



**SELF- ASSESSMENT REPORT
FOR
NATIONAL BOARD OF ACCREDITATION
(NBA)**

**Samarth Educational Trust
Arvind Gavali College of Engineering
At- Panmalewdi, Post- Varye, Tal-Dist. Satara-415015**

e-SAR Department of Mechanical Engineering

CRITERION 01	Vision, Mission and Program Educational Objectives	60
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1.1 State the Vision and Mission of the Department and Institute (05)**A. Availability of the Vision and Mission statements of the department****VISION of Institute:**

To be an institute of excellence, developing skilled engineers to serve the industry and society.

MISSION of Institute

M1: To provide quality education through effective teaching learning process.

M2: To develop professional skills and promote innovation among students by providing conducive atmosphere.

M3: To inculcate ethical values, respect for the environment & social responsibility.

VISION of Department

To develop professional technocrats and socially responsible engineers in the field of Mechanical engineering.

MISSION of Department

M1: To provide quality education to enhance academic competency keeping pace with the industrial needs.

M2: To develop attitude and the professional skills for employability and research.

M3: To imbibe ethical values in graduates for the progressive social development.

1.2 State the Program Educational Objectives (PEOs) (05)

The Program Educational Objectives of Civil Engineering program is listed below:

PEO 1: The graduates will be able to apply concepts from the fundamental engineering for solving problems in industry.

PEO 2: The graduates will be able to demonstrate professional skills for the understanding of Mechanical engineering and allied areas to address complex real-life problems.

PEO 3: The graduates will be able to take responsibility to serve the society and to preserve the environment through ethical values.

1.3. Indicate where the Vision, Mission and PEOs are published and disseminated among Stakeholders (10)

1.3 A: Publication and dissemination of Vision, Mission and PEOs

The department is responsible for making a lot of effort to communicate its vision, mission, and PEOs to all internal and external stakeholders through a variety of media, including digital, print through student progress records, vinyl records, and interactivity through meetings that can be held both offline and online.

Table: 1.1 provides information on the release and distribution of statements.

Table 1.1: Stakeholders of the Program

Stakeholder	Type	Purpose/relevance	Mode of Publication and dissemination
Management	Internal	<ul style="list-style-type: none"> • Creating a development strategy and a roadmap; human, and financial resources; and developing policies. 	1. Banners for all the visiting and participating stakeholders at meeting/interaction sites. (Entrance to the department, office of the head of department, faculty rooms, laboratories, classrooms, department meeting room/library)
Faculty and Support Staff	Internal	<ul style="list-style-type: none"> • Implementer (Contributor) of Policies; • Major Contributor in Creating and Implementing Growth Plan; • Responsible with Producing Competent Graduates/Product from the Institution 	2. The department newsletter, laboratory manuals, faculty course files, information brochures, event and industrial visit reports, academic diaries, and a
Students	Internal	<ul style="list-style-type: none"> • accountable for building the reputation 	

		and results of the institute.	book for internal test assessments.
Employers	External	<ul style="list-style-type: none"> employing recent college graduates and evaluating their competency and employability 	3. The remarks are made available digitally via the Institute website, emails, social media, screensavers, event presentations, and the CANVA platform.
Industry	External	<ul style="list-style-type: none"> both an employer and a participant in initiatives involving industry and academic institutions. 	4. The distribution is monitored in both online and offline settings, such as meetings with administrators and stakeholders and introduction programme.
Alumni	External	<ul style="list-style-type: none"> Capable of connecting professional practice and learning, provides the department/program Committee with pertinent input 	
Funding Agencies	External	<ul style="list-style-type: none"> offers financial assistance to the institution and communicates with the department's or program's faculty and principal investigator. 	
Parents	External	<ul style="list-style-type: none"> Perception of the department's or program's assistance in guiding their wards' careers 	
Regulatory/	External	<ul style="list-style-type: none"> establishes guidelines and standards to guarantee quality 	

Accrediting Authorities/Professional bodies		control and improvement	
Society	External	<ul style="list-style-type: none"> from the viewpoint of the institution, offers intangible results 	

Table 2: Vision, Mission & PEOs are Published & Disseminated

Sl.No.	Mission and Vision are published at	Internal Stake Holders	External Stake Holders
1	College Website: www.agce.edu.in (https://agce.edu.in/)	√	√
2	Institute Moodle : https://103.159.152.195/moodle/	√	
3	Curriculum Course File	√	
4	Academic Diary	√	
5	Internal Test Assessment Book	√	
6	Department Notice Board	√	
7	Laboratories	√	
8	Staff Rooms	√	
9	Class Rooms	√	
10	Department Newsletter	√	√
11	Industry Institute Interaction Meets		√

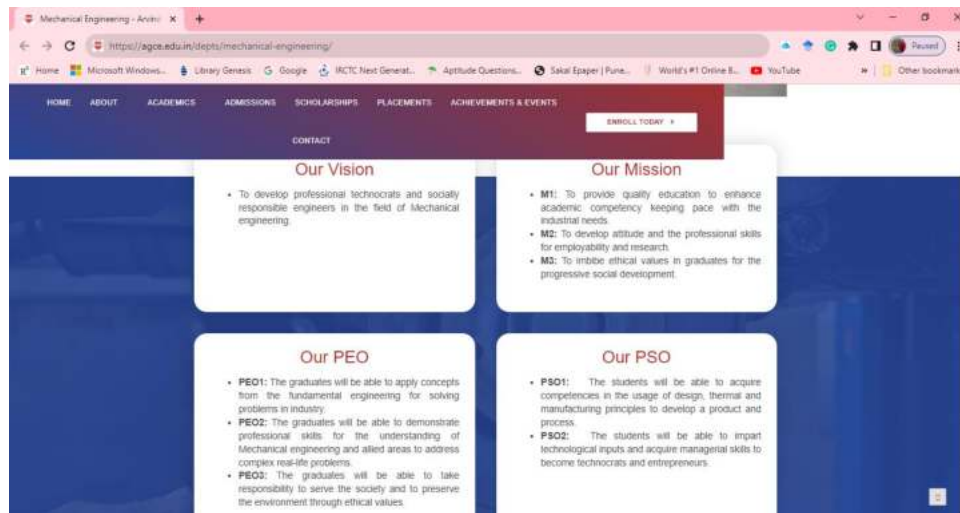


Fig.1.3 a Screenshot of Vision- Mission & PEOs disseminated on Website

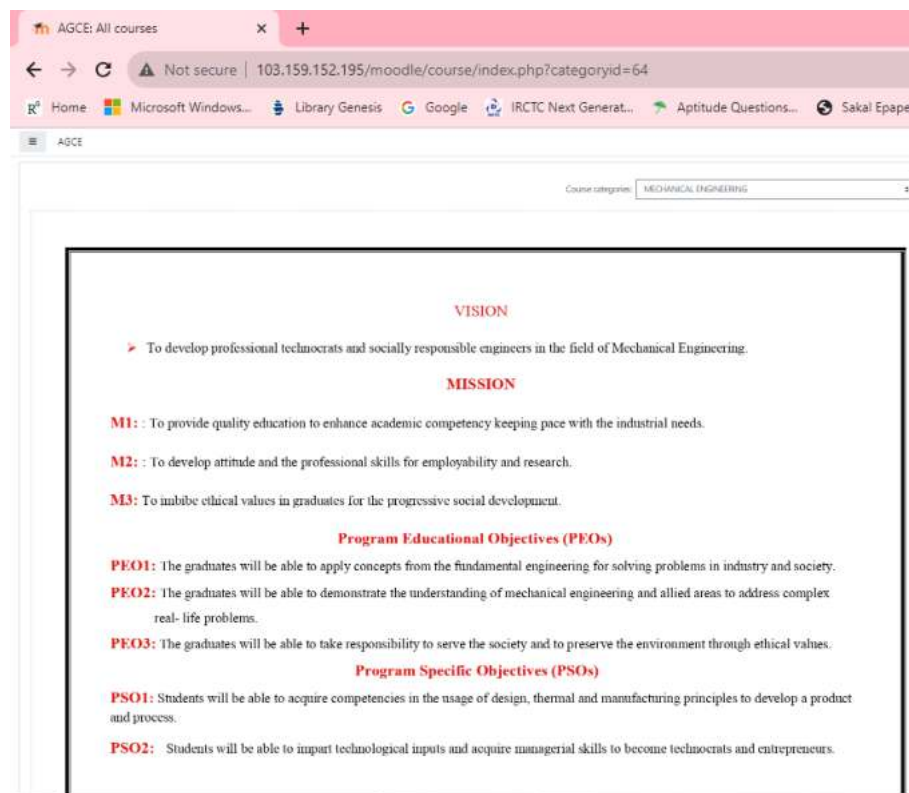


Fig.1.3 b Screenshot of Vision, Mission and PEOs disseminated on MOODLE

1.3 B: Process of Dissemination

- Through interactions between stakeholders, which specifically relate to the vision, mission aspects, and PEOs in the development, implementation, and execution of academic programme, the spread of statements is observed.
- During the induction programme, the vision, mission aspects, and PEOs serve as a road map for a successful career.
- The students are educated about career plans and higher education in accordance with the vision, mission, and PEOs during the guidance and counselling session.
- It is noted during administrative meetings that academic plan policies, execution, and monitoring are in line with the vision, mission elements, and PEOs.

- The department head, programme coordinator, and course coordinators present the vision and mission at the start of each term and at other points throughout sessions.
- During classes, faculty members discuss the significance of the Vision and Mission as well as how they relate to the Program Outcomes with the students.
- Every event, including meetings with DAB, parental meetings, and technical and non-technical events, has included a description of the institute's vision, mission, and departmental vision, mission, and programme educational outcomes.
- The department head, in collaboration with the programme coordinator, informs the faculty on the significance and applicability of the program's vision and mission in relation to its educational objectives and outcomes.

1.3 C: Extent of Awareness of Vision, Mission & PEOs

In meetings with internal and external stakeholders, such as the Departmental Advisory Board (DAB), parents, employers, alumni, students through GFM, faculty meetings, events inauguration, etc., the head of the department has shared the department's vision, mission, and PEOs. To inform internal & external stakeholders of the on-going development of department- and outcome-based education, the significance of the vision and its accomplishments through the mission, along with the relevance of programme educational outcomes (PEOs), have been described.



Fig.1.3 c Awareness of Vision, Mission & PEOs

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)

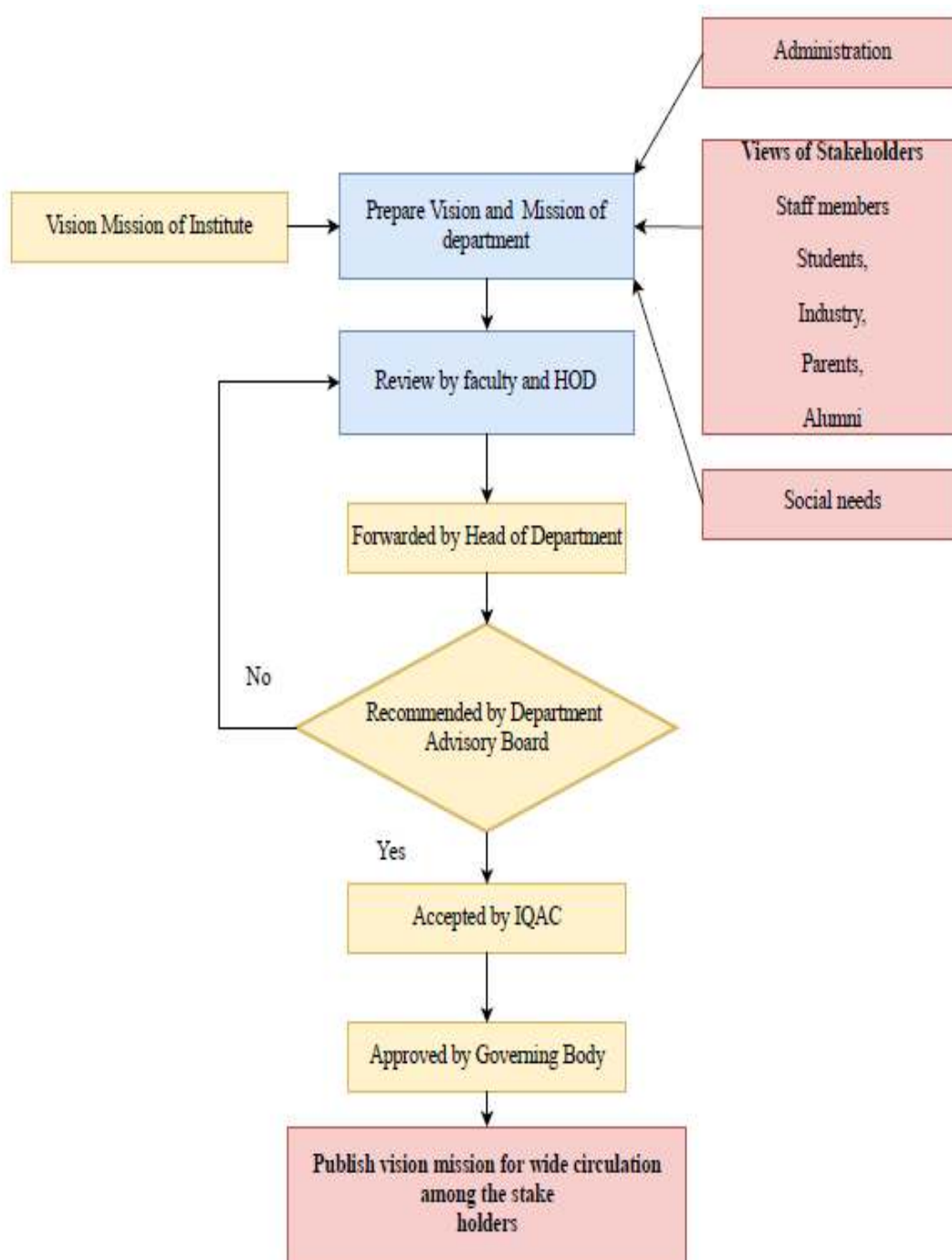


Figure 1.4 a: Process of defining the Vision & Mission of Department

- **Process of Defining the Vision & Mission of the Department**

- The Department established its Vision and Mission statements through a consultative process by interacting with all the stakeholders of the department, the long term and short-term goals of the department and the societal requirements as shown in following Figure 1.4a. The Vision and Mission statements of the department were formulated during in the year 2020. The new Outcome Based Education (OBE) accreditation process has given an opportunity to review and modify the Vision and Mission statements of the department considering the Graduate Attributes. The Internal stakeholders involve students, staff members etc. whereas external stakeholders involve industries/employers, parents, alumni, professional bodies etc. The following steps have been followed to formulate vision & mission of the department.
- **Step1:** Head of Department along with faculty members formulate & coordinate the vision and mission statement of the department, based on the continuous feedback from internal & external stakeholders in line with vision and mission of the Institute.
- **Step2:** The formulated statements of vision & mission are presented in the DAB meeting and waiting for their recommendations or suggestions/advice. It is in continuous flow from review of faculty & HoD to Departmental Advisory Board & vice versa till the final recommendation from DAB.
- **Step3:** Recommended vision and mission statements from DAB are sent to the IQAC to coordinate with governing body. Once it is accepted by IQAC, the governing body has approved it in coordination with IQAC.
- **Step 4:** Finally, the vision and mission statements are published to internal & external stakeholders through digital & print media.

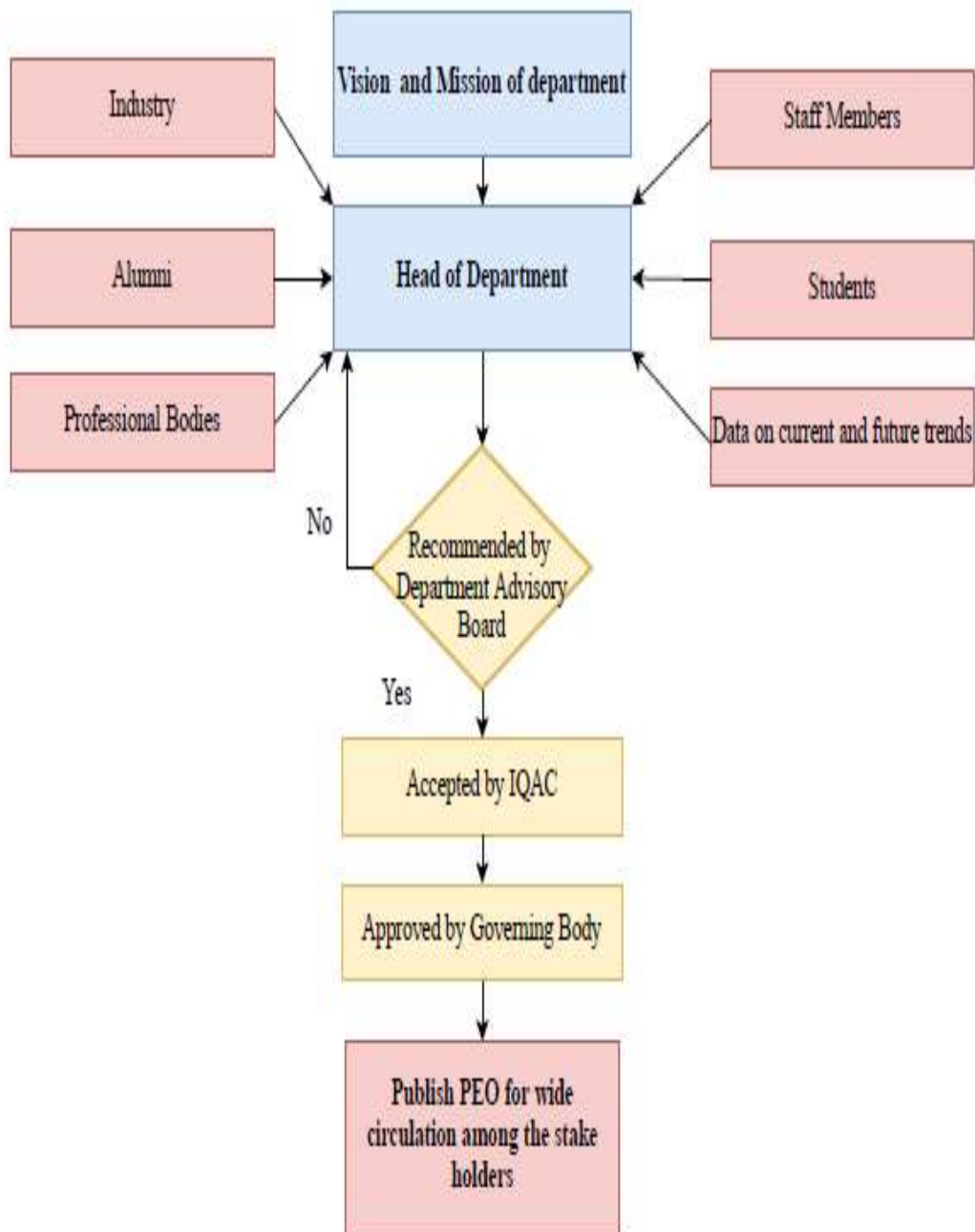


Figure 1.4 b: Process of defining the Program Educational Outcome (PEOs) of Department

- **Process of Defining the Program Educational Outcomes (PEOs) of the Program**
 - The process of defining PEOs is in conjunction with Vision, Mission of program and inputs received from a committee constituting representatives of all internal & external stakeholders as shown in figure 1.4 b. The PEOs are established through following steps.
 - **Step 1:** PEOs were created by HoD comprising of students, staff members, alumni, industrial experts, professional bodies and data on current and future trends.
 - **Step 2:** The formulated PEOs are forwarded to Departmental Advisory Board (DAB) for recommendation or suggestions in formulated PEOs. It is in continuous flow HoD to Departmental Advisory Board & vice versa till the final recommendation from DAB.
 - **Step 3:** Recommended PEOs statements from DAB are sent to the IQAC to coordinate with governing body. Once it is accepted by IQAC, the governing body has approved it in coordination with IQAC.
 - **Step 4:** Finally, the Program Educational Outcomes (PEOs) statements are published to internal & external stakeholders through digital & print media.

1.5. Establish consistency of PEOs with Mission of the Department (15)
(Generate a “Mission of the Department – PEOs matrix” with justification and rationale Of the mapping)

The Program Educational Objectives are consistent with the Mission statement of the department which is stated in following table 3.

PEO Statements	M1	M2	M3
The graduates will be able to apply concepts from the fundamental engineering for solving problems in industry.	3	2	1
The graduates will be able to demonstrate professional skills for understanding of mechanical engineering and allied areas to address complex real- life problems.	2	3	2
The graduates will be able to take responsibility among them to serve the society and to preserve the environment through the ethical values.	1	2	3

	M1	M2	M3	
PEO Statements	To provide quality education to enhance academic competency keeping pace with the industrial needs	To develop attitude and the professional skills for employability and research.	To imbibe ethical values in graduates for the progressive social development	
PEO:1 The graduates will be able to apply concepts from the fundamental engineering for solving	3	2	1	M 1 Strongly supports to achieve PEO1, as the objective is to develop the students in accordance with the global industry

<p>problems in industry.</p>				<p>requirements, which is possible through academic competence and the latest technological developments.</p> <p>M 2 Moderately supports to attain PEO1, as objective is to inculcate research culture in the students which will be developed moderately by exposing them merely to the latest technological developments.</p> <p>M 3 slightly supports PEO1, as objective is to develop the projects which will be useful to the society and also be environmental friendly. PEO statement relates only to the technological developments which may be concerned about society and environment.</p> <p>Overall, the department mission reasonably supports PEO1.</p>
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PEO:2 The graduates will be able to demonstrate professional skills for understanding of mechanical engineering and allied areas to address complex real- life problems.	2	3	2	<p>M 1 moderately supports PEO 2; as students will be technically sound, by acquiring engineering knowledge and developing them for satisfying the global needs.</p> <p>M 2 strongly supports PEO 2; as mechanical engineering core knowledge, professional skills and research aptitude developed in the students through various technical activities, helps the students for life-long learning.</p> <p>M 3 slightly supports to PEO2 as it is related to sensitivity towards the society and ethical values.</p> <p>Overall, the department mission reasonably supports PEO2.</p>

<p>PEO:3 The graduates will be able to take responsibility among them to serve the society and to preserve the environment through the ethical values.</p>	1	2	3	<p>M 1 slightly supports PEO 3 as the students can serve the society with the help of their knowledge and skills.</p>
				<p>M2 moderately supports PEO 3; Research activities and practical based learning can develop the system for betterment of the society.</p>
				<p>M 3 highly supports for the achievement of PEO3 by establishing sensitivity towards the society, environment and ethical values.</p> <p>Overall, the department mission reasonably supports PEO3</p>

	M1	M2	M3
	To provide quality education to enhance academic competency keeping pace with the industrial needs.	To develop attitude and the professional skills for employability and research.	To imbibe ethical values in graduates for the progressive social development.
PEO-1 The graduates will be able to apply concepts from the fundamental engineering for solving problems in industry.	3 PEO- Basic Knowledge of Science & Technology M- Technical Knowledge	2 PEO- Solving Civil Engineering Problems M- Innovative approaches	1 PEO- Applying Basic Knowledge of Science M- Well Being Environment
PEO-2 The graduates will be able to demonstrate the understanding of Mechanical engineering and allied areas to address complex real-life problems.	2 PEO- Techniques in Civil Engineering M- Technical Knowledge	3 PEO- Develop Solutions M- Innovative Approaches	1 PEO- Society Based Problems M- well-being of environment and society
PEO-3 The graduates will be able to take responsibility to serve the society and to preserve the	1 PEO- Developments in Technology	2 PEO- Lifelong Learning M- Creativity	3 PEO- Maintain the Pace M- Inculcate the Value

environment through ethical values.	M- Technical Knowledge & Competency		
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PEOs	Mission Component
PEO-1 The graduates will be able to apply concepts from the fundamental engineering for solving problems in industry.	M1 - To impart essential technical knowledge and competency among students
	M2 - To enhance innovative approaches towards creativity.
	M3 - To inculcate the values for the well-being of environment and society.
PEO-2 The graduates will be able to demonstrate the understanding of Mechanical engineering and allied areas to address complex real-life problems.	M1 - To impart essential technical knowledge in mechanical engineering and allied branch.
	M2 - To enhance innovative approaches towards creativity.
	M3 - To inculcate the values for the well-being of environment and society.
PEO-3 The graduates will be able to take responsibility to serve the society and to preserve the environment through ethical values.	M1 - To impart essential technical knowledge and competency among students
	M2 - To enhance innovative approaches towards creativity.
	M3 - To inculcate the values for the well-being of environment and society.

CRITERION 02	Program Curriculum & Teaching Learning Process	120
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2.1.1. State the process used to identify the extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I. Also mention the identified curricular gaps, if any (10)

Arvind Gavali College of Engineering, Satara is affiliated with Dr. Babasaheb Ambedkar Technological University (DBATU), Lonere Maharashtra. Mechanical engineering department follows the scheme and syllabus of DBATU. The scheme follows the semester pattern and is divided into eight semesters, for a four-year graduation program. The curriculum contains basic, social sciences, humanities, and professional and elective courses.

According to the university curriculum, each course is mapped with 12 Program Outcomes (POs) and 2 Program Specific Outcomes (PSOs), and the evaluation of each PO and PSO is done. The university's recommended courses adhere strictly to all PSOs and PO's. Faculty from the Mechanical program actively participate in developing and implementing the University curricula. By setting up several skill-oriented certified add-on courses and industry-sponsored competitions for the student's overall development, academic flexibility is accomplished. To help students fulfill the demands and expectations of the industry, the program offers a variety of supplementary courses.

Table B 2.1.1a Mapping of Curriculum Components with PO/ PSOs

Sr. No.	Type of Courses Offered	Number of Subjects Mapped	Number of Credits allotted	Weightage in percentage
1	Basic Sciences Courses(BSC)	10	27	16
2	Engineering Sciences Courses (ESC)	13	23	14
3	Humanities and Social Science Including Management Courses (HSSMC)	3	3	2

4	Professional Core Course (PCC)	34	12	7
5	Professional Elective Course (PEC)	02	73	44
6	Open Elective Course (OEC)	07	6	4
7	Seminar/Mini Project/ Internship	06	18	11
8	Project(MP)	02	5	3
Total		77	167	100

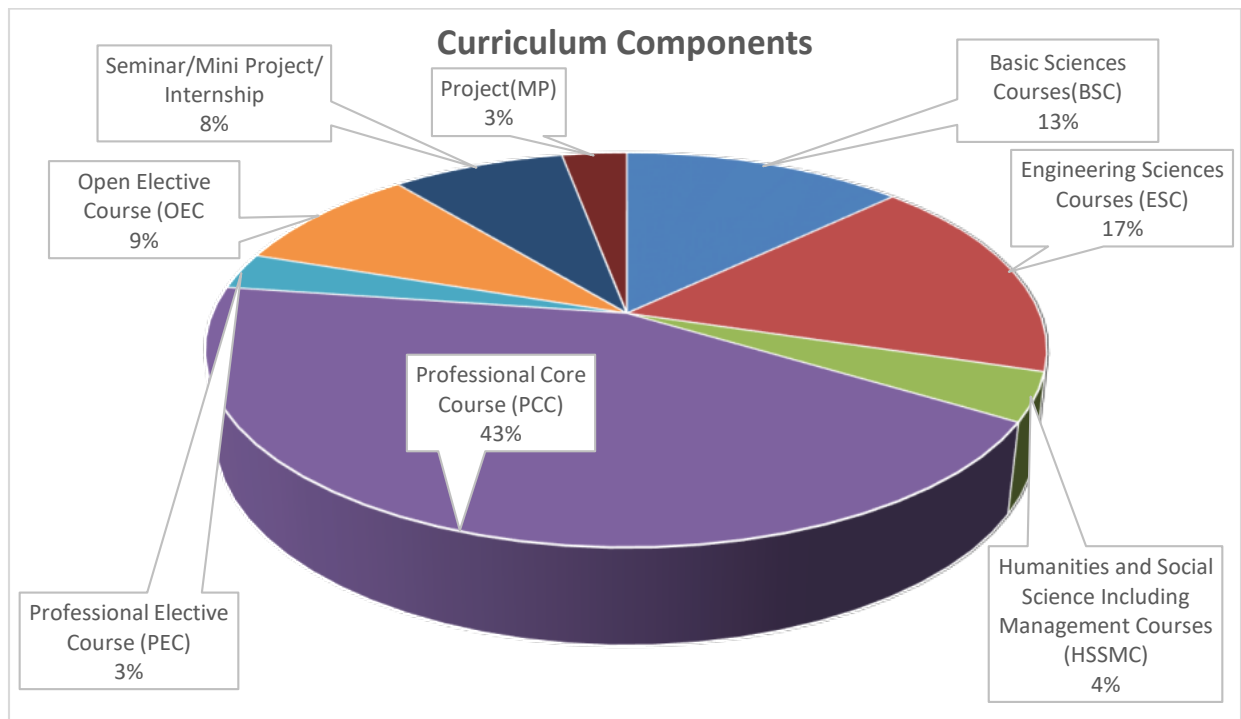


Fig B 2.1.1a Curriculum Components

The institution implements the overall curriculum break up as per DBATU which is for 8 semesters. The curriculum for the Bachelor of Technology in Mechanical engineering is given in Table B 2.1.1b

Table B 2.1.1 b University Curriculum Structure

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Semester - I

Group A

Sr. No.	Course Code	Course Title	Weekly Teaching hrs			Evaluation Scheme			Credit	
			L	T	P	CA	MSE	ESE		
1	Mandatory	Induction Program	3 weeks duration in the beginning of the semester							
2	BTBS101	Engineering Mathematics – I	3	1	-	20	20	60	4	
3	BTBS102	Engineering Physics	3	1	-	20	20	60	4	
4	BTES103	Engineering Graphics	2	-	-	20	20	60	2	
5	BTHM104	Communication Skills	2	-	-	20	20	60	2	
6	BTES105	Energy and Environment Engineering	2	-	-	20	20	60	2	
7	BTES106	Basic Civil and Mechanical Engineering	2	-	-	50	-	-	Audit	
8	BTBS107L	Engineering Physics Lab	-	-	2	60	-	40	1	
9	BTBS108L	Engineering Graphics Lab	-	-	4	60	-	40	2	
10	BTHM109L	Communication Skills Lab	-	-	2	60	-	40	1	
TOTAL			14	2	8	330	100	420	18	

**Semester - II
Group B**

Sr. No.	Course Code	Course Title	Weekly Teaching hrs			Evaluation Scheme			Credit
			L	T	P	CA	MSE	ESE	
1	BTBS201	Engineering Mathematics – II	3	1	-	20	20	60	4
2	BTBS202	Engineering Chemistry	3	1	-	20	20	60	4
3	BTES203	Engineering Mechanics	2	1	-	20	20	60	3
4	BTES204	Computer Programming in C	2	-	-	20	20	60	2
5	BTES205	Workshop Practices	-	-	4	60	-	40	2
6	BTES206	Basic Electrical and Electronics Engineering	2	-	-	50	-	-	Audit
7	BTES207L	Computer Programming Lab	-	-	2	60	-	40	1
8	BTBS208L	Engineering Chemistry Lab	-	-	2	60	-	40	1
9	BTES209L	Engineering Mechanics Lab	-	-	2	60	-	40	1
10	BTES210P	Mini Project	-	-	2	60	-	40	1
11	BTES211P	Field Training / Internship / Industrial Training (minimum of 4 weeks which can be completed partially in First Semester and Second Semester or in at one time).	-	-	-	-	-	-	Credit to be evaluated in III Sem
TOTAL			12	3	12	430	80	440	19

B. Tech. Mechanical Engineering
Course Structure for Semester III [Second Year] w.e.f. 2018-2019

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTBSC301	BSC 7	Engineering Mathematics-III	3	1	--	20	20	60	100	4
BTMEC302	ESC 11	Materials Science and Metallurgy	3	1	--	20	20	60	100	4
BTMEC303	PCC 1	Fluid Mechanics	3	1	--	20	20	60	100	4
BTMEC304	PCC 2	Machine Drawing and CAD	2	--	--	20	20	60	100	2
BTMEC305	ESC 12	Thermodynamics	3	1	--	20	20	60	100	4
BTHM3401	HSMC 3	Basic Human Rights	2	--	--	50	--	--	50	Audit (AU/ NP)
BTMEL307	ESC 13	Materials Science and Metallurgy Lab	--	--	2	60	--	40	100	1
BTMEL308	PCC 3	Fluid Mechanics Lab	--	--	2	60	--	40	100	1
BTMEL309	PCC 4	Machine Drawing and CAD Lab	--	--	4	60	--	40	100	2
BTMEF310	Project 1	Field Training /Internship/Industrial Training I	--	--	--	--	--	50	50	1
Total			16	4	8	330	100	470	900	23

B. Tech. Mechanical Engineering
Course Structure for Semester IV [Second Year] w.e.f. 2018-2019

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTMEC401	PCC 5	Manufacturing Processes - I	2	1	--	20	20	60	100	3
BTMEC402	PCC 6	Theory of Machines-I	3	1	--	20	20	60	100	4
BTMEC403	PCC 7	Strength of Materials	3	1	--	20	20	60	100	4
BTMEC404	BSC 8	Numerical Methods in Mechanical Engineering	2	1	--	20	20	60	100	3
BTID405	PCC 8	Product Design Engineering – I	1	--	2	60	--	40	100	2
BTBSE406A	OEC 1	Physics of Engineering Materials	3	--	--	20	20	60	100	3
BTBSE3405A		Advanced Engineering Chemistry								
BTHM3402		Interpersonal Communication Skill & Self Development								
BTMEL407	PCC 9	Manufacturing Processes Lab – I	--	--	2	60	--	40	100	1
BTMEL408	PCC 10	Theory of Machines Lab- I	--	--	2	60	--	40	100	1
BTMEL409	PCC 11	Strength of Materials Lab	--	--	2	60	--	40	100	1
BTMEL410	BSC 9	Numerical Methods Lab	--	--	2	60	--	40	100	1
Total			14	4	10	400	100	500	1000	23
Minimum 4 weeks training which can be completed partially in third and fourth semester or in at one time.										

B. Tech. Mechanical Engineering

Course Structure for Semester V [Third Year] w.e.f. 2019-2020

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTMEC501	PCC 12	Heat Transfer	3	1	--	20	20	60	100	4
BTMEC502	PCC 13	Applied Thermodynamics – I	2	1	--	20	20	60	100	3
BTMEC503	PCC 14	Machine Design – I	2	1	--	20	20	60	100	3
BTMEC504	PCC 15	Theory of Machines- II	3	1	--	20	20	60	100	4
BTMEC505	PCC 16	Metrology and Quality Control	2	1	--	20	20	60	100	3
BTID506	PCC 17	Product Design Engineering - II	1	--	2	60	--	40	100	2
BTMEC506A	OEC 2	Automobile Engineering	3	--	--	--	--	--	--	Audit (AU/ NP)
BTMEC506B		Nanotechnology								
BTMEC506C		Energy Conservation and Management								
BTMEL507	PCC 18	Heat Transfer Lab	--	--	2	30	--	20	50	1
BTMEL508	PCC 19	Applied Thermodynamics Lab	--	--	2	30	--	20	50	1
BTMEL509	PCC 20	Machine Design Practice- I	--	--	2	30	--	20	50	1
BTMEL510	PCC 21	Theory of Machines Lab- II	--	--	2	30	--	20	50	1
BTMEF511	Project 2	Field Training /Internship/Industrial Training II	--	--	--	--	--	50	50	1
Total			16	5	10	280	100	470	850	24

B. Tech. Mechanical Engineering
Course Structure for Semester VI [Third Year] w.e.f. 2019-2020

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTMEC601	PCC 22	Manufacturing Processes- II	2	1	--	20	20	60	100	3
BTMEC602	PCC 23	Machine Design-II	3	1	--	20	20	60	100	4
BTMEC603	PCC 24	Applied Thermodynamics- II	2	1	--	20	20	60	100	3
BTMEC604A	PEC 1	Engineering Tribology	2	1	--	20	20	60	100	3
BTMEC604B		IC Engines								
BTMEC604C		Additive Manufacturing								
BTMEC604D		Mechanical Measurements								
BTMEC605A	OEC 3	Quantitative Techniques in Project Management	3	--	--	20	20	60	100	3
BTMEC605B		Sustainable Development								
BTMEC605C		Renewable Energy Sources								
BTMEC606A	OEC 4	Biology for Engineers	3	--	--	--	--	--	--	Audit (AU/ NP)
BTMEC606B		Solar Energy								
BTMEC606C		Human Resource Management								
BTMEL607	PCC 25	Metrology and Quality Control Lab	--	--	2	30	--	20	50	1
BTMEL608	PCC 26	Machine Design Practice-II	--	--	2	30	--	20	50	1
BTMEL609	PCC 27	IC Engine Lab	--	--	2	30	--	20	50	1
BTMEL610	PCC 28	Refrigeration and Air Conditioning Lab	--	--	2	30	--	20	50	1
BTMEM611	Project 3	Technical Project for Community Services	--	--	4	30	--	20	50	2
Total			15	4	12	250	100	400	750	22

B. Tech. Mechanical Engineering
Course Structure for Semester VII [Fourth Year] w.e.f. 2020-2021

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTMEC701	PCC 29	Mechatronics	2	1	--	20	20	60	100	3
BTMEC702	PCC 30	CAD/CAM	2	1	--	20	20	60	100	3
BTMEC703	PCC 31	Manufacturing Processes - III	2	1	--	20	20	60	100	3
BTMEC704A	PEC 2	Fluid Machinery	2	1	--	20	20	60	100	3
BTMEC704B		Industrial Engineering and Management								
BTMEC704C		Finite Element Method								
BTMEC704D		Surface Engineering								
BTMEC704E		Refrigeration and Air Conditioning								
BTAMC704C		Automobile Design (Product Design, PLM, CAE, Catia)								
BTMEC705A	OEC 5	Engineering Economics	3	--	--	--	--	--	--	Audit (AU/ NP)
BTMEC705B		Intellectual Property Rights								
BTMEC705C		Wind Energy								
BTMEC705D		Knowledge Management								
BTMEL706	PCC 32	Manufacturing Processes Lab - II	--	--	2	30	--	20	50	1
BTMEL707	PCC 33	Mechatronics Lab	--	--	2	30	--	20	50	1
BTMEL708	PCC 34	CAD/CAM Lab	--	--	2	30	--	20	50	1
BTMES709	Project 4	Seminar	--	--	2	30	--	20	50	1
BTMEF710	Project 5	Field Training /Internship/Industrial Training III	--	--	--	--	--	50	50	1
BTMEP711	Project 6	Project Stage-I**	--	--	6	30	--	20	50	3
Total			11	4	14	230	80	390	700	20

B. Tech. Mechanical Engineering
Course Structure for Semester VIII [Fourth Year] w.e.f. 2020-2021

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
Choose any two subjects from ANNEXURE-A#			-	-	--	20	20	60	100	3
			-	-	--	20	20	60	100	3
BTMEP803	Project 7	Project Stage-II or Internship and Project*	--	--	30	50	--	100	150	15
Total			--	--	30	90	40	220	350	21

* Six months of Internship in the industry

These subjects are to be studied on self-study mode using SWAYAM/NPTEL/Any other source

Student doing project in Industry will give NPTEL Examination/Examination conducted by the University i.e. CA/MSE/ESE

Students doing project in the Institute will have to appear for CA/MSE/ESE

Table 2.1.1b Curriculum Structure

The department has a well-defined process in implementation to achieve the Program Outcomes (POs) and Program Specific Outcomes (PSOs). If some components, to attain COs/POs are not included in the curriculum provided by DBATU, then the department makes additional efforts to impart this knowledge by incorporating them is used to identify the extent of compliance for attaining the program outcomes and Program Specific Outcomes.

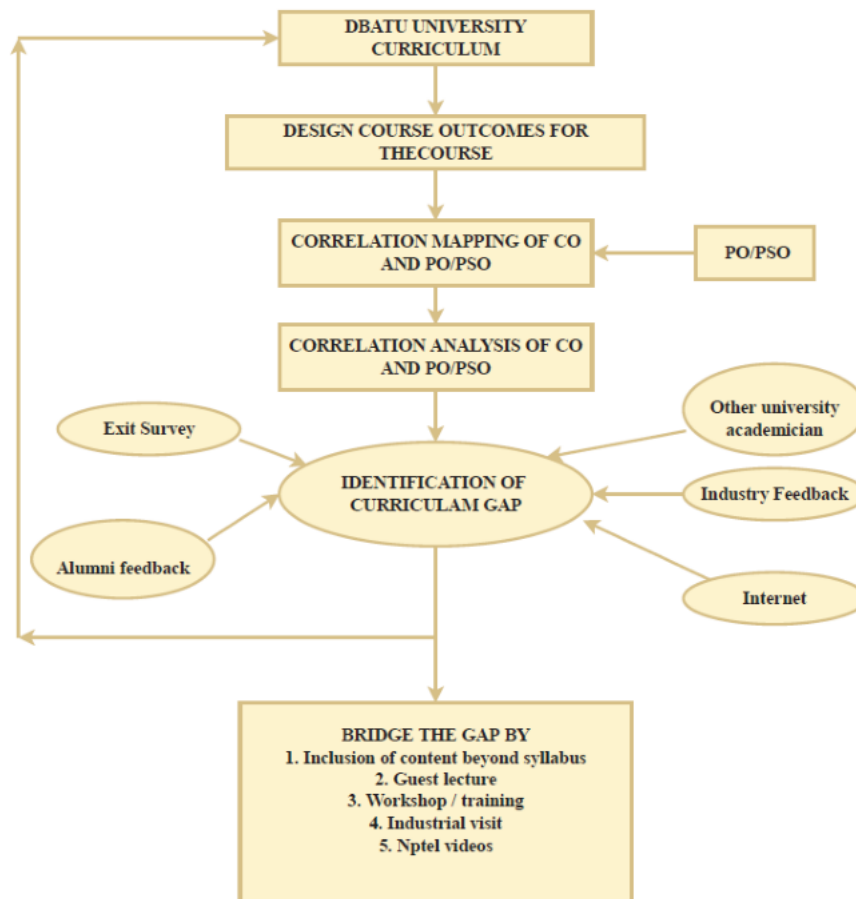


Figure B 2.1.1 b Process to Identify Curriculum Gaps

1. The University publishes the curriculum annually in June if changed or updated. The curriculum provides the syllabus of each course.
2. Faculty members update and design the course outcomes for the course allotted to them. The teaching plan with course objectives and course outcomes is prepared by the

individual faculty member of the department before the commencement of a semester.

The plan is duly presented and confirmed in DAB. The plan ensures the coverage of the complete syllabus before the end of the semester

3. For each course, a course file is prepared by the concerned faculty member. The Correlation matrix of CO with PO/ PSOs is also designed and analyzed by Academic Monitoring Committee.
4. The feedback from the alumni, industry experts, and academicians from other Universities and students is regularly taken. Gaps are identified based on the CO attainment of individual courses and feedback from different stakeholders.
5. The data collected is then presented in front of the Program Evaluation and Review Committee. The gaps are discussed in the AMC meeting. To bridge gaps, seminars, workshops, guest lectures, industrial visits, etc. are arranged by our department/ institute to provide knowledge beyond the syllabus. The following table shows the correlation matrix courses to program outcomes.

Subject Code	Name of Subject	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	P O1 1	P O 12	PS O 1	PS O 2
F.Y. B Tech Part-I Sem-I															
BTBS101	Engineering Mathematics- I	Y	Y	Y	Y		Y					Y	Y	Y	Y
BTBS102	Engineering Physics	Y	Y	Y	Y		Y	Y					Y	Y	Y
BTES103	Engineering Graphics	Y	Y	Y	Y	Y					Y		Y	Y	
BTHM104	Communication Skills	Y				Y	Y		Y		Y		Y	Y	Y
BTES105	Energy and Environment Engineering	Y	Y	Y	Y		Y	Y	Y		Y	Y		Y	Y
BTES106	Basic Civil and Mechanical Engineering	Y	Y	Y	Y		Y	Y			Y	Y		Y	Y
BTBS107L	Engineering Physics Lab	Y	Y	Y	Y		Y	Y		Y			Y	Y	Y
BTES108L	Engineering Graphics Lab	Y	Y	Y	Y	Y				Y	Y		Y	Y	
BTHM109L	Communication Skills Lab.	Y				Y	Y		Y		Y		Y	Y	Y
F.Y. B Tech Part-II Sem-II															
BTBS201	Engineering Mathematics-II	Y	Y	Y	Y		Y					Y	Y	Y	Y
BTBS202	Engineering Chemistry	Y	Y				Y	Y		Y				Y	
BTES203	Engineering Mechanics	Y	Y	Y			Y			Y				Y	Y
BTES204	Computer Programming in C	Y	Y	Y						Y	Y				

BTES205	Workshop Practices	Y				Y				Y	Y			Y	Y
BTES206	Basic Electrical and Electronics Engineering	Y					Y	Y							
BTES207 L	Computer Programming Lab	Y	Y	Y						Y	Y				
BTBS208 L	Engineering Chemistry Lab	Y	Y				Y	Y		Y				Y	
BTES209 L	Engineering Mechanics Lab	Y	Y	Y			Y	Y		Y	Y			Y	Y
BTES210 P	Mini Project	Y	Y			Y	Y	Y	Y	Y	Y			Y	Y
BTES211 P	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

S.Y. B Tech Part-I Sem-III

BTBSC301	Engineering Mathematics-III	Y	Y	Y		Y				Y		Y	Y	Y	Y
BTMEC302	Materials Science and Metallurgy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y
BTMEC303	Fluid Mechanics	Y	Y	Y									Y	Y	Y
BTMEC304	Machine Drawing and CAD	Y	Y	Y								Y	Y	Y	Y
BTMEC305	Thermodynamics	Y	Y	Y		Y							Y	Y	
BTHM3401	Basic Human Rights		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y
BTMEL307	Materials Science and Metallurgy Lab	Y	Y	Y		Y				Y		Y	Y	Y	
BTMEL308	Fluid Mechanics Lab	Y	Y	Y		Y				Y		Y	Y	Y	
BTMEL309	Machine Drawing and CAD Lab	Y	Y	Y		Y						Y	Y	Y	Y
BTMEF310	Field Training /Internship/Industrial Training I	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

S.Y. B Tech Part-II Sem-IV															
BTMEC401	Manufacturing Processes - I	Y	Y	Y			Y				Y		Y	Y	Y
BTMEC402	Theory of Machines-I	Y	Y	Y	Y	Y	Y		Y		Y	Y	Y	Y	Y
BTMEC403	Strength of Materials	Y	Y	Y	Y	Y	Y		Y		Y		Y	Y	
BTMEC404	Numerical Methods in Mechanical Engineering	Y	Y		Y	Y								Y	
BTID405	Product Design Engineering – I	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
BTHM3402	Interpersonal Communication Skill& Self Development		Y	Y	Y	Y		Y	Y	Y	Y	Y	Y		Y
BTMEL407	Manufacturing Processes Lab – I	Y	Y	Y		Y		Y			Y	Y	Y	Y	Y
BTMEL408	Theory of Machines Lab- I	Y	Y	Y		Y		Y			Y	Y	Y	Y	Y
BTMEL409	Strength of Materials Lab	Y	Y	Y		Y	Y	Y			Y	Y	Y	Y	
BTMEL410	Numerical Methods Lab	Y	Y		Y	Y						Y		Y	Y
T.Y. Btech Part-I (Sem- V)															
BTMEC501	Heat Transfer	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y	
BTMEC502	Applied Thermodynamics – I	Y	Y	Y		Y	Y	Y				Y	Y	Y	
BTMEC503	Machine Design – I	Y	Y	Y		Y	Y						Y	Y	Y
BTMEC504	Theory of Machines- II	Y	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y	Y
BTMEC505	Metrology and Quality Control	Y	Y	Y	Y	Y						Y	Y	Y	Y
BTID506	Product Design Engineering - II	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
BTMEC506A	Automobile Engineering	Y	Y	Y		Y			Y	Y	Y		Y	Y	
BTMEL507	Heat Transfer Lab	Y	Y	Y		Y				Y	Y	Y	Y	Y	

BTMEL5 08	Applied Thermodynamics Lab	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	
BTMEL5 09	Machine Design Practice- I	Y	Y	Y		Y					Y	Y	Y	Y	Y
BTMEL5 10	Theory of Machines Lab- II	Y	Y	Y		Y	Y				Y	Y	Y	Y	
TY B.Tech Part II (SEM VI)															
BTMEC6 01	Manufacturing Processes- II	Y	Y	Y	Y	Y		Y	Y				Y	Y	
BTMEC6 02	Machine Design-II	Y	Y		Y		Y						Y	Y	
BTMEC6 03	Applied Thermodynamics- II	Y	Y	Y		Y		Y					Y	Y	
BTMEC6 04B	IC Engines	Y	Y	Y		Y		Y					Y	Y	
BTMEC6 05C	Renewable Energy Sources	Y	Y	Y		Y			Y	Y			Y	Y	
BTMEC6 06B	Solar Energy	Y	Y	Y	Y	Y	Y			Y				Y	
BTMEL6 07	Metrology and Quality Control Lab	Y	Y	Y		Y				Y		Y	Y	Y	Y
BTMEL6 08	Machine Design Practice-II	Y	Y	Y		Y				Y	Y		Y	Y	
BTMEL6 09	IC Engine Lab	Y	Y	Y		Y				Y	Y	Y	Y	Y	
BTMEL6 10	Refrigeration and Air Conditioning Lab	Y	Y	Y		Y				Y	Y	Y	Y	Y	
BTMEM6 11	Technical Project for Community Services	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
Final Year B.Tech (Sem- VII)															
BTMEC7 01	Mechatronics	Y	Y	Y		Y		Y	Y				Y	Y	
BTMEC7 02	CAD/CAM	Y	Y	Y	Y	Y		Y	Y				Y	Y	
BTMEC7 03	Manufacturing Processes - III	Y	Y	Y	Y	Y		Y	Y			Y	Y	Y	
BTMEC7 04B	Industrial Engineering and Management	Y	Y	Y		Y		Y			Y	Y	Y	Y	Y

BTMEC705C	Wind Energy	Y	Y	Y		Y		Y			Y		Y	Y	
BTMEL706	Manufacturing Processes Lab - II	Y	Y	Y			Y			Y	Y	Y	Y	Y	
BTMEL707	Mechatronics Lab	Y	Y	Y		Y	Y				Y	Y	Y	Y	
BTMEL708	CAD/CAM Lab	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y
BTMES709	Seminar	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y	Y
BTMEF710	Field Training /Internship/Industrial Training III	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
BTMEP711	Project Stage-I	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Final Year BTech (Sem- VIII)															
BTMEC801A	Fundamentals of Automotive Systems	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y		Y	
BTMEC801F	Non-Conventional Energy Resources	Y	Y	Y	Y	Y		Y	Y				Y	Y	
BTMEP803	Project Stage-II	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Total (77)	75	65	69	38	57	35	38	32	30	49	46	60	62	39
	Percentage	97	84	90	49	74	45	49	42	39	64	60	78	81	51
		P O 1	PO 2	PO 3	PO 4	PO 5	P O 6	P O 7	PO 8	P O 9	PO1 0	PO 11	PO 12	PS O1	PS O2

Table B.2.1.1.c Mapping of the courses to program outcomes

Curricular Gaps

The following table list the identified gaps in the syllabus of DBATU for the attainment of Program Outcomes and Program Specific Outcomes as per the above mapping.

Table B 2.1.1.d Gaps in Program Outcomes of University Curriculum

Sr. No.	PO's	Description
1	PO4	Conduct investigations of complex problems
2	PO6	The engineer & society
3	PO7	Environment & sustainability
4	PO8	Ethics
5	PO9	Communication

Following are the year-wise curriculum gap identified:

CAY (2022-23):

Table B.2.1.1e Identified Curricular Gaps

Sr. No	Relevant Course/Area	Curriculum Gap Identified	Relevance to PO & PSO
1	Machine Design-II	Recent trends in gear design	PO1, PO3, PO5, PSO1
2	I.C. Engines	Application of carburetor in Automobile Engg.	PO1, PO5, PSO1
3	Heat Transfer	Difference between Heat Transfer and Mass Transfer	PO1, PSO1

CAYm1 (2021-22):

Table B.2.1.1 f Identified Curricular Gaps

Sr. No	Relevant Course/Area	Curriculum Gap Identified	Relevance to PO & PSO
1	CAD/ CAM	Problem analysis using modern tools	PO2, PO5, PSO1
2	Mechatronics	Recent trends in Mechatronics	PO5, PSO2
3	Metallurgy and Material Science	Latest trends and techniques in castings	PO5, PSO1

4	Project work	Start up	PO6,PO7,PO8,PO9,PO11,PSO2
5	Industry Essential Skills	Industrial Culture	PO8, PSO2,PSO1
6	Soft skill & Personality Development	Communication Skill, Presentation Skill	PO10, PO12 PSO1, PSO2
7	Entrepreneur Skills	Leadership Skill	PO9, PO11 PSO1, PSO2
8	Social Health & Safety Issues	Awareness about social health and safety measures	PO6, PO7, PSO2
9	Awareness of Higher Education	Various higher education opportunities	PO12, PSO1
10	Awareness of Education Support Scheme	Various higher education financial support schemes	PSO1

CAYm2 (2020-21)**Table B.2.1.1 g Identified Curricular Gaps**

Sr. No	Relevant Course/Area	Curriculum Gap Identified	Relevance to PO & PSO
1	Machine Drawing and CAD (BTMEC304)	2D and 3D Modelling	PO3, PO5, PSO1
2	Industrial Engineering and Management (BTMEC704B)	Process Implementation	PO2, PO3, PO5, PSO1
3	Manufacturing Processes-II (BTMEC601)	Practical aspects of CNC Programming, machining simulation	PO1, PO2, PO5, PSO1

CAYm3 (2019-20)**Table B.2.1.1 h Identified Curricular Gaps**

Sr. No	Relevant Course/Area	Curriculum Gap Identified (Content Beyond Syllabus)	Relevance to PO & PSO
1	Thermodynamics	Practical Exposure	PO5,PSO1
2	Theory of Machines -II	Advances in vibration	PO5, PO7,PSO1
3	Industry Essential Skills	Industrial Culture	PO6, PO8, PO9 PSO, PSO2

4	Soft skill & Personality Development	Communication Skill, Presentation Skill	PO8, PSO2
5	Entrepreneur Skills	Leadership Skill	PO5, PO9 PSO1, PSO2
6	Social Health & Safety Issues	Awareness about social health and safety measures	PO6, PO7, PSO2
7	Awareness of Higher Education	Various higher education opportunities	PO12, PSO1
10	Awareness of Education Support Scheme	Various higher education financial support schemes	PSO1

CAYm4 (2018-19):

Table B.2.1.1 i Identified Curricular Gaps

Sr. No	Relevant Course/Area	Curriculum Gap Identified	Relevance to PO & PSO
1	Industry Essential Skills	Industrial Culture	PO8, PSO1
2	Soft skill & Personality Development	Communication Skill, Presentation Skill	PO10, PO12 PSO1, PSO2
3	Entrepreneur Skills	Leadership Skill	PO9, PO11 PSO1, PSO2
4	Social Health & Safety Issues	Awareness about social health and safety measures	PO6, PO7, PSO2
5	Awareness of Higher Education	Various higher education opportunities	PO12, PSO1

2.1.2. State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs. (10)

CAY (2022-23):

Table B.2.1.2.a Content discussed beyond the syllabus to fill the curriculum gap

Sr. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No of Students	Relevance to Pos, PSOs
1	Soft skill & Personality Development	Corporate Grooming	21-02-2023 to 23-02-2023	Mr. George	20	PO8,PO9,PO10,PO11,PO12,PSO1,PSO2
2	Application of engineering knowledge	AVISHKAR 2022-2023	18-11-2022	Dr. Gayatri Mirajkar & Kadam Arjun A.	10	PO5,PO6,PO7,PO9,PO10,PO11,PSO1,PSO2
3	Usage of Modern Tools	Solid Work	07/12/2022 to 25/01/2023	Mahesh Sathe	12	PO5,PSO1
4	Application of engineering knowledge	Project Exhibition	24-12-2023	Dr. Salman Warimani	25	PO6,PO7,PO12 PSO2
5	Applications of quality engineering domain	Expert lecture of quality engineer	24 May 2023	Ms Aishwarya Salunkhe	30	PO9,PO6,PO12 PSO2
6	Applications of heat power engineering domain	Expert lecture on heat exchangers	21 June 2023	Ms Nikita Sawant	30	PO9, PO10, PO12 PSO1
7	Campus to corporate life	Expert lecture on industry culture and trends	19 April 2023	Mr Ajinkya Pandharpatte	18	PO6,PO9, PO10, PO12

8	Campus to corporate life	Expert lecture on industry culture and trends	06 July 2023	Rohit G Asawale	22	PO10, PO12, PSO2, PSO1
9	Orientation of service/purchase domain	Expert lecture on supply chain management	16 May 2023	Ms Mayuri Shewale	12	PO10, PO12, PSO2
10	Campus to corporate life	Expert lecture on industry culture and trends	06 Feb 2023	Mr Vedant Shinde	63	PO10, PO12, PSO2
11	Modern tool usage	Expert lecture on SAP	24 May 2023	Ms Adishree Pawar	30	PO6, PO12, PSO2
12	Campus to corporate life	Expert lecture on industry culture and trends	21 June 2023	Mr Aniket Yadav	15	PO10, PO12, PSO2
13	Modern tool usage	Expert lecture on various design softwares	26 July 2023	Mr Panaskar Pratik	55	PO10, PO11, PO12

14	Campus to corporate life	Expert lecture on industry culture and trends	07 July 2023	Mr Rushikesh Chavan	10	PO10, PO12, PSO2
15	Orientation of fluid mechanics domain	Expert lecture on various fluid control valves	26 July 2023	Mr Aniket Gaikwad	55	PO6,PO7,PO12 PSO2
16	Campus to corporate life	Expert lecture on industry culture and trends	28 March 2023	Pratik Shinde	21	PO6,PO9,PO7,PSO2
17	Modern tool usage	Expert lecture on various design softwares	28 July 2023	Mr Nikhil Dhane	34	PO5,PSO1
18	Interdisciplinary knowledge	Expert lecture on career opportunities in IT sector	15 March 2023	Mr Suraj Dixit	26	PO9,PO11
19	Orientation about latest trends in Mechanical Engineering	Expert lecture on robotics engineering	02 Jan 2023	Mr Akash Lembe	15	PO5,PSO1
20	Knowledge regarding	Expert lecture on	24 May 2023	Mr Pratik Mane	30	PO1,PO5,PSO1

	quality domain	different trends for quality measurement				
21	Design procedure of gears, valve	Industrial Visit to Delval india Pvt Ltd	9 th June 2022	Mr. Ankur Kamble	26	PO1, PO3, PO5,PSO1
22	Pre primary process of raw material of sheet metal operations	Industrial Visit to Oracle Press comp Engineering Pvt. Ltd.	26 th May 2023	Dr. Khadtare A.N.	15	PO1, PO7,PO8,PO9,PSO1
23	Overhauling and maintenance of engine components	Industrial Visit to MSRTC Workshop , Satara	13 th May 2023	Mr. Ghadage S.S.	28	PO1, PO5,PO11,PSO1
24	CNC programing and operation	Industrial Visit to Maharashtra Scooter Pvt Ltd	20 th Dec.2022	Mrs. Alatkari M.N.	20	PO4, PO5,PSO1,PSO2

CAY m1(2021-22):**Table B.2.1.2.b Content discussed beyond the syllabus to fill the curriculum gap**

Sr. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No of Students	Relevance to Pos, PSOs
1	Problem analysis using modern tools	Workshop on CATIA	26/11/21 to 21/1/2022	Mahesh Sathe	25	PO1, PO5, PO3, PO4, PSO1
2	Problem analysis using modern tools	Workshop on Creo 3.0	26/1/22 to 27/2/2022	Mahesh Sathe	30	PO2, PO3, PO5, PO4, PSO1
3	Latest trends in castings	Expert lecture on Material Science	2 nd February 2022	Dr Shirguppikar Shailesh RIT Islampur	15	PO1, PO2, PO3, PO4, PSO1
4	Technical Skills in line with the requirements of the industry	Expert Lecture on Industrial Engineering	01-02-2022	Dr A.B.Gholap, Asst Prof MMCOE Pune	08	PO1, PO2, PO3, PO4, PSO1
5	Technical Skills in line with the requirements of the industry	Expert Lecture on Heat Transfer	01-02-2022	Dr Choudhari C.S. AISSMS Pune	10	PO1, PO2, PO3, PO4, PSO1
6	Technical Skills in line with the requirements of the industry	Expert Lecture on Applied Thermodynamics	05-02-2022	Mr Vikram Pawar	13	PO2, PO3, PO4, PSO1
7	Technical Skills in line with the requirements of the industry	Expert Lecture on Applied Thermodynamics	28-01-2022	Mr Pujari A.S. Resarch Scholar IIT Bombay	27	PO1, PO2, PO3, PO4, PSO1
8	Technical Skills in line with the requirements of the industry	Expert Lecture on Theory of Machines-II	29-01-2022	Mr Manik Patil DYPIT Pimpri	29	PO1, PO2, PSO1

9	Technical Skills in line with the requirements of the industry	Internal Hackathon of Smart India Hackathon 2022	28-29/04/2022	Dr. Mirajkar Gayatri		PO1, PO2, PO3, PO4, PSO1
10	To Enhance communication skills	Soft skill program Conducted by Rubicon	16-22/9/2022	Mr. G George	38	PO10
11	Dimensional Modeling	One-day Workshop on Business Intelligence	13/11/2021	Mr. Suyog Patil	37	PO6, PO3, PO5, PSO1
12	Usage of Modern Tools	Effective Use of ICT Tools (MOODLE), NPTEL COURSERA Certification	21-12-2021	Ms. S.Y. Mulla	43	PO2, PO3, PO4, PSO1
13	Soft skill & Personality Development	English Speaking Session	16-04-2021 to 13-08-2021	Mr. Kale Abhay.A. (A.G.C.E., Satara)		PO2, PO3, PO4, PO10, PSO1
14	Recent Trends & Industry Readiness	Campus To Corporate Activity	1-05-2022 to 30-06-2022	Ms. Bhilare Nikita.S. Mr. Kale Abhay.A		PO1, PO2, PO3, PO4, PSO1
15	Soft skill & Personality Development	Brand Yourself	17-05-2022 to 19-05-2022	Mr. George		PO1, PO2, PO3, PO4, PSO1
16	Industry Readiness	Yuva 360 degree Internship	14-06-2022	Mrs. Patil		PO2, PO3, PO4, PSO1
17	Awareness of Higher Education	German Language Training Program	24/02/2022 07/4/2022	Ms. Sunita Shaligram		PO1, PO2, PO3, PO4, PSO1

CAY m2 (2020-21):**Table B.2.1.2.c Content discussed beyond the syllabus to fill the curriculum gap**

Sr. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No of Students	Relevance to Pos, PSOs
1	Practical aspects of CNC Programming, machining simulation	CNC Programming Workshop in Yugam 2020	29/06/2020	Mr. Bhoite L.K. S.D. Tech Institute Hadapsar	30	PO5, PO8, PO2, PSO1
2	Process Implementation	Lean six sigma in Yugam 2020	29/06/2020	Mr. Prasad Kulkarni,	30	PO3, PO5, PSO1
3	3D, Surface modelling and assembly, machin	UG NX in Yugam 2020	29/06/2020	1) Mr. Suraj Patil (Design Engineer Product Development JCB Pune) 2) Mr. Mahesh Sathe (Founder Design Solution Karad) 3) Mr. Omkar Pathwardhan (Design Engg. Supreme Equipment Pvt. Ltd, Nashik) 4) Mr. Suyog Patil (Assistant Professor AGCE, Satara)	42	PO3, PO8, PSO1
4	Industry Software Test Cases, Black Box Testing,	A career in Software Testing:	9/5/2021	Mr. Sushant Sankpal Quality Kiosks Mumbai	10	PO2, PO3, PO4, PSO1

	Categories of Testing	Prerequisite & Opportunities				
5	Entrepreneur Skills	Guidance session on Entrepreneurship Development	25 th April 2021	Mr. Mandar Kulkarni, Owner Ideal Gas Springs, Satara	15	PO9, PO10, PSO1
6	Technical Skills requirements	How to Crack Gate Examination	5-12-2020	Mr. Sumit Acharya (Gate Academy Pune)	20	PO2, PO3, PO5, PSO1

CAYm3(2019-20):**Table B.2.1.2.d Content discussed beyond the syllabus to fill the curriculum gap**

Sr. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No of Students Participated	Relevance to Pos, PSOs
1.	Practical exposure for manufacturing of automobile components and emission norms	Industrial Visit to Mahindra Vehicle Manufacturing Limited, Chakan MIDC, Maharashtra	20/09/2019	Mr. Melwyn Munnuswamy (Team Leader Administration & CSR)	50	PO1, PO9, PO3, PO5, P7, PO11, PSO1
2	Soft skill & Personality Development	Personality Development Program by Rubicon Skill Development Pvt Ltd	10/09/2019-12/09/2019	1. Grayish Shriwastv 2. Mr Amar Shinde 3. Satya S	31	PO1, PO2, PO3, PO4, PO5, PSO1, PSO2
3	Awareness on Education Support Scheme	Cummins Scholarship Orientation	23 rd August 2019	Mr. Swaroop Shiras	23	PSO1
4	Industry Essential Skills	Resume building and interview technique workshop	23/01/2020	Mr. Naren Juvekar	156	PO2, PO3, PO5, PO6, PSO2

5	Soft skill & Personality Development	AVISHKAR 2019-20 Poster Presentation Competition	19 th October 2019	Hon. Mr. Shri. S. V. Khobragade (Prof.In-charge of Start up at DBATU Lonere)	All SY, TY and BE Students	PO8, PO12, PSO2
6	Awareness of Higher Education	Orientation Program on GATE by ACE Academy	12/03/2020	Mr. Abhay Chaugule	28	PO12, PSO1
7	Social Health & Safety Issues	Healthy Life Style for Student	4/04/2020	Dr. Manohar Sasane	47	PO12, PSO1
8	Youth Development Program	“Jal Divas ”Celebration	22/7/2019	NSS Coordinator		PO6,PO7,PO12 PSO2
9	Youth Development Program	“Activity for helping people of flood affected areas”	18/08/2019	NSS Coordinator		PO6,PO7,PO12 PSO2
10	Youth Development Program	“Swachata hi Seva”	02/10/2019	NSS Coordinator		PO6,PO7,PO12 PSO2
11	Youth Development Program	NSS Camp @ AnewadiSatar a	02/02/2020-08/02/2020	NSS Coordinator		PO6,PO7,PO12 PSO2
12	Social Health & Safety Issues	“Road Safety week”	17/01/2020	Mrs. AfreenMulani (RTO Officer Satara)	38	PO6,PO7,PO12 PSO2
13	Youth Development Program	Aptitude Sessions (40 Sessions)	1-09-2019 to 13-03-2020	Prof Patil S,P Prof Pawar S.D. Prof Kasture A.D.	21	PO9,PO6,PO12 PSO2
14	Youth Development Program	Attitude Building for professional Excellence	23-11-2020	Prof. Pramod Bhadakawade (Symbiosis International University Pune)	20	PO9, PO10, PO12 PSO1
15	Youth Development Program	Development of	24-11-2020	Prof. Pramod Dastoorkar (Professor,	20	PO6,PO9, PO10, PO12


		Communication Skills		MIT Academy of Engineering, Pune)		
16	Youth Development Program	Career opportunities after B. Tech.	5-11-2020	Prof. Dr. Avinash V. Waghmare (All India Shree Shivaji Memorial Society, College of Engineering, Pune)	15	PO10, PO12
17	Youth Development Program	Career opportunities in Banking Sectors	11-11-2020	Mr. Vijay Adsul (Head-Training - IDBI, Rural Self Employment Training Institute, Satara)	16	PO10, PO12
18	Youth Development Program	Yoga for Physical and Mental Health	1-12-2020	Mr. Chandrkant Deoda (Sahaj Yoga Foundation, Pune)	10/36	PO6, PO12
19	Youth Development Program	One Day Workshop on Entrepreneurship Development	8-02-2020	Under lead college		PO10, PO11, PO12

2.2. Teaching - Learning Processes (100)

2.2.1. Describe Processes followed to improve the quality of Teaching & Learning (25)

A. Adherence to Academic Calendar (3M)

- The institute adheres to the academic calendar of DBATU, Lonere. The academic calendar constitutes the academic activities of the institute and the department.
- The institute prepares its academic calendar after the university academic calendar announcement at the beginning of each semester.
- In line with Institute academic calendar, the department prepares an annual activity calendar separately and shares it with the faculties and students
- All faculties and students follow the department activity calendar
- It includes the following details:
 - i. Schedule of Guest lecturers, Industrial visits, Cultural Events, and Sports activities organized by the department.
 - ii. Commencement of Semester
 - iii. Exam form filling date
 - iv. Internal Examination Schedule
 - v. Tentative dates of commencement of University practical and theory end semester examinations.
 - vi. Dates of public holidays
- Sample University, Institute, Department academic calendar is shown below



डॉ. बाबासाहेब आंबेडकर तंत्रशास्त्र विद्यापीठ, लोणेरे
Dr. Babasaheb Ambedkar Technological University, Lonere
 (Established under Act No XXIX of 2014 by Government of Maharashtra)
 विद्यापीठ, लोणेरे-राजद ४०२ १०३ (महाराष्ट्र) Vidyavihar, Lonere - Raigad 402 103 (Maharashtra)
 Tel: (02140) 275142 Student Helpline: 02140-275212
 Website: www.dbatu.ac.in, E-mail: registrar@dbatu.ac.in


Dr. Bhagwan F. Jogi
Registrar

डॉ. भगवान व. जोशी
कुलसचिव

Dated: 12/08/2022

Academic Calendar 2022-23 (Odd Semester) (Engineering)

Sl. No.	Activity	Commencement Date	Concluding Date	Total Days	Engineering
1	Admissions: B.Tech. Second, Third and Final Year, M.Tech. Second year.	September 01, 2022	September 10, 2022	10	UG and PG
2	Commencement of Classes of Second, Third and Final Year	September 01, 2022	December 19, 2022	110	UG and PG
3	Dissertation Examination of the Academic Year 2021-2022	September 01, 2022	September 10, 2022	10	PG
4	Mid-Semester Examinations	October 12, 2022	October 21, 2022	09	UG and PG
5	Submission of Dissertation Proposal to University	October 18, 2022	October 21, 2022	04	PG
6	Display of Mid-Semester Examination Marks	October 28, 2022	October 31, 2022	04	UG and PG
7	Scrutiny of Master's Level Dissertation Work Proposal	November 01, 2022	November 03, 2022	03	PG
8	Exam Form Filling for Regular & Supplementary Examinations	November 01, 2022	November 08, 2022	08	UG and PG
9	Exam Form Filling for Regular & Supplementary Examinations with Late Fee	November 09, 2022	November 15, 2022	07	UG and PG
10	University Tech Fest 2021	November 17, 2022	November 19, 2022	03	UG and PG
11	End of Classes	—	December 19, 2022	110	UG and PG
12	Practical/Project/Seminar Examinations	December 20, 2022	December 23, 2022	04	UG and PG
13	Uploading Internal, Mid Semester, Practical, Project and Seminar marks on University portal	December 22, 2022	December 24, 2022	03	UG and PG
14	End Semester Regular & Supplementary Examination	December 26, 2022	January 21, 2023	26	UG and PG
15	Internship/Industrial Training [#]	January 1, 2023	January 20, 2023	20	Faculty and Staff
16	Vacation	January 1, 2023	January 20, 2023	20	Faculty and Staff



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 Tel : (02140) 275142 Student Helpline : 02140-275212

Dr. Bhagwan F. Jogi
Registrar

डॉ. भगवान व. जोशी
कुलसचिव

Dated: 24/08/2022

DBATU REG/07C/2022/1383

Academic Calendar Semester-II Revised (AY 2022-2023)

Sr. No.	Activity	Commencement Date	Concluding Date	Level
1	Commencement of Classes	1 st April 2023	20 th June 2023	UG
2	Mid Semester Examination	8 th May 2023	12 th May 2023	UG
3	End of Classes	-	20 th June 2023	UG
4	End Semester Examination	21 st June 2023	30 th June 2023	UG
5	Practical Examination	1 st July 2023	10 th July 2023	UG
6	Result Declaration	-	30 th July 2023	UG
7	Commencement of Classes for Next semester	1 st August 2023		UG
Holidays 18 Feb – MahaShivratri 19 Feb – Chhatrapati Shivaji Maharaj Jayanti 7 March – Dhanuvidhan 22 March – Gudi Padwa 30 March – Ram Navami 4 April – Mahavir Jayanti 7 April – Good Friday 14 April – Dr Babasaheb Ambedkar Jayanti 22 April – Ramzan Eid 1 May – Maharashtra Din 5 May – Buddha Pournima 29 June – Bakri Eid				
1) All Sundays to be made working except public holidays. 2) Institute may allot additional lectures than prescribed to cover the syllabus.				

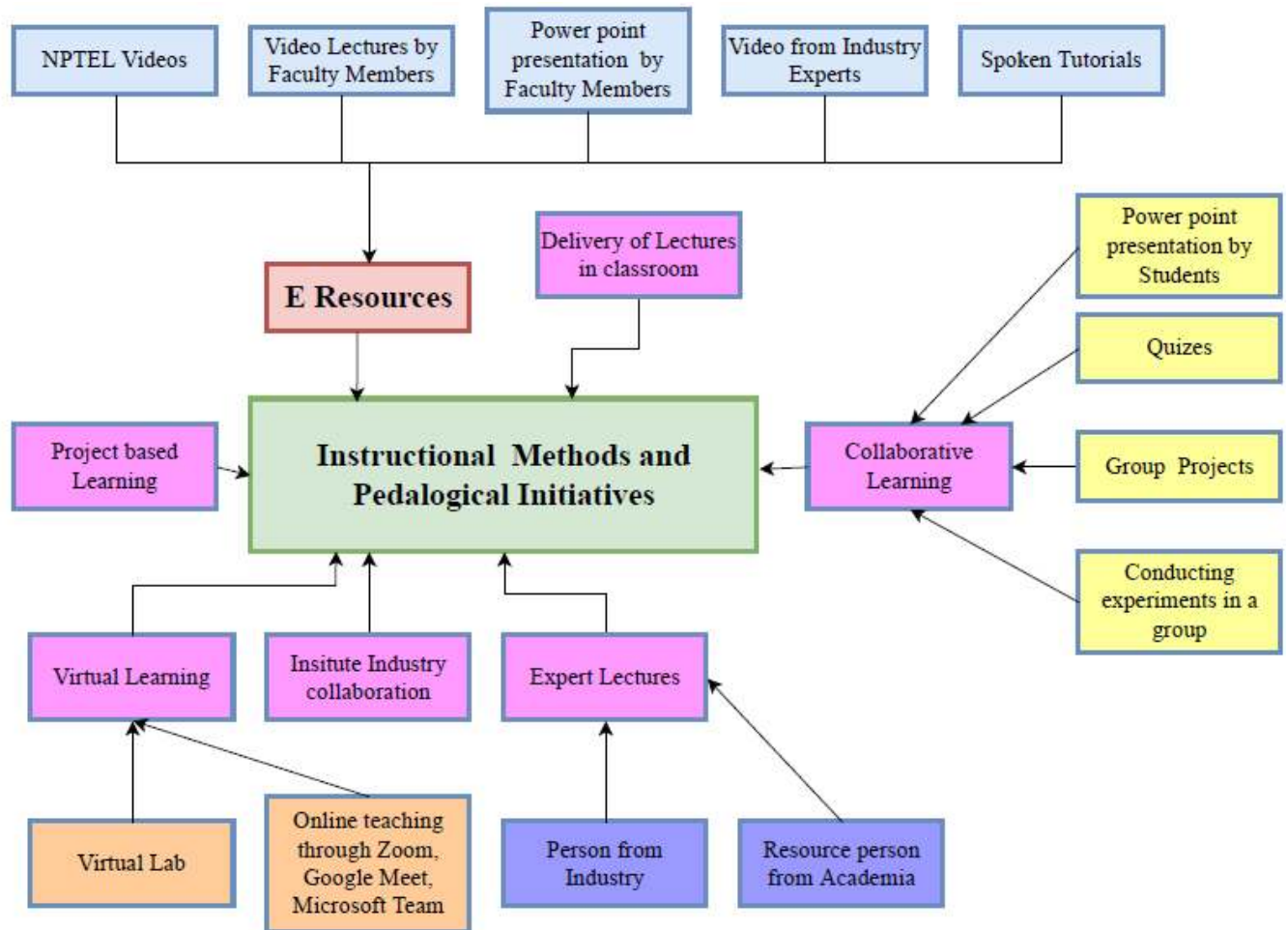
Copy submitted for information: Office of Hon'ble Vice-Chancellor
 Copy to:
 1. All heads of departments
 2. Affiliated institutes
 3. Academic Section
 4. Controller of Examinations

Dr. B. F. Jogi
Registrar
 Dr. Babasaheb Ambedkar Technological University,
 LONERE 402 103,
 Tal. Raigad, Dist. Raigad, (Maharashtra)

Web Site : www.dbatu.ac.in E-mail: registrar@dbatu.ac.in

Fig. B.2.2.1a.: Sample Academic calendar of the University

SAWAKAR INSTITUTES							Samarth Educational Trust's Arvind Gavali College of Engineering, Satara Academic Calendar 2022-23 Department: Mechanical Engineering Term-I								
September-2022							1.08 Sat Commencement of Classes and Admissions, 8 Tech Section, Third and Final Year, 14 Tech Section								
Week	SUN	MON	TUE	WED	THU	FRI	SAT	1.09 Sat	1.10 Sun	1.11 Mon	1.12 Tue	1.13 Wed	1.14 Thu	1.15 Fri	1.16 Sat
1								1.16 Sat	1.17 Sun	1.18 Mon	1.19 Tue	1.20 Wed	1.21 Thu	1.22 Fri	1.23 Sat
2								1.24 Sun	1.25 Mon	1.26 Tue	1.27 Wed	1.28 Thu	1.29 Fri	1.30 Sat	1.31 Sun
3								2.01 Mon	2.02 Tue	2.03 Wed	2.04 Thu	2.05 Fri	2.06 Sat	2.07 Sun	2.08 Mon
4								2.09 Tue	2.10 Wed	2.11 Thu	2.12 Fri	2.13 Sat	2.14 Sun	2.15 Mon	2.16 Tue
5								2.17 Wed	2.18 Thu	2.19 Fri	2.20 Sat	2.21 Sun	2.22 Mon	2.23 Tue	2.24 Wed
6								2.25 Thu	2.26 Fri	2.27 Sat	2.28 Sun	2.29 Mon	2.30 Tue	3.01 Wed	3.02 Thu
7								3.03 Fri	3.04 Sat	3.05 Sun	3.06 Mon	3.07 Tue	3.08 Wed	3.09 Thu	3.10 Fri
8								3.11 Sat	3.12 Sun	3.13 Mon	3.14 Tue	3.15 Wed	3.16 Thu	3.17 Fri	3.18 Sat
9								3.19 Sun	3.20 Mon	3.21 Tue	3.22 Wed	3.23 Thu	3.24 Fri	3.25 Sat	3.26 Sun
10								3.27 Mon	3.28 Tue	3.29 Wed	3.30 Thu	3.31 Fri	4.01 Sat	4.02 Sun	4.03 Mon
11								4.04 Tue	4.05 Wed	4.06 Thu	4.07 Fri	4.08 Sat	4.09 Sun	4.10 Mon	4.11 Tue
12								4.12 Wed	4.13 Thu	4.14 Fri	4.15 Sat	4.16 Sun	4.17 Mon	4.18 Tue	4.19 Wed
13								4.20 Thu	4.21 Fri	4.22 Sat	4.23 Sun	4.24 Mon	4.25 Tue	4.26 Wed	4.27 Thu
14								4.28 Fri	4.29 Sat	4.30 Sun	5.01 Mon	5.02 Tue	5.03 Wed	5.04 Thu	5.05 Fri
15								5.06 Sat	5.07 Sun	5.08 Mon	5.09 Tue	5.10 Wed	5.11 Thu	5.12 Fri	5.13 Sat
16								5.14 Sun	5.15 Mon	5.16 Tue	5.17 Wed	5.18 Thu	5.19 Fri	5.20 Sat	5.21 Sun
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25								7.25 Tue	7.26 Wed	7.27 Thu	7.28 Fri	7.29 Sat	7.30 Sun	7.31 Mon	8.01 Tue
26								8.02 Wed	8.03 Thu	8.04 Fri	8.05 Sat	8.06 Sun	8.07 Mon	8.08 Tue	8.09 Wed
27								8.10 Thu	8.11 Fri	8.12 Sat	8.13 Sun	8.14 Mon	8.15 Tue	8.16 Wed	8.17 Thu
28								8.18 Fri	8.19 Sat	8.20 Sun	8.21 Mon	8.22 Tue	8.23 Wed	8.24 Thu	8.25 Fri
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37								10.29 Sun	10.30 Mon	10.31 Tue	11.01 Wed	11.02 Thu	11.03 Fri	11.04 Sat	11.05 Sun
38								11.06 Mon	11.07 Tue	11.08 Wed	11.09 Thu	11.10 Fri	11.11 Sat	11.12 Sun	11.13 Mon
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42								12.08 Fri	12.09 Sat	12.10 Sun	12.11 Mon	12.12 Tue	12.13 Wed	12.14 Thu	12.15 Fri
43								12.16 Sat	12.17 Sun	12.18 Mon	12.19 Tue	12.20 Wed	12.21 Thu	12.22 Fri	12.23 Sat
44								12.24 Sun	12.25 Mon	12.26 Tue	12.27 Wed	12.28 Thu	12.29 Fri	12.30 Sat	12.31 Sun
45								1.01 Jan	1.02 Tue	1.03 Wed	1.04 Thu	1.05 Fri	1.06 Sat	1.07 Sun	1.08 Mon
46								1.09 Tue	1.10 Wed	1.11 Thu	1.12 Fri	1.13 Sat	1.14 Sun	1.15 Mon	1.16 Tue
47								1.17 Wed	1.18 Thu	1.19 Fri	1.20 Sat	1.21 Sun	1.22 Mon	1.23 Tue	1.24 Wed
48								1.25 Thu	1.26 Fri	1.27 Sat	1.28 Sun	1.29 Mon	1.30 Tue	1.31 Wed	2.01 Thu
49								2.02 Fri	2.03 Sat	2.04 Sun	2.05 Mon	2.06 Tue	2.07 Wed	2.08 Thu	2.09 Fri
50								2.10 Sat	2.11 Sun	2.12 Mon	2.13 Tue	2.14 Wed	2.15 Thu	2.16 Fri	2.17 Sat
51								2.18 Sun	2.19 Mon	2.20 Tue	2.21 Wed	2.22 Thu	2.23 Fri	2.24 Sat	2.25 Sun
52								2.26 Mon	2.27 Tue	2.28 Wed	2.29 Thu	2.30 Fri	3.01 Sat	3.02 Sun	3.03 Mon
53								3.04 Tue	3.05 Wed	3.06 Thu	3.07 Fri	3.08 Sat	3.09 Sun	3.10 Mon	3.11 Tue
54								3.12 Wed	3.13 Thu	3.14 Fri	3.15 Sat	3.16 Sun	3.17 Mon	3.18 Tue	3.19 Wed
55								3.20 Thu	3.21 Fri	3.22 Sat	3.23 Sun	3.24 Mon	3.25 Tue	3.26 Wed	3.27 Thu
56								3.28 Fri	3.29 Sat	3.30 Sun	3.31 Mon	4.01 Tue	4.02 Wed	4.03 Thu	4.04 Fri
57								4.05 Sat	4.06 Sun	4.07 Mon	4.08 Tue	4.09 Wed	4.10 Thu	4.11 Fri	4.12 Sat
58								4.13 Sun	4.14 Mon	4.15 Tue	4.16 Wed	4.17 Thu	4.18 Fri	4.19 Sat	4.20 Sun
59								4.21 Mon	4.22 Tue	4.23 Wed	4.24 Thu	4.25 Fri	4.26 Sat	4.27 Sun	4.28 Mon
60								4.29 Tue	4.30 Wed	5.01 Thu	5.02 Fri	5.03 Sat	5.04 Sun	5.05 Mon	5.06 Tue
61								5.07 Wed	5.08 Thu	5.09 Fri	5.10 Sat	5.11 Sun	5.12 Mon	5.13 Tue	5.14 Wed
62								5.15 Thu	5.16 Fri	5.17 Sat	5.18 Sun	5.19 Mon	5.20 Tue	5.21 Wed	5.22 Thu
63								5.23 Fri	5.24 Sat	5.25 Sun	5.26 Mon	5.27 Tue	5.28 Wed	5.29 Thu	5.30 Fri
64								5.31 Sat	6.01 Sun	6.02 Mon	6.03 Tue	6.04 Wed	6.05 Thu	6.06 Fri	6.07 Sat
65								6.08 Sun	6.09 Mon	6.10 Tue	6.11 Wed	6.12 Thu	6.13 Fri	6.14 Sat	6.15 Sun
66								6.16 Mon	6.17 Tue	6.18 Wed	6.19 Thu	6.20 Fri	6.21 Sat	6.22 Sun	6.23 Mon
67								6.24 Tue	6.25 Wed	6.26 Thu	6.27 Fri	6.28 Sat	6.29 Sun	6.30 Mon	7.01 Tue
68								7.02 Wed	7.03 Thu	7.04 Fri	7.05 Sat	7.06 Sun	7.07 Mon	7.08 Tue	7.09 Wed
69								7.10 Thu	7.11 Fri	7.12 Sat	7.13 Sun	7.14 Mon	7.15 Tue	7.16 Wed	7.17 Thu
70								7.18 Fri	7.19 Sat	7.20 Sun	7.21 Mon	7.22 Tue	7.23 Wed	7.24 Thu	7.25 Fri
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79								9.28 Fri	9.29 Sat	9.30 Sun	10.01 Mon	10.02 Tue	10.03 Wed	10.04 Thu	10.05 Fri
80								10.06 Sat	10.07 Sun	10.08 Mon	10.09 Tue	10.10 Wed	10.11 Thu	10.12 Fri	10.13 Sat
81								10.14 Sun	10.15 Mon	10.16 Tue	10.17 Wed	10.18 Thu	10.19 Fri	10.20 Sat	10.21 Sun
82								10.22 Mon	10.23 Tue	10.24 Wed	10.25 Thu	10.26 Fri	10.27 Sat	10.28 Sun	10.29 Mon
83								10.30 Tue	10.31 Wed	11.01 Thu	11.02 Fri	11.03 Sat	11.04 Sun	11.05 Mon	11.06 Tue
84								11.07 Wed	11.08 Thu	11.09 Fri	11.10 Sat	11.11 Sun	11.12 Mon	11.13 Tue	11.14 Wed
85								11.15 Thu	11.16 Fri	11.17 Sat	11.18 Sun	11.19 Mon	11.20 Tue	11.21 Wed	11.22 Thu
86								11.23 Fri	11.24 Sat	11.25 Sun	11.26 Mon	11.27 Tue			

B. Use of various instructional methods and pedagogical initiatives (3M):**Fig. B.2.2.1d.: Instructional methods & pedagogy****Delivery**

Teachers employ a variety of tools in the classroom, including intelligent interactive panels, whiteboards, projectors, and blackboards. During lectures, each student is permitted to ask any question about the subject. Faculty members answer questions from students that they are asked during lectures.

Use of e-resources:

For all courses, professors use PowerPoint presentations to help students understand the concept. Additionally, they use videos from many MOOC platforms, including those from the National Programme

on Technology Enhanced Learning (NPTEL), MIT Open-Source Video, and videos from Industry Experts.

The screenshot displays the 'Manage College and SPOC Profile' interface. The header includes 'SWAYAM-NPTEL Local Chapter' and navigation links: Home, Downloads, Fee waiver, Bulk Payment, Mentors, NPTEL stars, and Logout. The main content area has tabs for 'College Profile', 'SPOC Profile', 'Req Letter', and 'Ack Letter'. The 'College Profile' tab is selected, showing the following details:

Field	Value
College Address	GAT NO. 247,PANMALEWADI, VARYE
	SATARA
	MAHARASHTRA
Contact No:	8482875175
Alternate No:	8975981500
College Id :	521

The left sidebar contains the following links:

- SPOC Timeline
- SPOC Conference Support Request
- LC Profile Changes Request

Fig. B.2.2.1e.: Swayam NPTEL Local Chapter

Collaborative Learning:

- Collaborative learning is the educational strategy that makes use of groups to improve learning by cooperating. Learners who are in groups of two or more collaborate to solve issues, finish tasks, or understand new ideas. It encourages hearing other people's points of view, listening to criticism and suggestions, and improving cooperation while also fostering public speaking and active listening abilities.
- The curriculum covers topics including seminars, mini projects, and major projects, where groups of three to five students are created and a mentor is assigned to oversee and guide the progress of the work.
- The approaches utilized for group learning are as follows:
 1. Small modules are divided into project work, and a subset of students work on various modules.
 2. In groups of 3-5 students, preparation activities for seminars and PowerPoint presentations were also carried out.
 3. In a group of 3-5 students, laboratory experiments are carried out for a subject like IoT.

4. Moodle is a significant ICT project of the Mechanical department that is helpful for group learning. Quiz, assignments, and resource sharing are among the many activities carried out online.

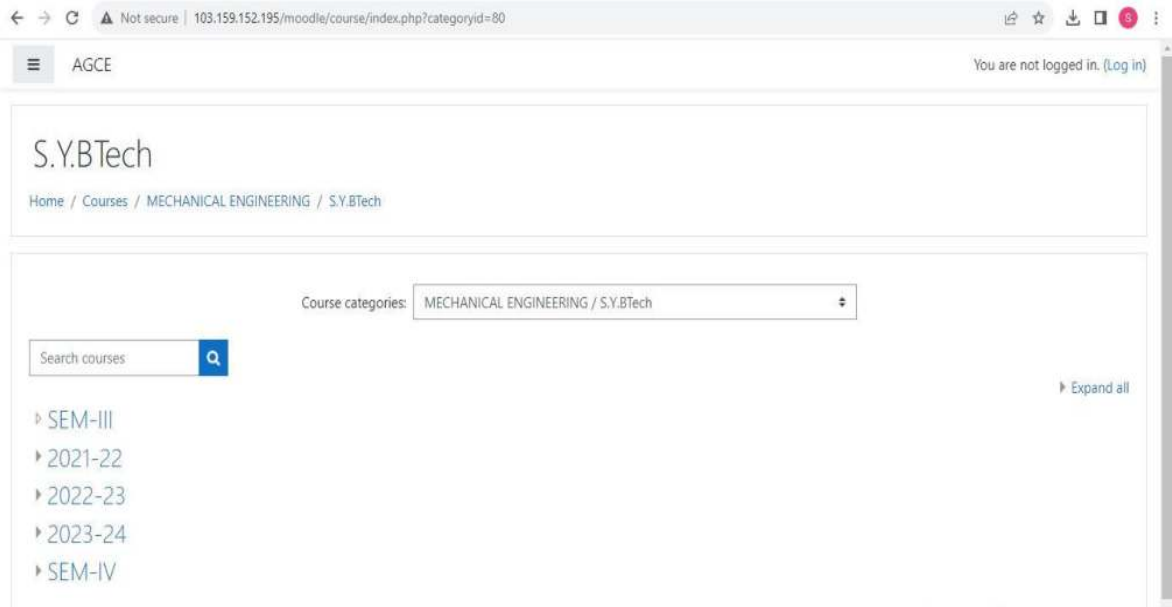


Fig. B.2.2.1f.: MOODLE Web

Project Based Learning:

- During the period of study, many real-time projects are given to the students on the latest technologies and they are guided by faculty members. In the seventh and eighth semesters, a final year project is developed by a group of students. For some academic courses, students have been encouraged to do some projects



Fig. B.2.2.1 g.: Project Demonstration

Expert Lectures:

- Experts from Industries and renowned academic institutions are regularly invited to deliver Guest/Expert Lectures for our students

Virtual Learning:

- Virtual laboratories: Faculty members use virtual laboratories of different IITs to conduct some experiments beyond the syllabus of the respective laboratories. Instruction manuals about the conduction of experiments are given in virtual labs, students follow these instruction materials to complete the experiments.
- Online teaching through MS Teams, Google Meet, and Zoom: Faculty members use software like MS team, Google meet, zoom, etc. to take lectures, tutorials, and laboratories online. Some faculty members also run their own created video lectures, NPTEL, and YouTube videos during online lectures using MS teams, Google meets, and zoom.

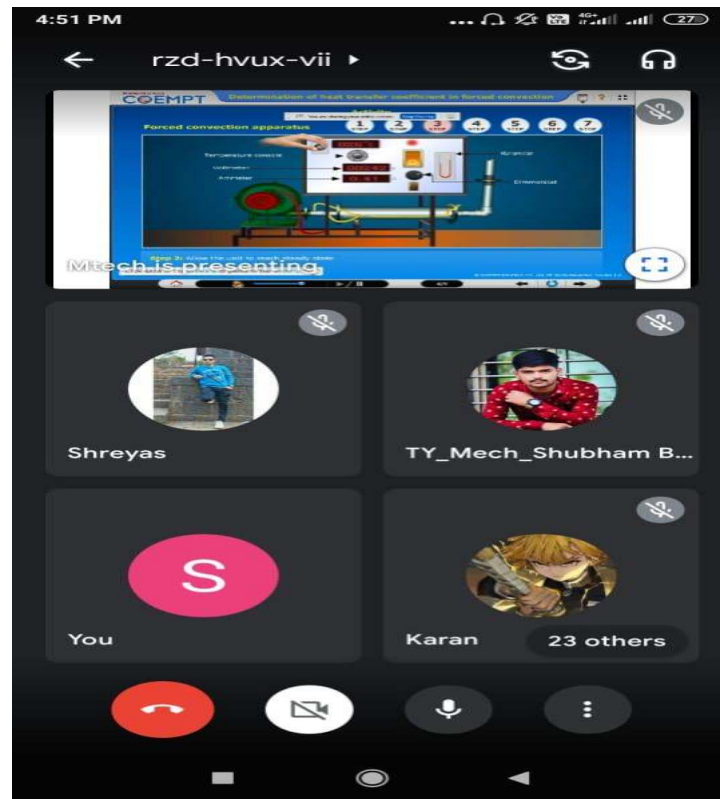


Fig. B.2.2.1 h: Online Learning on Google Meet

C. Methodologies to support weak students and encourage bright students(4M)

Departments have a proper mechanism to support the weak-performing student as well as encourage bright students. Identification of weak and bright students is carried out by considering their previous academic performance and feedback from Guardian Faculty members. For every batch of 20 students, one faculty is appointed as a guardian faculty member (GFM) who takes care of all these students as a guardian. This faculty member listens to all personal problems of student, council them, and help them to sort out their issues. Based on counseling department identifies areas of improvement and do the necessary plan which involves remedial classes, improvement test, and extra assignment, this enables the weak students to participate and perform better in understanding the concepts, internal assessment, and university exams.

APRIL // Academic Calendar , Term - II

Suggestion

TARUNAJI - 2023

05/04/23	9:30	5:30
06/04/23		
07/04/23		
08/04/23		

16-4-23 - national level technical project competition - co-ordinate & participant.

20-4-23 to 21-4-23 - participate in poster & project competition at spvm college Malegaon.

1st Saturday GFM Signature

3rd Saturday GFM Signature

PERSONAL DETAILS (2022-23)

Name of Student - Matkar Akansha D.

Address - At - post Vikhale Tal - Koregaon Dist satara

Student Mobile No - 8857 89880

Parent Mobile No - 9970584685

Parents Occupation - Farmer

E-mail - akanshamatkar16@gmail.com

Branch - Mechanical

Blood Group - AB+

Class - TY-BTech

Roll No - 3051

GFM Name - Dr. SAI Bellary

GFM Mob No - 9962604864

Note - Students having attendance more than 75% are eligible for Institute Scholarship.
*Laptop / Tablets are allowed during practical for academic purpose.



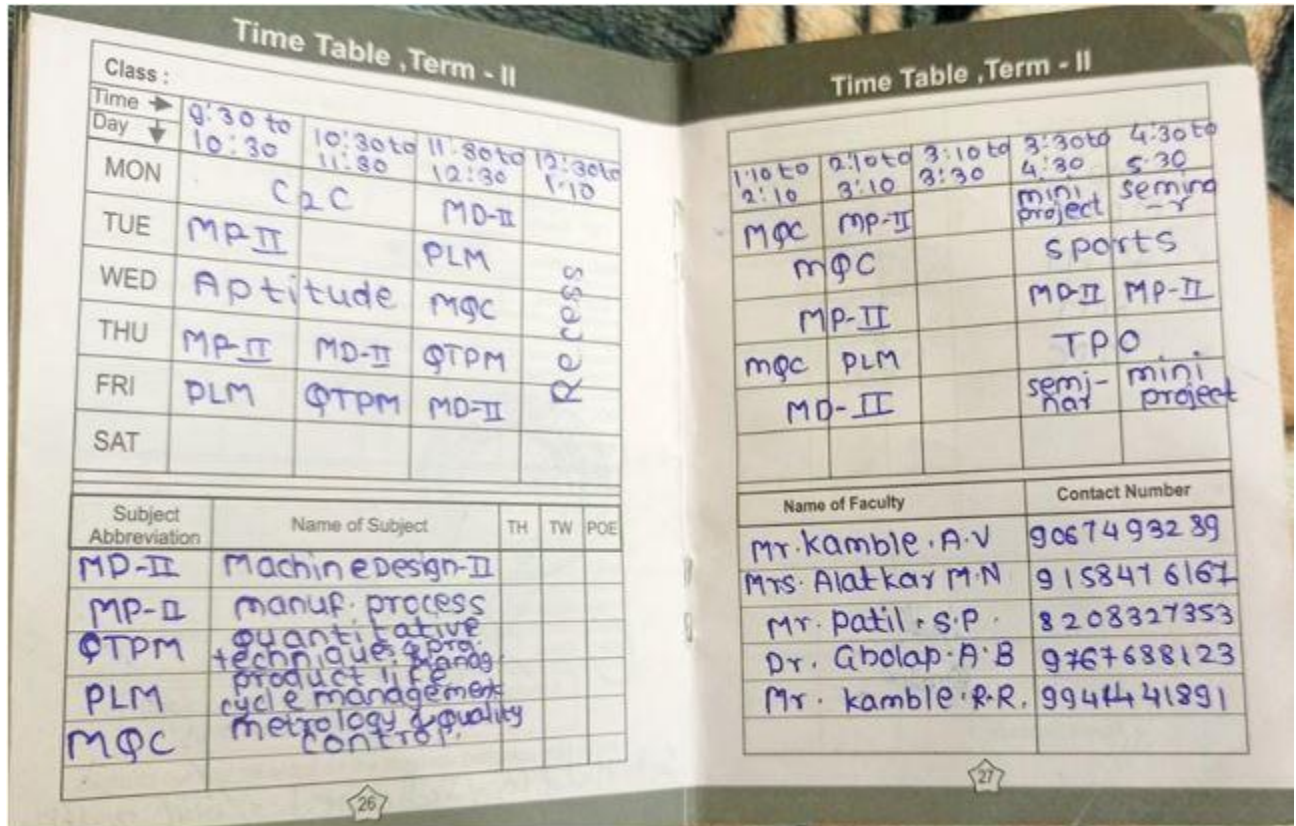


Fig. B.2.2.1 i: Sample Student Progress Diary

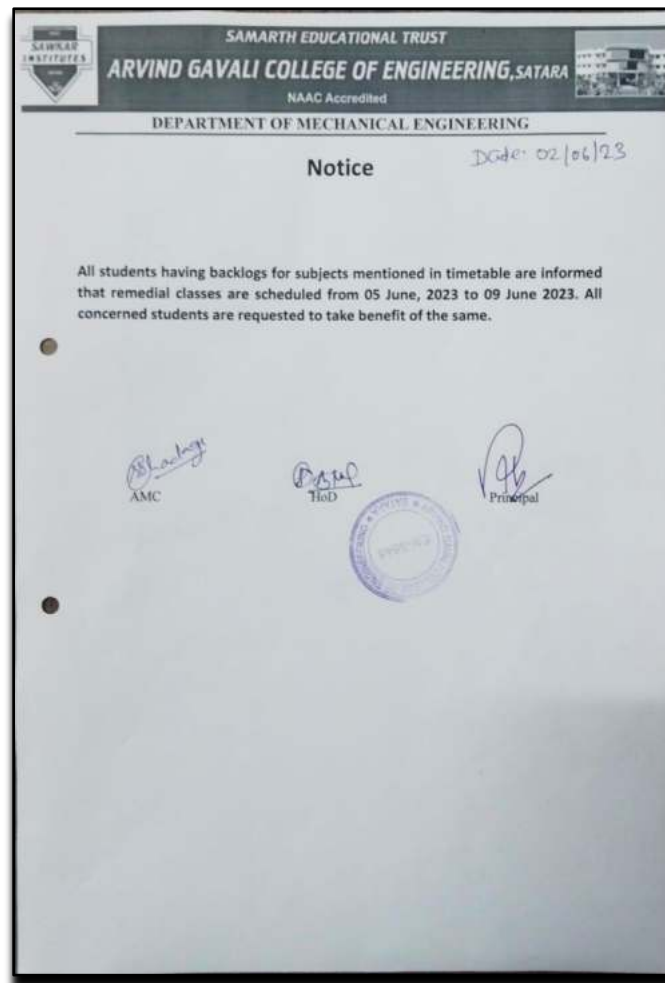


Fig. B.2.2.1 j: Sample Notice of Remedial Classes

Arvind Gavali College of Engineering Satara
DEPARTMENT OF MECHANICAL ENGINEERING
Remedial lectures Schedule (Monday to Friday)

DAY	Monday	Subject	Faculty Name	TIME
Date	05 June 2023	Heat Transfer	Dr. Sonachalam	9:30am to 11:30 pm 1:00 pm to 2:50 pm 3:00pm to 5:00pm
DAY	Tuesday	Subject	Faculty Name	TIME
Date	06 June 2023	Applied Thermodynamics	Mr. Ghadage S.S.	9:30am to 11:30 pm 1:00 pm to 2:50 pm 3:00pm to 5:00pm
DAY	Wednesday	Subject	Faculty Name	TIME
Date	07 June 2023	Material science and Metallurgy	Dr. Ghodap A.B.	9:30am to 11:30 pm 1:00 pm to 2:50 pm 3:00pm to 5:00pm
DAY	Thursday	Subject	Faculty Name	TIME
Date	08 June 2023	Thermodynamics	Mr. Patil S.P.	9:30am to 11:30 pm 1:00 pm to 2:50 pm 3:00pm to 5:00pm
DAY	Friday	Subject	Faculty Name	TIME
Date	09 June 2023	Engineering Mathematics-III	Mr. Swarnab Shinde	9:30am to 11:30 pm 1:00 pm to 2:50 pm 3:00 pm to 5:00 pm







Fig. B.2.2.1 k: Sample Remedial Classes Time Table

Brighten students are encouraged to learn content beyond the syllabus through MOOC platforms NPTEL courses, Coursera also MIT Open-source online education. Institute has a separate NPTEL Local Chapter (LC-ID 521), through which various advanced courses in various sectors like project management, software engineering, etc. are made available to bright students.

This enables the bright students:

- a) Update themselves with the latest tools and technologies
- b) Demonstrate critical thinking and take up innovative projects
- c) Taking up higher studies in the field of research and development enhances their skill and managerial quality to become successful entrepreneurs/employees.

SWAYAM-NPTEL Local Chapter														
Home Downloads Fee waiver Bulk Payment Mentors NPTEL stars Logout														
Jan-Apr 2023 Enrollment details														
Excel Print Search: mech														
S.no	Name	Email Id	Course Id	CourseName	College Roll Number	Mobile Number	City	Profession	Qualification	Degree	Department	Study Year	Motivation	Timeline
8	Bhosale Abhijeet Sumil	abhijeetbhosale1825@gmail.com	noc23-me23	Convective Heat Transfer	3001	+91 70389 52320	Satara	student	bachelor-4yr	btech	Mechanical Engineering	3		Jan-Apr 2023
9	Bhosale Abhijeet Sumil	abhijeetbhosale1825@gmail.com	noc23-me55	IC Engines and Gas Turbines	3001	+91 70389 52320	Satara	student	bachelor-4yr	btech	Mechanical Engineering	3		Jan-Apr 2023
10	Abhijit Sarjerao Shinde	abhijeetshinde7007@gmail.com	noc23-me14	Product Design and Manufacturing	3001	+91 87664 19950	Kavathe Mahankal	student	bachelor-4yr	btech	Mechanical Engineering	2		Jan-Apr 2023
11	Abhishek Sanjay Chavan	abhishekchavan392@gmail.com	noc23-de01	Fundamentals of Automotive Systems	4082	+91 87885 29075	Karad	student	diploma	btech	Mechanical Engineering	4		Jan-Apr 2023
12	Abhir Jahaneir	abhirdange2@gmail.com	noc23-de01	Fundamentals of Automotive	4076	+91 81492 89313	Karad	student	diploma	btech	Mechanical Engineering	4		Jan-Apr 2023

Fig. B.2.2.1 l: Sample NPTEL Enrollment



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
ANIRUDHA SANJAY KADAM
for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of **50** %

Online Assignments	19.53/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **461**

Jan-Apr 2023
(12 week course)



Prof. T. V. Bharat
Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati



Roll No: NPTEL23ME55S64600226

To validate the certificate



No. of credits recommended: 3 or 4

Fig. B.2.2.1 m: Sample NPTEL Certificate

Department announces every year the “Best outgoing student” of the program. Selection is carried out based on one’s continuous quality performance in all sorts of activities which include curricular, extracurricular, internships, competitions, innovative projects undertaken and completed, MOOC courses studied, and university marks, following table shows the last three years' best outgoing students.

Table B.2.2.1 a: Best outgoing student

Sr. No.	Name of Student	Academic Year
1	Rushikesh Ghorpade	2022-23
2	Aishwarya Salunkhe	2021-22
3	Sharad Asawale	2020-21
4	Sonali Pisal	2019-20

D. Quality of classroom teaching (3M):

- Teachers are properly assigned courses and practical sessions before the semester even begins, which enhances both the quality of the information students get and their performance.
- Before the start of the semester, every faculty member prepares lesson plans, session plans, and lecture notes. They then post the study materials on MOODLE.
- Faculty members use common textbooks to prepare their notes. When creating the session plan, chapters from these textbooks are emphasized so that students are compelled to consult them.
- To keep students' interest throughout lectures, professors employ brainteasers, quizzes, and engaging movies and Power Points linked to the subject.
- Various educational efforts and instructional techniques & tools are used to engage the student in learning



Fig. B.2.2.1 n.: Student's Learning on Intelligent Interactive Panel

E. Conduct of experiments:

All laboratories of the Mechanical engineering department are equipped with enough Mechanical equipments

1. Each student performs experiments on set up.
2. All laboratory experiments have accompanying laboratory manuals.
3. Before the laboratory session, students are urged to read up on the theory underlying the experiments and the steps necessary to carry them out.
4. A concerned professor explains how the experiment was conducted.
5. It is suggested that students consult laboratory manuals for assistance.
6. A faculty member supervises and assists each student while they undertake experiments.
7. The laboratory performance record is to be submitted by the students for evaluation.

8. Internal marks are given according to the experiment's understanding, neatness, and timely journal submission.



Fig. B.2.2.1 o.: Laboratory Session

F. Continuous Assessment in the laboratory (3M):

Laboratory Evaluation:

A continuous assessment system is implemented for the assessment of laboratory work. Assessment is carried out for each student experiment in the laboratory as per demonstrated by the course in charge. This assessment is done based on

1. Timely Submission
2. Neatness
3. Understanding


Following is a sample laboratory work assessment sheet.

SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING **AGCE**
 Parnatewad, Varga, Tal & Dist - Satara - 415 015
 Approved by AICTE, New Delhi, Recognised by Govt. of Maharashtra &
 Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere

Continuous Assessment Sheet (CAS)

Name of Candidate Jadhav Bavin Class & Department TY Mechanical
 Roll No. 3017 Subject Manufacturing Process II

Exp. No.	Exp Name	Date of Construction	Laboratory Assessment				Faculty Sign with Date				
			Timely submission (02)	Neatness (04)	Understanding (04)	Total (10)					
1	Study of types of chips	02/10/23	1	2	4	7	A				
2	Cutting rate and angles in oblique turning process	04/10/23	2	3	5	7					
3	Cutting fluid on surface roughness during oblique turning process	05/10/23	2	3	4	9					
CA1			Average marks of laboratory experiment (10)								
4	Partial milling cycle	06/10/23	2	3	3	8	A				
5	Part program on CNC M2 using G&M code	07/10/23	1	2	3	6					
6	Write CNC program	08/10/23	2	3	3	8					
7	Part programme for CNC	09/10/23	1	2	3	6					
8	Part programme for CNC milling w/c using G&M code	23/10/23	2	3	3	7					
CA2			Average marks of laboratory experiment (10)								
	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)	
CA1	7	4	9	2	26	CA2	8	4	9	5	26

 Student Sign.


 Faculty Sign.

Fig.2.2.1 p. Sample Laboratory Evaluation Sheet

G. Student feedback on the teaching-learning process and actions are taken (6)

The department collects student feedback to identify areas for development. The Head of the Department (HoD) also examines feedback to evaluate faculty performance. Before course completion, a prescribed structure is used to collect student feedback on the course and the faculty member instructing it (attached below).

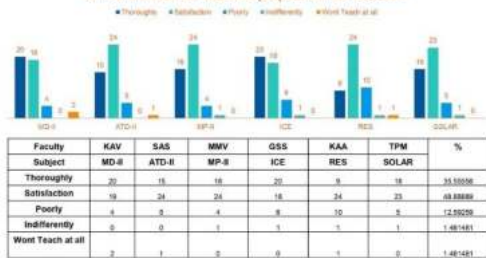
Third Year Div B Feedback

Month : April 2022 -
Total Responses : 45
Total Class Strength : 68
Feedback Percentage : 66.17%

FACULTY – SUBJECT DISTRIBUTION

Sr. No	Subject	Abbrev.	Name of Faculty	Abbrev.
01	Machine Design-II	MD-II	Mr. Kamble Ankur V.	KAV
02	Applied Thermodynamics -II	ATD-II	Mr. Shivade A.S.	SAS
03	Manufacturing Processes- II	MP-II	Mr. Matkar Mahesh V.	MMV
04	I.C. Engines	ICE	Mr. Ghadage Suraj S.	GSS
05	Renewable Energy Sources	RES	Mr. Kadam A. A.	KAA
06	Solar Energy	SOLAR	Mr. Tambe Pratik M.	TPM

2.How well did the teachers prepare for the classes?



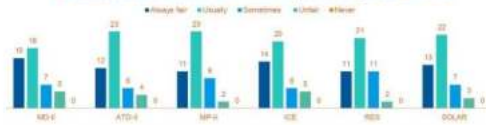
3.How well were the teachers able to communicate?



4.The teacher's approach to teaching can best be described as

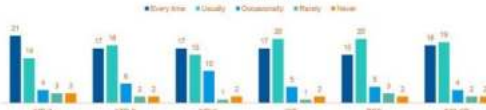


5. Fairness of the internal evaluation process by the teachers



Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Always fair	18	12	11	14	11	13	38.14815
Usually	18	22	23	20	21	22	47.93304
Sometimes	7	6	9	6	11	7	17.93304
Unfair	5	4	3	5	2	3	7.77778
Never	0	0	0	0	0	0	0

6. Was your performance in assignments/extra practice test discussed with you?



Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	21	17	17	17	15	19	38.8889
Usually	14	18	15	20	20	19	39.25926
Occasionally	3	8	10	3	5	4	12.96296
Rarely	3	2	1	1	3	2	4.44444
Never	2	2	2	2	2	2	4.814815

7. The faculty takes active interest in promoting internship, student exchange, field visit opportunities for students.



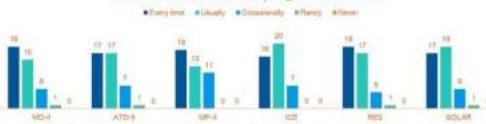
Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Regularly	14	16	20	12	11	14	31.85185
Often	17	18	15	16	19	19	37.77778
Sometimes	3	10	7	10	10	9	20.23232
Rarely	3	3	1	1	3	2	5.55556
Never	3	2	2	2	2	1	4.44444

9. The institute provides multiple opportunities to learn and grow



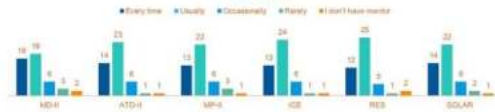
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Strongly Agree	9	8	8	8	3	3	11.64444
Agree	22	25	23	28	22	28	33.33333
Neutral	8	8	10	8	13	10	20.74074
Disagree	4	3	1	1	2	1	4.44444
Strongly Disagree	4	3	3	3	3	3	7.92593

10. Teachers inform you about your expected competencies, course outcomes, and program outcomes



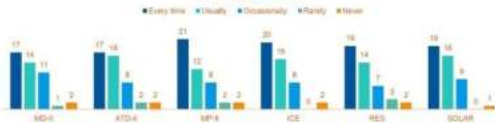
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	19	17	18	19	19	17	39.25926
Usually	15	17	13	20	17	19	37.67411
Occasionally	8	7	11	7	9	8	13.55556
Rarely	1	1	0	0	1	1	1.481481
Never	0	0	0	0	0	0	0

11. Your mentor does a necessary follow-up with as assigned task to you



Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	16	14	13	13	12	14	35.27037
Usually	18	23	22	24	25	22	49.87963
Occasionally	6	6	8	8	5	6	12.96298
Rarely	3	1	3	1	1	2	4.074074
I don't have mentor	2	1	1	1	2	1	2.962963

12. The teacher illustrates the concepts through examples and applications



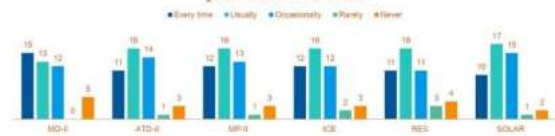
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	17	17	21	20	19	19	41.85714
Usually	14	16	12	15	16	16	32.22222
Occasionally	11	8	8	8	7	8	18.58824
Rarely	1	2	2	0	3	0	2.959595
Never	2	2	2	2	2	1	4.074074

13. The teacher identifies your strengths and encourage you with providing right level of challenges



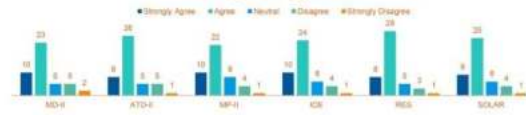
Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Fully	10	12	12	8	7	11	22.32222
Reasonably	19	20	15	20	18	17	40.74074
Partially	11	9	14	14	11	14	27.03704
Slightly	1	1	1	0	4	1	2.862963
Unable	4	3	3	3	4	2	7.037037

14. Teachers are able to identify your weaknesses and help you to overcome them



Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	15	11	12	12	11	10	26.2963
Usually	13	16	16	16	16	17	34.81481
Occasionally	12	14	13	12	11	15	28.51852
Rarely	0	1	1	2	3	1	2.962963
Never	5	3	3	3	4	2	7.407407

15. The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.



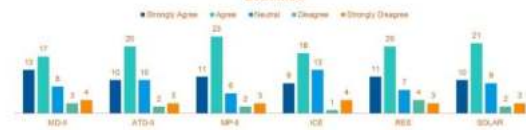
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Strongly Agree	10	8	10	10	8	8	30.37037
Agree	23	20	22	24	20	22	54.81481
Neutral	5	5	8	8	5	8	12.96296
Disagree	5	5	4	4	3	4	9.259259
Strongly Disagree	2	1	1	1	1	1	2.962963

16. The institute/ teachers use student-centric methods, such as experiential learning, participative learning and problem-solving methodologies for enhancing learning experiences



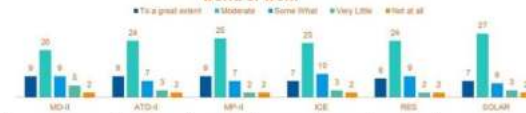
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
To a great extent	10	7	10	8	7	8	18.51852
Moderate	18	24	25	25	20	24	49.62963
Some What	10	12	9	8	14	11	23.7037
Very Little	8	1	2	3	2	1	5.185185
Not at all	2	1	1	1	2	1	2.962963

17. Teachers encourage you to participate in extracurricular activities

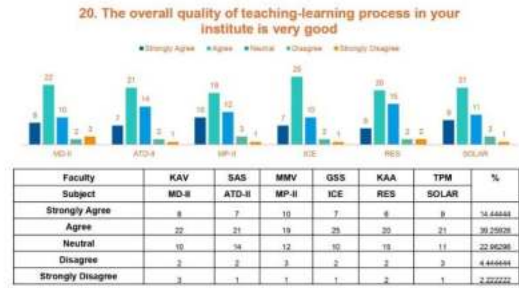
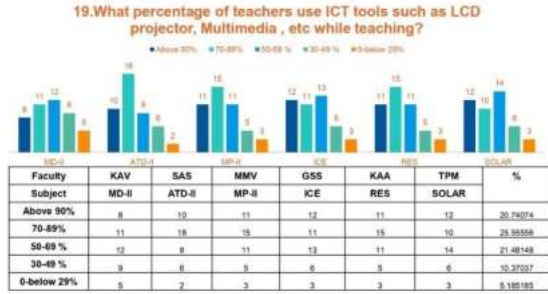


Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Strongly Agree	13	10	11	9	11	10	33.7597
Agree	17	25	23	18	20	21	44.07407
Neutral	8	10	6	13	7	9	18.0263
Disagree	3	2	2	1	4	2	6.185185
Strongly Disagree	4	3	3	4	3	3	7.497497

18. Efforts are made by teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work



Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
To a great extent	9	9	9	7	8	7	18.14815
Moderate	20	24	25	23	24	27	52.96296
Some What	9	7	7	10	9	8	17.77778
Very Little	5	3	2	3	2	3	6.000007
Not at all	2	2	2	2	2	2	4.444444



OVERALL ANALYSIS

Sub	Faculty	Appreciation	Suggestions for improvement
MD-II	KAV	Performance discussion of assignments, Identification of Strength and Weakness of Students	Participative learning and problem solving, Field Visits
ATD-II	SAS	Use of ICT, Follow up of task	Review and continuous quality improvement, Multiple opportunities to learn
MP-II	MMV	Preparation for class, Efforts to inculcate soft skills	Identification of Strength and Weakness of Student, CO-PO discussion
ICE	GSS	Illustration of concepts through examples, Follow up of task	Identification of Strength and Weakness of Student, Multiple opportunities to learn
RES	KAA	CO-PO discussion, Use of ICT	Identification of Strength and Weakness of Students, Participative learning
SOLAR	TPM	Illustration of concepts through examples, Fairness of internal Evaluation	Field Visits, Identification of Strength and Weakness of Students

Fig.2.2.1 q. Sample Online Feedback Form

Action Taken

Subject	Faculty	Suggestions for improvement	Action	Remark of HOD
MD-II	KAV	Students response to learning	Plan for extra lessons	Conduct extra lessons & record the same
RES	SAS	Teaching planning prepared	Prepare detailed plan for the topic	Plan & prepare content for teaching
MP-II	MMV	Improve the usage of ICT	prepare ppt for easy understanding	Use appropriate format for easy understanding
ICE	GSS	Illustration of concepts of engineering students	Discuss with each & every student	Follow the instructions
RES	KAA	Improve teaching material is prepared	Prepare topic with extra examples	Prepare material as instructed
SOLAR	TPM	Arrange field visit	will plan for industrial visit at Mumbai	Bring visit and industry visit record file

Fig.2.2.1 r. Sample Feedback Action Taken

2.2.2. Quality of Internal Semester Question papers, Assignments, and Evaluation (20)**A. Process for internal semester question paper setting and evaluation and effective process implementation(5M)**

Mechanical Engineering department follows the evaluation of the scheme of DBATU, Lonere.

- Internal and external exams are the main medium for PO attainment. Three tests continuous assessment test 1, continuous assessment test 2, and mid-semester examination are conducted during the semester as per the Institute Academic Calendar.
- The students are informed of the evaluation process during their orientation program itself.
- The institute forms an Academic and Examination committee for question paper quality checking, evaluation, and effective process implementation.
- Three sets of question papers for each course are prepared by the faculty members and submitted to the Academic Monitoring Committee. The committee member selects one copy based on the quality of questions and relevance to COs.
- After approval from the committee, the final paper is printed, one hour before the scheduled class test to maintain confidentiality.
- The examination department schedules the examination timetable, test invigilation allotment, and room allotment and coordinates in smooth execution of the examination. The examination timetable and seating arrangement documents are displayed on the notice board and posted on the what-app group of students.
- The questions for theory examination are aligned with bloom's taxonomy. COs and bloom's level are incorporated by the course coordinators and verified by the Academic Monitoring Committee. The duration of the test is 1 hr.
- The minimum 20% syllabus is covered before the continuous assessment test-I, the minimum 50% syllabus is covered before the mid-semester examination, and the 100% syllabus is covered before the continuous assessment test-II by the course coordinator.

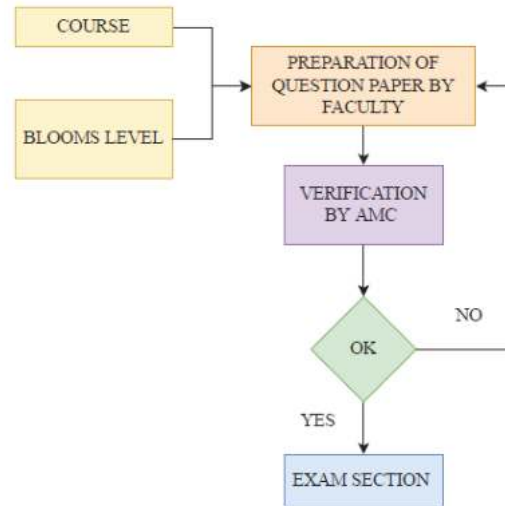


Fig B.2.2.2.a: Internal Question Paper Setting and Evaluation Process

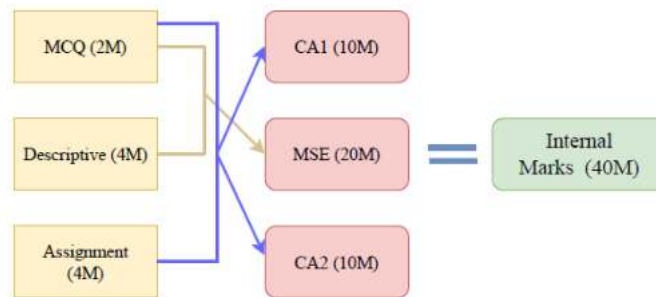


Fig B.2.2. 2.b: Internal Examination Question Paper Pattern

Evaluation:

- The faculty member evaluates the test books as per the scheme of evaluation.
- The standard question paper solution is discussed with the students in a classroom.
- For any genuine reason if a student was unable to perform well in the given three internal assessment tests or students are interested in class improvement, a remedial test facility is available for him/her.
- The best of the two test marks obtained is chosen for the internal assessment marks.
- Assignments are used to learn, practice, and demonstrate the learning goals only. As actual evaluation is based purely on an internal assessment test.

Figures B.2.2.2.e shows the sample question papers.

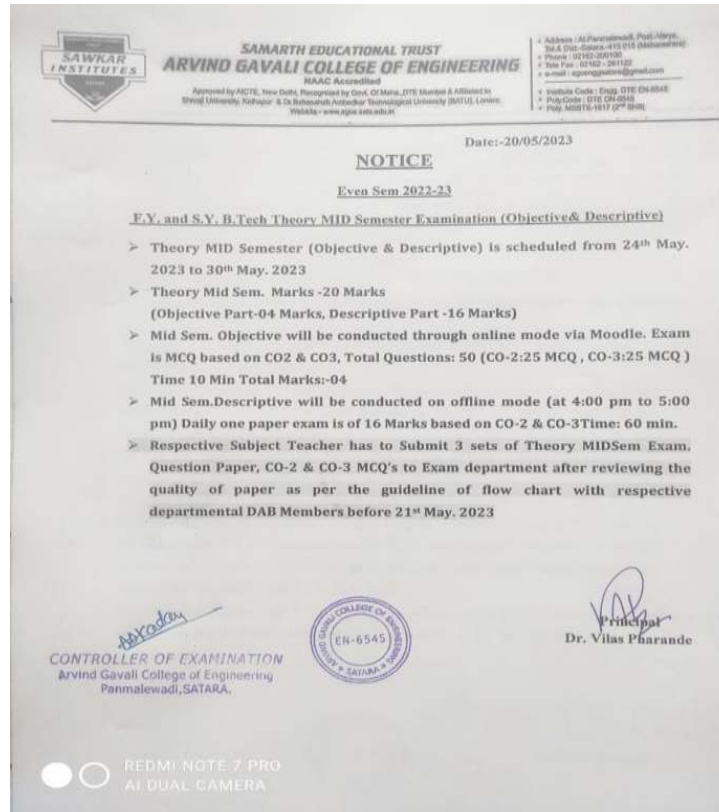


Fig B.2.2.2.c: Sample Examination Notice

 Dr. Babasaheb Ambedkar Technological University, Lonere Arvind Gavali College of Engineering, Satara (Inst. Code-6545) 2022-2023 Department: Mechanical Engineering CA-2 (Objective & Descriptive) Exam TIME TABLE (12th Dec. to 17th Dec. 2022) 				
Day & Date	Class	Subject Name	Objective Exam Time (Moodle)	Descriptive Exam Time
12 December 2022	SY Btech	Engineering Mathematics- III	10:00 AM to 11:59 PM	4:30 PM to 5:00 PM
	TY Btech	Machine Design-I		
13 December 2022	SY Btech	Thermodynamics	10:00 AM to 11:59 PM	4:30 PM to 5:00 PM
	TY Btech	Theory of Machine-II		
14 December 2022	SY Btech	Material Science and Metallurgy	10:00 AM to 11:59 PM	4:30 PM to 5:00 PM
	TY Btech	Applied Thermodynamics-III		
15 December 2022	SY Btech	Fluid Machinery	10:00 AM to 11:59 PM	4:30 PM to 5:00 PM
	TY Btech	Refrigeration and Air conditioning / Automobile		
16 December 2022	SY Btech	Appititude test	10:00 AM to 11:59 PM	4:00 PM to 4:30 PM
	TY Btech	Appititude test		
16 December 2022	TY Btech	Heat Transfer	10:00 AM to 11:59 PM	4:30 PM to 5:00 PM
17 December 2022	TY Btech	Human resource Management/ Solar Energy	10:00 AM to 11:59 PM	10:30 am to 11:00am

Note:

- Theory CA-2 Exam will be Conducted in offline mode only. CA-2exam (Objective) Will be conducted Online through MOODLE.
- As per guidelines from DBATU, all Students should attend the CA-2 Exam as per the above schedule.
- If any student fails to appear test, then he/she will be considered as absent. Opportunity may be given.

 Exam Coordinator
 Mr. Kadam Arjun A.

 Controller of Exam
 Mr. Kadam Arjun A.

 HOD
 Dr. Ghisap A. E.

 Principal
 Dr. Vilas Phalande



CONTROLLER OF EXAMINATION
 Arvind Gavali College of Engineering
 Panmalewadi, SATARA.

Fig. B.2.2.2.d: Sample Examination Time Table



 DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Arvind Gavali College Of Engineering, Satara Odd Sem 2022-23 CA-2 Examination (Descriptive) – December 2022 Course: B. Tech in Mechanical Engineering Set: V Subject Name: Applied Thermodynamics Subject Code: BTMC506 Max Marks: 12 Date: 14 /12/2022 Duration:- 30 Min.				
Instructions to the Students: 1. All Questions compulsory 2. Assume suitable data if necessary 3. Figures to right indicate full marks 4. Use of Programmable Calculator is Allowed				
Q.1.		(Level/CO)	Marks	
Q.2	Solve Any one of the following.		6 Marks	
(A)	Differentiate between Jet and Surface condensers	CO3		
(B)	Illustrate different types of nozzles in detail.	CO3		
Q.3	Solve Any one of the following.		6 Marks	
(A)	In a De- Laval turbine steam issues from the nozzle with a velocity of 1200 m/s. The nozzle angle is 20°, the mean blade velocity is 400 m/s, and the inlet and outlet angles of blades are equal. The mass of steam flowing through the turbine per hour is 1000 kg. Calculate: [i] Blade angles [ii] relative velocity of steam entering the blades [iii] Tangential force on the blades [iv] Power developed [v] Blade efficiency. Take blade velocity coefficient as 0.8.	CO4		
(B)	Classify the turbine and explain any one type in detail.	CO4		
*** End ***				


Fig B.2.2.2.e: Sample CA2 Question Paper

B. The process to ensure questions from outcomes/learning level perspective(5M)


- Using Bloom's taxonomy internal exam questions papers are set.
- The questions in the internal test are based on the course outcomes to find attainment.
- The course coordinator ensures that the learning objectives and potential results.
- Each internal theory test, whether it be online or offline, is administered as a means of evaluation.
- The questions are formed with the COs and Bloom's level.

C. Evidence of CO coverage in-class test/mid-term tests(5M)

- The institute has defined the following tools for the attainment of the course outcomes.
- The theory courses are assessed with the following tools for the attainment of course outcomes.
- The internal assessment tools of the program are as follows.



DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE
ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA
Even Sem 2022-23
CA-1 Examination [Descriptive] – April 2023
Course: B. Tech in Mechanical Engineering
Sem: IV



Subject Name: Sheet Metal Engineering Subject Code: BTMPE405B
Max Marks: 12 Date: 28 /04/2023 Duration: 30 Min.

Instructions to the Students:

1. All Questions compulsory
2. Assume suitable data if necessary
3. Figures to right indicate full marks
4. Use of Programmable Calculator Not Allowed

	(Level/CO)	Marks
Q.1 CA-1 Exam (Objective Part) completed of 2 marks		2 marks
Q.2 Solve Any one of the following.		6 Marks
(A) Define the sheet metal operation and explain any three sheet metal operations with diagram.	CO1	
(B) Discuss the importance of sheet metal fabrication in manufacturing industry. Differentiate between sheet metal and metal forming process.	CO1	
Q.3 Solve Any one of the following.		6 Marks
(A) Discuss what material properties are required for the sheet metal operation in details.	CO2	
(B) Calculate the die and punch sizes for blanking a circular disc of 20 mm diameter from a C20 steel sheet whose thickness is 1.5 mm. (Consider Shear strength of C20: 294 MPa)	CO2	

Fig B.2.2.2.f: Sample CA-1 Question Paper

Internal assessment tools (Direct) are:

Table 2.2.2.a Direct Internal Assessment Tools

Course Outcome	Internal Assessment Tools
CO 1	CA1, MSE, ESE
CO 2	CA1, MSE, ESE
CO 3	CA2, MSE, ESE
CO 4	CA2, ESE

D. Quality of Assignments and its relevance to Cos(5M):


- Faculty members prepare COs for the allocated subjects. They then prepare assignments according to these COs using Bloom's Taxonomy levels. Academic monitoring member verifies checks mapping of assignments with the defined COs.

- The faculty prepares a total of five-six assignments by considering coverage of all course outcomes. Certain time duration is given to the students to submit the assignment. The assignments submitted by the students are evaluated by the faculty members. Marks are given as per student's performance and a record is maintained in the course files.

Dr. Babasaheb Ambedkar Technological University, Lonere
Arvind Gavali College of Engineering, Satara
(Inst. Code: 6545)
ODD Sem. (2022-23)
Department: Mechanical
Class: B.Tech
Subject: Fundamentals of Automotive Systems
Subject Code : BTMEC801A
Assignment No: 1

Published Date: /03/2023
Submission Date: /03/2023

Q.1)	Explain Exhaust manifold	CO-1	[6 Marks]
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Name & Sign of Faculty
Mr. Kamble A.V.

Dr. Babasaheb Ambedkar Technological University, Lonere
Arvind Gavali College of Engineering, Satara
 (Inst. Code: 6545)
Odd Sem (2022-23)
Department: Mechanical
Class: T.Y.
Subject: Applied Thermodynamics
Subject Code :BTMC506
Assignment No: 3

Published Date: 10/12/2022
 Submission Date: 17/12/2022

Q.1)	Explain the phenomenon of Supersaturated or metastable expansion of steam in a nozzle and effects of supersaturation.	CO-3	[6 Marks]
Q.2)	Draw p-V, T-S, h-s diagrams for following cycles in detail: [i] Rankine Cycle [ii] Carnot Cycle [iii] Reheat Cycle [iv] Regeneration Cycle [v] Stirling Cycle [vi] Joule Brayton Cycle	CO-3	[6 Marks]



 Name & Sign of Faculty
 Mr. Ghadage S.S.
 Assistant Professor,
 Mechanical Dept.

Fig B.2.2.2.g Assignment with CO relevance

Dr. Babasaheb Ambedkar Technological University, Lonere										
Samarth Educational Trust's										
Arvind Gavali College of Engineering, Satara (Inst Code: 6545)										
Result Analysis Theory Odd Sem 2022-23										
CA-I Exam										
Class:- Final Year Btech		Sem:- VII		Subject:- Manufacturing Processes-III (BTME703)				Dept: Mechanical		
Sr. No	PRN No.	Name of Student	Objective		Descriptive				Assignment	
			Total out of 1	Total out of 1	Q.1 (A) 06 Marks	Q.1 (B) 06 Marks	Q.2 (A) 06 Marks	Q.2 (B) 06 Marks	Assignment No 1 (12 Marks)	Assignment No 2 (12 Marks)
Maximum marks			1	1	6	6	6	6	12	12
			CO-1	CO-2	CO-1	CO-1	CO-2	CO-2	CO-1	CO-2
1	1965451612062	JADHAV ATUL SAMBHAR	1	1	4		5		9	10
2	1965451612068	PAWAR SNEHAL SANTOSH	1	1		4		5	10	9
3	1965451612069	BHAPKAR ROHIT SUNIL	0	1		5	4		8	9
4	1965451612078	NIKAM VAIBHAV DILIP	1	1	4		4		9	8
5	1965451612083	JADHAV KARAN UDDHAV	1	1		5		5	11	11
6	1965451612084	KONDHALKAR BANAJI BAPU	1	1	5		4		10	9
7	1965451612085	BARGE ATUL RAVINDRA	1	1	6			6	8	8
8	1965451612086	BHINTADE MRUNAL RAJAN	1	1		5	4		9	7
9	1965451612087	MARATHE VIKRANT VASANT	1	1		3	3		11	11
10	1965451612088	JADHAV SHRIYASH SHASHIKANT	1	1	5		4		10	9
11	1965451612096	NIKITA SHIVDAS KOSHTI	1	1	4		4		8	9
12	1965451612100	RAUT PRATHAMESH BRAMHADEV	1	1	6		6		7	9
13	1965451612101	KHARAT CHAJTANYA LAXMAN	1	1	4		4		9	8
14	1965451612102	SHINDE SUYOG MASKUDEV	1	1	4		5		10	9
15	1965451612104	MORBALE ABHISHEK SANGRAM	1	1	5		4		10	9

Fig B.2.2.2.h Sample Assignment Evaluation Record

2.2.3. Quality of student projects (25)

A. Identification of projects and allocation methodology to Faculty Members (3)

Student carries out mini project in fourth semester and major project in seventh and eighth semester. Department follows standard procedure to ensure quality of project. Student selects project domain in line with their interest. Students are encouraged to do real world project. Department and R& D department head guides, help student to select domain by sharing with them various project domain like (not limited to)

- a) Design and manufacturing
- b) Manufacturing/production
- c) Mechatronics
- d) Renewable energy
- e) Design
- f) Multidisciplinary
- g) Automobile
- h) Thermal
- i) Artificial Intelligence (AI)
- j) Design and Development
- k) Agricultural
- l) Pneumatic System
- m) Electric power
- n) Additive manufacturing
- o) 3D printing

Project groups are formed by student itself, if they are not able to form group then project coordinator help them to form group.

A. Project Identification & guide allocation methodology (3M).

The project coordinator and project assessment committee (PAC) ensure the quality of students' projects. The PAC follows the guidelines set by the department in the following manner:

1. The R & D committee displays a list of faculty members along with their areas of expertise on the notice board.
2. A list of previous year's projects is displayed on the notice board and also available in the departmental library, which ensures no repetition of project work.
3. Students select the suitable area, form their group of a minimum of three and a maximum of five, and contact the concerned faculty member.
4. If any group is failing to submit the guide name then the project coordinator will assign the guide to the group.
5. Students can identify a problem statement for the project. If they are not able to find the problem statement, then the supervisor will give a problem statement to the students for the execution of problem solutions through the project work.
6. Committee finally allows the projects by considering various parameters like relevance to POs, originality, feasibility, the technology used, patentability, and resource required.
7. The guide monitors the progress of the project work regularly and keeps a track record. In case, the performance of the student's group is not satisfactory, the matter is reported to PAC for required action.
8. The guide ensures documentation with the university format for submission of the project report.

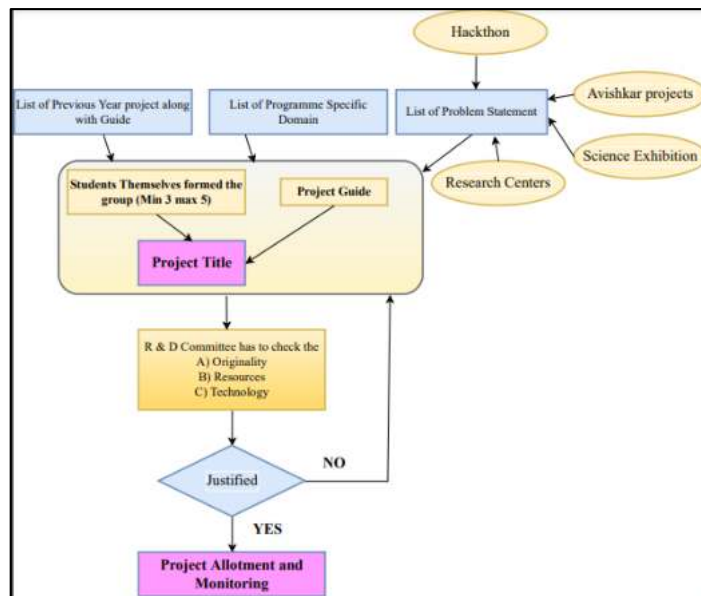


Fig B.2.2.3.a: Project Identification & allocation method

Design and manufacturing	4	9	
Manufacturing/production	7	4	10
Mechatronics	6	3	1
Renewable energy	4		
Design	2		7
Multidisciplinary	2		
Automobile	1	5	9
Thermal			
Artificial Intelligence (AI)		1	
Design and Development		3	
Agricultural		3	1
Pneumatic System			3
Electric power			1
Additive manufacturing			2
3D printing			2
Total	26	28	36

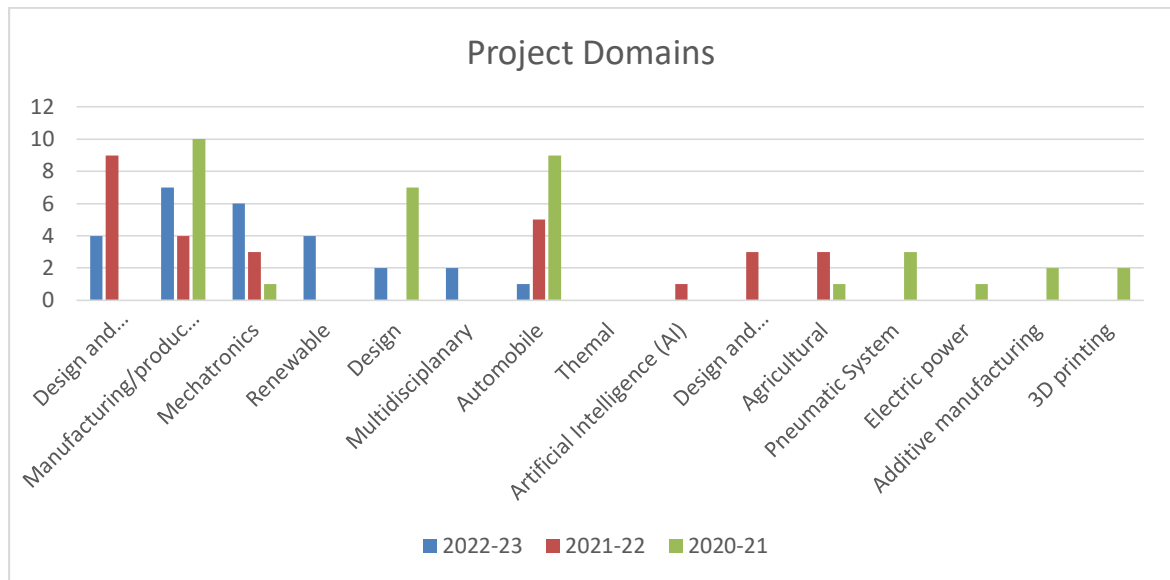


Fig B.2.2.3.c Project Categorization

To ensure the relevance of projects, the need for the development of the project in the current technological context should be verified by the team consisting of the project guide and project assessment committee members, and also the projects are mapped to POs and PSOs.

Course Objectives:

1. To provide an opportunity for applying the knowledge gained at the time of study.
2. The students are expected to develop higher order skills, where in they analyze, evaluate and create.
3. To prepare students to solve/implement/upgrade the issues of the safety/ public health/ environmental/societal by application Mechanical Engineering concepts or principles.

Course Outcomes:

1. Improve professional competency and research aptitude in the relevant area.
2. Develop work practices in students to apply theoretical and practical tools/techniques to solve real-life problems related to industry and current research.
3. Clearly understand the value of achieving perfection in project implementation and completion.
4. Learn to accept challenges and work in a team to solve problems with a multidisciplinary approach.
5. Enable the student to implement the project planning in their industrial In plant training work

6. Demonstrate professionalism with ethics, present effective communication skills, and relate engineering issues to the broader social context of

Table 2.2.3.b Project CO-PO Mapping

CO - PO Mapping Of Project												
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO 1	2	3	2	3	2	2	2	3	3	2	2	2
CO 2			2	2	3				2		2	
CO 3		2	3					2	3		2	3
CO 4		2	2						2	3	3	2
CO 5	2	3	2	3	2	3	2	3	2	2	3	2
CO 6									3	2		3
Strength of Correlation: High – 3, Medium – 2, Low – 1												

The procedure of CO Attainment

1. All the performance indicator parameters/ Rubrics are mapped with course outcomes.
2. The percentage of marks in each CO for every student is calculated.
3. The percentage of students securing more than a threshold percentage (increase every year for continuous improvement of performance) in internal and external evaluation is calculated which shows a certain level of CO achievement

CAY (2022-23):

Table B.2.2.3c Mapping of Projects (PR1-PR26) with PO and PSO

Gr p No	Project Name	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
		1	2	3	4	5	6	7	8	5	6	7	9	1	1	1	1	2

PR 1	Metal non metal sorting using metal detection	Y	Y	Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y		
PR 2	Radial and axial relief Grinding Machine		Y	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y	Y		
PR 3	Semi autoconducting mulching machine		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
PR 4	ALTERNATIVE METHOD FOR WATER LIFTING TECHNOLOGY IN RURAL AREAS		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y		
PR 5	3-Wheel Pesticides Sprayer		Y	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR 6	Generation Of Electricity From Ocean Waves by using spur gear		Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
PR 7	Analysis And Elimination Of Leakages In Hydraulic Joints Of Excavator		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
PR 8	Pneumatic arm industrial		Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y		
PR 9	Design and Development of Autonomous Pothole Detection Robot For Smart City		Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
PR 10	Robotic arm with vehicle		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
PR 11	Accelerometer Based Gesture Controlled Robocar		Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y		
PR 12	Vibration investigation of two wheeler speedometer using vibration fixture			Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y		
PR 13	Road power generation		Y	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y	Y		
PR 14	Grass cutter with self charging		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		

PR 15	Design and development of 360 degree fire protection system	Y	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR 16	Medicine Donation Web Application	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y			
PR 17	Multitasking Agricultureal Robot	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR 18	Mini core cut Machine	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y
PR 19	Design and fabrication of automatic ground clearance machine	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y			
PR 20	Section bending machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
PR 21	Multipurpose agriculture machine	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y		
PR 22	Vertical axis wind turbine		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
PR 23	Pneumatic jet machine	Y	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y	Y		
PR 24	Component Extractor	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR 25	Design and manufacturing of hydraulic cutter	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
PR 26	Motorised Screw Jack	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y			

CAYm1 (2021-22):

Table B.2.2.3d Mapping of Projects (PR1-PR23) with PO and PSO

Gr p No	Project Name	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PR 1	Fabrication of Battery Operated Mini Power Tiller	1	2	3	4	5	6	7	8	5	6	7	9	0	1	1	2	2
		Y	Y	Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y
													Y	Y	Y	Y	Y	Y
PR 2	Spyder Bot		Y	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y	Y	
PR 3	Electric Vehicle		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 4	Thermal Analysis of Rectangular & Parabolic Fins in Heat Exchanger		Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	
PR 5	Design and fabrication of triangular air compressor		Y	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR 6	Intelligent Braking System		Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	
PR 7	Design and Manufacturing of pull back collet chuck		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 8	Process improvement using DMAIC methodology		Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	
PR 9	Design and development of RF controlled fire fighting robot		Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 10	Dual Axis Solar Tracking System with self cleaning		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

PR 11	Self power generated electric bicycle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 12	Testing and analysis of mechanical properties of different 3D printing materials		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	
PR 13	Design & Manufacturing Cattle Feed Pallets Machine	Y	Y	Y	Y		Y	Y	Y		Y	Y	Y	Y	Y	Y
PR 14	Design and manufacturing of Oil skimmer	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 15	Exoskeloton Arm using pneumatic cylinder	Y	Y	Y	Y		Y	Y	Y		Y	Y	Y	Y	Y	
PR 16	Design and development of can crusher machine	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 17	Design and development of welding fixture	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	
PR 18	Vertical Axis Windmill Turbine	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 19	Solar Backup Installation	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
PR 20	Motorized Chain Mechanism Hacksaw	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 21	Chiller for thermoforming process	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	
PR 22	solar operated mini seed drilling and fogging sprayer pump	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 23	Design and manufacturing of 3 axis drilling machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 24	Design and development of drilling fixture for radial drilling machine	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	

PR 25	Wireless river trash collector		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR 26	Fully automated solar grass cutter	Y	Y	Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y
												Y	Y	Y	Y	Y	Y	Y
PR 27	Braking Energy Storage in flywheel	Y	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
PR 28	Design and fabrication of pipe inspection robot	Y	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y	Y	Y	Y

CAYm2(2020-21):

Table B.2.2.3 e Mapping of Projects (PR1-PR35) with PO and PSO

Grp NO	Project Name	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	S
					4	5	6			6	7	9	1	1			O	
		1	2	3				7	8	5			0	1	1	1	2	
														2				
PR1	Gyro Vehicle With Flexible Chassis	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	
PR2	Walking BOT Theo Jansen Mechanism	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR3	IoT-Based multi-direction conveyor robot	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR4	Design and Fabrication of Automatic Milk Can Tilter Mechanism	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	
PR5	Bicycle Without Chain Drive	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR6	Solar Based Robotic Farming Machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR7	Low Cost Ventilator Machine	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR8	Rocker Bogiee Robot With Stabilized Platform	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	
PR9	Rolling and Bending Machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

PR10	Electric Vehicle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR11	Automatic Painting Machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR12	Design and Manufacturing of Air Calorimeter to Enhance Engine Efficiency	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR13	Pneumatic Operator Feeder	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
PR14	UGC Vehicle With Gun Mechanism	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR15	Design of 6-Way Valve	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR16	Design and Fabrication of Automatic Tyre Inflation System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
PR17	Recycling of Plastic Using Compression Molding Machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR18	Regular Elevated Creeper	Y	Y	Y		Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
PR19	Robotic Irrigation System With Water Pump Control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR20	Sugarcane Sowing Machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR21	Snake BOT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
PR22	Advanced Spying and Bomb Disposal Robot	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR23	Design and Fabrication of Automatic Load Carrying Vehicle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR24	Design and Development of Automatic Feeding Mechanism Through Feed Center Less Grinding Machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
PR25	Hydraulic Baling Machine	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR26	Polyster Let Off Machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

PR27	Design and Development of Solar Powered Earth Auger and Fertilizer Machine	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR28	Air Ballon Jack	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y		
PR29	Performance Study of Eletric Discharge Machine (EDM) Processes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR30	Ladle Lining by Readymade Exothermic Sleeve	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR31	Design & Development of Jig For Drive End Machining Hummer	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR32	On-Grid 4KW Solar Lighting Power Plant Installation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR33	Design and Development of Rapid Prototyping Setup with Fixed Bed (Model 2)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y		
PR34	Design and Development of Rapid Prototyping Setup with Moving Bed (Model 4)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR35	Design and Development of Rapid Prototyping Setup with Fixed Bed (Model 1)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR36	Design and Development of Rapid Prototyping Setup with Moving Bed (Model 3)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y

CAYm3(2019-20):

Table B.2.2.3 f Mapping of Projects (PR1-PR21) with PO and PSO

Grp No.	Project Name	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	S	S
		1	2	3	4	5	6	7	8	5	6	7	9	1	1	1	1	1	1	2
PR1	Design & Development of boring fixture	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR2	Experimental Analysis of bearing	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR3	Bar Feeding Mechanism	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR4	Windmill	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
PR5	Design & Development of Rice Planting Machine	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR6	Investigation of Chicken fat oil blended biodiesel for diesel engine	Y	Y	Y	Y		Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
PR7	Engine Lifting Crain	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR8	Automatic Sealing Machine	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR9	Electric Bike	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR10	Automatic Drain wastage machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
PR11	Solar Drip Irrigation System	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR12	Fixture design for heavy water upgrading plant	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR13	Complaints solving through design change note & QC tools	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
PR14	Compressed air engine	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR15	Design of Centrifugal blower test rig	Y	Y	Y	Y		Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y

PR1 6	Design & Fabrication of agricultural crop reaper	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR1 7	Feeding System of centerless grinding machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR1 8	Design & manufacturing of plastic molding machine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR1 9	Advancement & time reduction standard assembly procedure of turbo20 + eco32 & eoc42	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR2 0	Design & manufacturing of Jigs & Fixture	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR2 1	Tool life improvement	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

B. Process for project work monitoring and evaluation (5M)

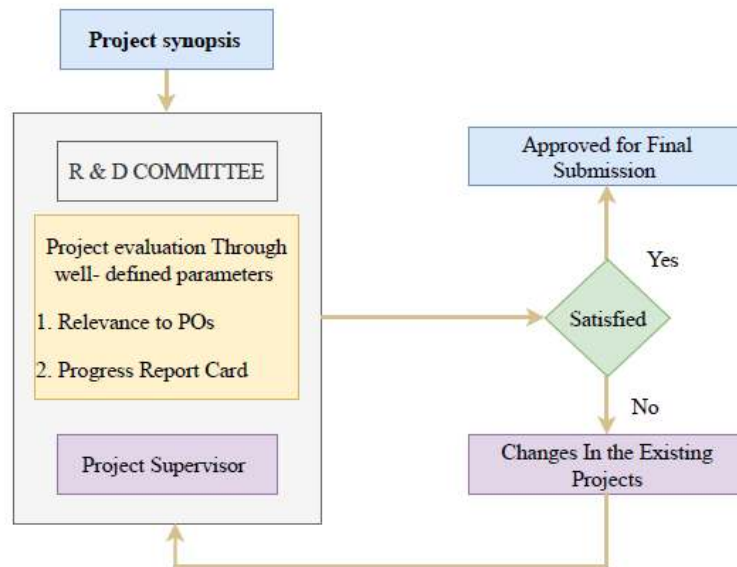


Fig B.2.2.3.d: Project Assessment Mechanism

Procedure for monitoring& evaluation:

- a. Students have to submit the synopsis of the project work to the coordinators for feasibility checking.

- b. The project work coordinators and the RR committee will scrutinize the synopsis and give suggestions for improvements in strengthening the synopsis.
- c. In case, the group of students taking projects from the Public/Private sectors needs to take approval from the HOD and a Letter of Reference sent to the concerned sector. A faculty member of the department functions as an Internal Guide to such students and the scientist/researcher in the concerned sector functions as an External Guide.
- d. Every week, the students should meet their concern guide and update their project work progress. The students/batch must give a presentation on the project in front of the project work review committee (RR Committee) as scheduled in Phase-1 & Phase-2.
- e. Finally, the RR committee evaluates the projects for respective domains.

Evaluation by project assessment committee:

Phase 1:

Table B.2.2.3 g Project Evaluation Scheme

Sr. No	Performance Indicators/Rubrics	CO Mapping
1	Identification of Problem	CO1
2	Literature Review/ Feasibility of Project	CO2
3	Industry Sponsored/Research/Peer Review Paper Based	CO6
4	Synopsis	CO1,CO2,CO6
5	Objectives and Methodology of the Proposed Work	CO1,CO2
6	Planning of the Project Work and Team Structure	CO4
7	Presentation	CO6
8	Technical Knowledge and Awareness Related to the Project	CO1,CO2
9	Effectiveness of Communication	CO6
10	Working Within a Team	CO4

All the above-mentioned performance indicators are evaluated on a scale of 1-5.

Excellent: 5

Very Good: 4

Good: 3

Satisfactory: 2

Not Satisfactory: 1

Phase 2:

Table B.2.2.3 g Project Evaluation Scheme

Sr. No	Performance Indicators/Rubrics	CO Mapping
1	Design Methodology	CO1,CO2
2	Experimental Setup/Laboratory Tests/Validation	CO2
3	Prototype Demonstration and Presentation	CO2
4	Incorporation of Suggestions	CO3
5	Project Budget and Finance	CO5
6	Final Project Demonstration	CO4
7	Effectiveness of Communication	CO6
8	Impact on Environment and Sustainability	CO6
9	Project Report	CO6
10	Results	CO6
11	Conclusion and Discussions	CO3
12	Modern Tool Usage	CO2
13	Participation in Competition	CO4
14	Self-Motivation and Determination	CO6
15	Working Within a Team	CO4
16	Impact of Project on Society	CO6
17	Regularity	CO6
18	Applied Ethical Principles	CO6
19	Future Scope	CO1
20	References	CO1,CO2,CO3

All the above-mentioned performance indicators are evaluated on a scale of 1-5.

Project assessment is the process of evaluating the performance of the individual and an entire team. Performance evaluation is done to get a clear idea of how well the individual and team's skills are working together, motivating them and providing a suggestion for improving individual and team performance. The assessment evaluation can be done by using assessment methods like individual and team performance questionnaires and presented in front of the RR committee. Students need to score more than 60% for continuing content work otherwise consult with a guide. After reworking again need to present in front of the RR committee and will start to do further work. The process to assess individual and team performance is shown in Fig. 2.2.3e.

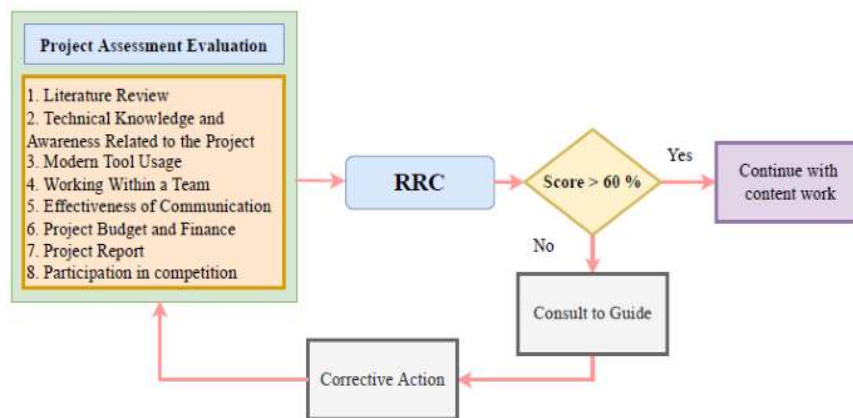


Figure B.2.2.3.f: Student Performance Evaluation Mechanism

E. Quality of completed projects/working prototypes(5M):

A committee of R&D head, Head of the Department, and Supervisor assess the quality of projects and select the best project each year based on the following parameters.

Table B.2.2.3 h. Best Project Evaluation Scheme

Sr. No	Performance Indicator	Marks
1	Problem Statement & Solution to Societal /Industry Problem	10 M
2	Design/Modern tool/Technology Usage	10M
3	% CO Attainment	10M
4	Question and Answer	10M

CAY (2022-23):

Table B.2.2.3 i. Three Best Project

Three Best Project 2022-23			
Group No	Name of Student	Name of Guide	Title of Project
G5	Jeevan Kalidas Sutar	Prof. Suraj Ghadage	3-Wheel Pesticides Sprayer
	Anish Prabhakar Yadav		
	Jadhav Vishal Ramchandra		
	Raskar pratik hindurao		
G4	Sujit Ramesh Yadav	Dr. Sadanand Sarapure	Alternative method for water lifting technology in rural areas
	Prajyot Vilas Salunkhe		
	Suraj Dhanaji Yadav		
	Kunal Sunil Salunkhe		
G15	Saurabh Shivaji Dombé	Prof. Suhas Patil.	Design and development of 360 degree fire protection system
	Sudhanshu vijay gurav		
	Masal Dadasaheb Ashok		
	Pawar Snehal Santosh		

CAY m1(2021-22):

Table B.2.2.3 j. Three Best Project

Three Best Project 2021-22			
Group No	Name of Student	Name of Guide	Title of Project
G2	Aditya Sunil Jagtap	Prof. Ghadage S. S.	Spyder Bot
	Rushikesh Shekar Chikne		
	Rohit Ravindra Patil		
	Gaurav Rajendra Kadam		
G17	Pawar Ashish Bhiku	Prof. Kadam A.A.	Design and manufacturing of Oil skimmer
	Pawar Pramod Bhiku		
	Sutar Jyoti Dattatraya		
	Bhosale Asmita Ananda		
G21	Pratik sanjay mane	Prof. Kambale A.V.	Vertical Axis Windmill Turbine
	Shweta Hanumantrao Chavan		
	Sushant Samadhan Jadhav		
	Patil shubham sanjay		

CAY m2(2020-21):

Table B.2.2.3 k. Three Best Project

Three Best Project 2020-21			
Group No.	Name of the Project Group Members	Name of the Guide	Title of the Project
G11	Rupesh Bhaskar Nawadkar	Prof. Shivade A S	Automatic Painting Machine
	Rohit Shankar Chavan		

	Yogesh Pandurang Sapkal		
	Partik Bhosale		
G17	Shubham Sawant	Prof. Kadam A. A.	Recycling of Plastic Using Compression Molding Machine
	Nawaj Patel		
	Aditya Sapkal		
	Sushant Dayanand Pawar		
G22	Ritik Agrawal	Prof. Pawar Sandeep	Advanced Spying and Bomb Disposal Robot
	Ranjit Kharade		
	Sanket Dhanawade		
	Akshay Gurav		

CAY m3(2019-20):

Table B.2.2.3 I. Three Best Project

Three Best Project 2019-20			
Group No.	Name of Student	Guide	Name of Project
G10	Kale Haridas	Prof. Patil S.M.	Automatic Drain wastage machine
	Sapkal Abhijit		
	Sathe Deepak		
	Mandave Akshay		
	Kadam Suraj		
G16	Bhilare Pranita M.	Prof. Waghmode P.K.	Design & Fabrication of agricultural crop reaper
	Gaikwad Kanchan C.		
	Bhosale Prasad R.		

	Parmar Meet N.		
G11	Shinde Ganesh	Prof. Matkar M.V.	Solar Drip Erigation System
	Gaikwad Suraj		
	Pisal Rohit		
	Pawar Omkar		



Figure B.2.2.3.g Intra-College Project Competition



Figure B.2.2.3.h AVISHAKAR 2019 University Project Participation & Prize



Figure B.2.2.3.h AVISHAKAR 2022 Zonal Participation & Prize





Figure B.2.2.3.i Project assessment by Industry Experts



Sample Photo of Best Project



Figure B.2.2.3.j Sample Photo of Best Project**F. Evidence of papers published/Awards received by projects etc.(2M)****Table B.2.2.3 m. Awards in Project Competition**

Sr. No.	Academic year	Name of the Competition	The number of students who participated
1	2022-23	Cretechnova 2K23 National Level project competition held at SVPMs College of Engineering, Malegaon	06
2		AVISHKAR 2022-2023 Institute level competition	03
3	2021-22	SMART INDIA HACKATHON 2022 at national level held at BHILAI INSTITUTE OF TECHNOLOGY, DURG	06
4		Internal Hackthon of Smart India Hackthon 2022) 28/04/2022	05
5		IDEATHON 2021 State level held at A.G. PATIL INSTITUTE OF TECHNOLOGY, SOLAPUR	01
6	2019-20	AVISHKAR 2019-2020 University level Competition by Shivaji University, Kolhapur	01
7		AVISHKAR 2019-2020 Zonal Level Competition by Shivaji University, Kolhapur	01
8		Published a paper entitled Design of tooling system to reduce cycle time in Saybold Report	04



Figure B.2.2.3.k Paper Publication Certificate



Figure B.2.2.3. l Smart India Hackathon 2022 International Hackathon Certificate

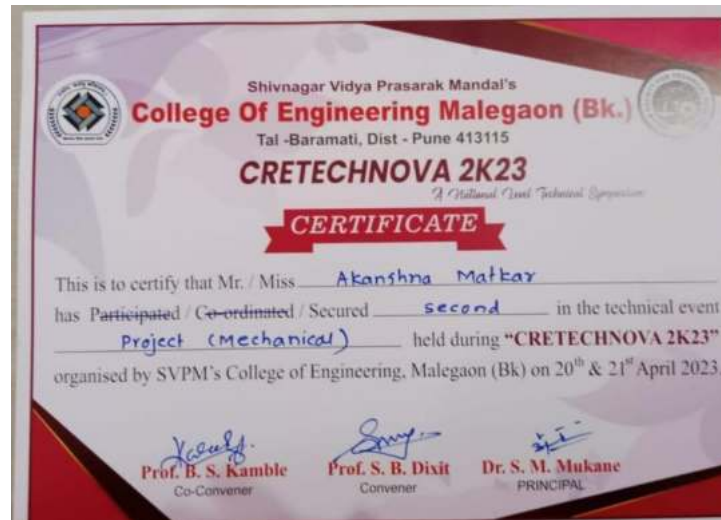


Figure B.2.2.3. m National Level Project Competition CRETECHNOVA 2K23 held at College of Engineering, Malegaon, Baramati

2.2.4. Initiatives related to industry interaction

A. Industry supported laboratories(5M)

The department of Mechanical Engineering has made efforts in the direction of making students ready for industry by enhancing their skill sets through training on recent tool and technologies. The said efforts are made through the following activities in collaboration with industry.

Table B. 2.2.4 a. Industry Supported Lab Details

S.No	Industry Attached Laboratories	Name of Company	Organization Objective	Relevance to PO/PSO
1.	CAD/CAM Laboratory	Designtech Solution, Karad (Institute of Design and Technology)	1. To get acquainted with the world of Design Tools. 2. Ability to create 2D and 3D modelling 3. To enhance the skills of students	PO1,PO2,PO3,PO5,PO12,PS01

B. Industry involvement in program design and partial delivery of any regular courses for students(5M)

a. Industrial Visits:

Industrial visits for the engineering students are an essential activity as per their curriculum to get a proper insight into how the real working environment of a company and its functionality at different levels. To go beyond academics, these visits are arranged to develop the insights of the students – attaining practical knowledge and their theoretical applications thereof

Objectives of Industrial Visits:

1. An opportunity to get exposure to real workstations, machines, and systems.
2. Acquaint students with interesting facts and new technologies.
3. Expert briefing about the functioning of machines and systems.
4. Increase practical awareness of various industrial sectors.
5. Opportunity to have a face-to-face session with technical or administrative experts of the organization to ask questions and clarify doubts. Understand the end-to-end process at all levels.
6. Opportunity to understand policies and practices of Industry in terms of production, quality, and service management.
7. Keeping these objectives at hand, the department organizes industrial visits which are within the framework of the curriculum.

Table B. 2.2.4 b. Industrial Visit

S.No	Academic Year	Batch	Name of Company Visited	Date of Visit	No. of Students
1	2022-23	BTech	Delval india Pvt Ltd	9 th June 2022	36
2		SY	Oracle Presscomp Engineering Pvt. Ltd.	26 th May 2023	15
3		TY	MSRTC Workshop, Satara	13 th May 2023	35
4		TY	Maharashtra Scooter Pvt Ltd	20 th Dec.2022	25

After each industry visit, the department takes students' feedback. Feedback is considered to do further improvement for the same. The format of feedback is shown below in Figure B.2.2.4a

STUDENT'S FEEDBACK FORM OF INDUSTRIAL VISIT/ TRAINING/ INTERNSHIP

1. Impact/ learning experience of the student from the visit/ training/ internship *

Excellent
 Very Good
 Good
 Moderate

2. How do you rate the working as a team member *

Excellent
 Very good
 Good
 Moderate

10. Live Projects Handling *

Excellent
 Very good
 Good
 Moderate

11. Suggestions if any

Your answer

Figure 2.2.4 a Format of student feedback on industrial visit

- b. Invited Industrial Talks-** Resource person from industries in the specific domain of Mechanical Engineering.



Figure 2.2.4 b. Industrial Talk Session

- c. Student Development Programs-** in collaboration with the industry for skill/curriculum development.



Figure 2.2.4 c. Student Development Session

d. Industry experts were invited as judges for the project Exhibition.



Figure 2.2.4 d. Industry Expert Visit for Project Exhibition

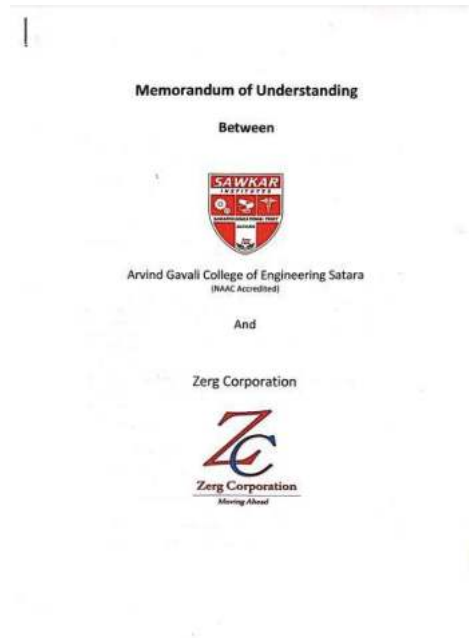
e. MOUs with Industry:

Following MOUs are signed with companies:

Table B. 2.2.4 c. Industry Institute MOUs

Sr. No.	Name of Company	Authorized Person	Duration
1	Zerg Corporation, Satara	Mr.Amey Patwardhan	13-09-2019 to 4-01-2025
2	Akashganga Constructional Machines Pvt. Ltd.	Mr.Sagar Kalani	25-1-2020 to 25-01-2025
3	Abhijat Equipments Pvt. Ltd., Satara	Mr.Prachet Doshi	10-12-2018 to 10-12-2021
4.	Design tech Systems Ltd	Mr. Raghav	20-02-2018 to 20-

	Pune	Kulkarni	02-2021
5	Majesty Tyres Satara	Mr. Ashish Jagtap	01-01-2022 to 31-12-2026
6	Om Enterprises, Satara	Mr. R. Bhintade	01-01-2022 to 31-12-2026
7	Kavade Engineering Works, Satara	-	06-03-2021 (5 Years)
8	GPRO Drives	-	16-08-2023(5 Years)
9	Designtech Solutions, Karad	Mr. Mahesh Sathe	5 Years
10	Oracle Presscomps & Engineering, Satara	-	01-08-2023(5 Years)



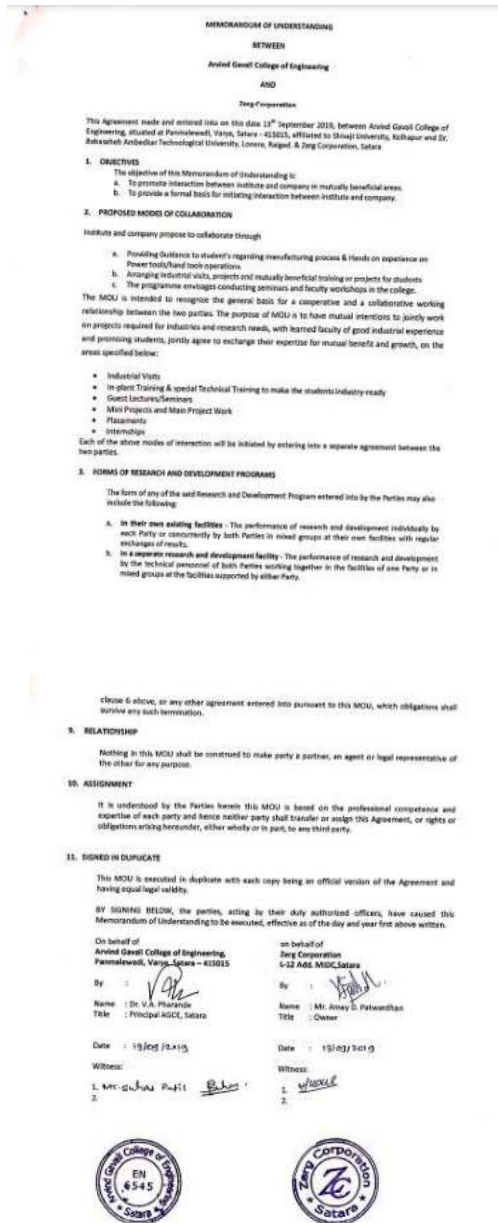


Figure 2.2.4 e. Sample MOU

f. Impact analysis of industry-institute interaction and actions are taken thereof(5)

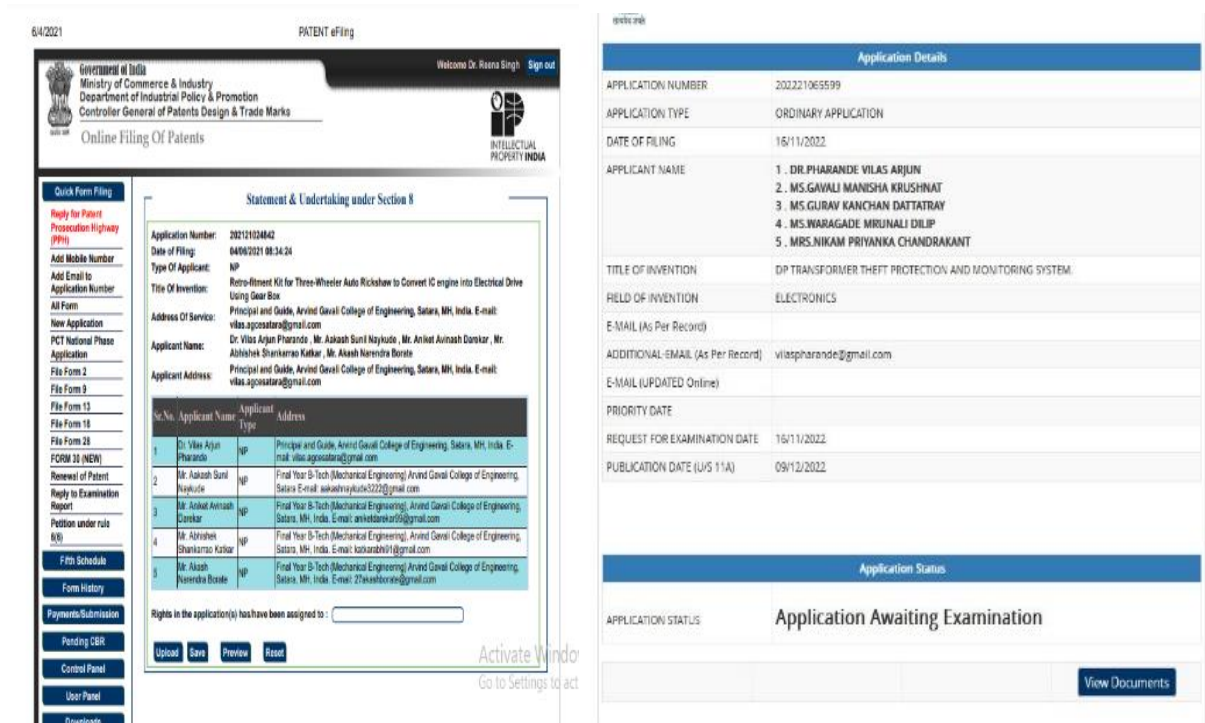


Table B.2.2.4.d: Initiatives related to Industry Interaction

Sr. No	Industry Interaction Initiative	Industry Involved	Outcome	Impact Analysis
1	Industrial Visits	Delval india Pvt Ltd	Skills to use modern engineering tools, and equipment to analyze superior quality ball valves, butterfly valves, actuators and control accessories	Experience the Industrial Culture

2	Industrial Visits	Maharashtra Scooter Pvt Ltd	Interaction with team and discussion on doubts Regarding immerging Technology	Enriched the knowledge about mentorship for Start Up
3	Industrial Visits	Prakhi Industries Bhosari	Get idea about opportunities available in Prakhi Industries group	Students get idea about cutting tools, Broaches cutters including air die face cutter.
4	Industrial Visits	Sankalp Milk Dairy Plant Satara	Get idea about Ice test rig,cooling system	Experience the Industrial Manufacturing process
5	Industrial Visits	Otari Cold Storage Plant Old MIDC Satara	Warehousing of refrigerated cold storage	Enhance the practical knowledge about Warehousing and support activities for transportation
6	Industrial Visits	Science Center Park Pimpri	Understanding about Automobile spares	Students aware about different spare parts
7	Industrial Visits	Bhuinj Sugar Factory	Study of sugar manufacturing machines mechanisms.	Students enhance knowledge about manufacturing machines mechanisms

Some Photographs of Industry Interactions:**Figure 2.2.4 f Industry Visit at Delval Flow Control Pvt. Ltd.****Figure 2.2.4 g Industrial Visit at Science Exhibition Center Pimpri Chinchwad**

Figure 2.2.4 h Students Present project models to Industrial Expert



Fig 2.2.4 i Industry expert talk

2.2.5 Initiatives related to internship / Summer Training

Industrial/Internship/Summer Training:

A. Industrial/Internship/Summer Training Course Objectives

1. To provide industry exposure to student
2. To make them the aware of working culture of the Industry
3. To provide knowledge of design, manufacturing, quality, and testing of products

B. Industrial/Internship/Summer Training Course Outcomes:

- a) Understand industrial environment and practices.
- b) Work on the specific project and complete it in the stipulated period.
- c) Able to understand the importance of quality of product and human safety.
- d) Apply theory and practical knowledge while dealing with industrial problems.

C. Implementation of Industrial Training:

1. The placement department approaches various companies every semester to provide internships to students. Some companies where students undergo are mentioned in Table B 2.2.4g.
2. Proper guidelines, suggestions, and scope of industry internship/summer training are provided to students.
3. Help students select the industry for summer training as per their domain of interest.
4. Based on the inputs by students, proper communication is carried out with the concerned industry.
5. Department provides the recommendation letter (Figure B.2.2.5b) and other necessary support to students for availing of industry internships.
6. All the students are required to submit their training reports along with a certificate from the concerned industry.

Table B 2.2.5 a Industry Interaction Details

Sr. No	Company Name
1	Delval India Pvt.Ltd.
2	Maharashtra Scooter Pvt.Ltd.

3	Abhijat Equipment Pvt.Ltd.
4	Becon Gear transmission Satara
5	TE Connectivity Shirval
6	Satara Engineering Pvt.Ltd
7	Atharv Engineering Pvt.Ltd.
8	Paranjape Pvt. Ltd.
9	Mutha Engineering Works
10	Om Enterprises Pvt.Ltd.
11	Top Gear Pvt. Ltd.
12	Alpha Laval Pvt. Ltd.
13	CRANE
14	Jay Maharashtra Engineering,Satara
15	SAI GEARS,satara
16	Pricol Limited ,pune
17	Menar Auto Components Pvt.Ltd,Bhosari Pune
18	Trimurti Tools, Satara
19	Shinde Kunal Narayan
20	Dogus Soma JV,Mumbai
21	Emerson Process Management,Pune
22	BSA Corporation Ltd,Pune
23	SBRS Machines PVT.LTD.Bhosari,Pune
24	Shardadeep Automobile Pvt.Ltd.Satara
25	Unitech Corporation PVT.LTD.Pune
26	ACG Associated Capsules Pvt.Ltd,Satara
27	Ognibene India PVT.LTD,Pune
28	Shri Jagadamba Engineering Woeks,Satara
29	Bharat Forge Ltd,Baramati
30	Kinetic Electric Motor CO.PVT.LTD,Pune
31	Span Filtration Systms PVT.LTD.Pune

32	Ognibene India PVT.LTD,Pune
33	Indreshwar Sugar Mills Ltd.Pune
34	Varad Engineering,Satara
35	Advent Foodtech,Pune
36	Suzlon Energy Ltd.Pune
37	Cooper Corporation PVT.LTD.Satara
38	Nilsan Engineering Solutions
39	Bharat Forge Ltd,Pune
40	Yashaswi Academy For Skills
41	John Deere,Pune
42	Tech Mahindra ,Pune
43	Peacock Allied Products PVT.LTD.Satara
44	Fortune Machines & Tools.CO, Satara
45	Precision Masters,Karad
46	ILJIN Global India PVT.LTD.Satara
47	Shardadeep Automobile Pvt.Ltd.Satara
48	Shree Mahalaxmi Services , Pune
50	SHREE SWAMI ENGINEERING WORKS,Satara
51	KSB,Pumps,Pune
52	Nexteer Automotive India Private Limited, Bengaluru
53	Neosym Industry Limited,Pune
54	Tata Cummins PVT LTD ,Phaltan
55	GE India Insustrial Pvt Ltd,Pune
56	SKF India Limited,Pune
57	Gangotri Auto Engineering,Satara
58	SeaLink Infotech, Pune
59	Shardadeep Automobile Pvt.Ltd.Satara
60	Transmetal industries Satara
61	S.B.E.M Pvt Ltd Pune

Table B 2.2.5 bIndustry Internship Details**CAY(2022-23):**

Sr No.	Names of the Candidates	Company
1	Bhapkar Rohit Sunil	Borgward Technology Pvt. Ltd.
2	Nikam Vaibhav Dilip	Gauri Engineering Work, Padali
3	Banaji Babu kondhalkar	NK Technologies Pvt. Ltd.
4	Barge Atul ravindra	Shaydri Irrigation, J /13 New MIDC, Satara
5	Bhintade Mrunal Rajan	Om Enterprises, Satara
6	Vikrant Vasant Marathe	Joshi Jhamphala Pvt. Ltd., Satara
7	Jadhav shriyash Shashikant	Borgward Technology, Hadpsar, Pune
8	Koshti Nikita Shivdas	Nisaka Engineering Pvt Ltd
9	Raut Prathamesh Bramhadev	Autocal Engineer, Chinchwad, Pune
10	Kharat Chaitanya Laxman	Gestamp Pune Automotive Pvt. Ltd. Takve Budruk, Taluka Maval, Dist. Pune 412 106
11	Suyog Maskudev shinde	Gestamp Pune Automotive Pvt. Ltd. Gat Number - 374, 517-521, 523 Village - Takve Budruk, Taluka Maval, Dist. Pune 412 10
12	Morbale Abhishek Sangram	Tanksale Polymers Pvt. Ltd, j-13/20,Addl . MIDC, Satara- 415004
13	Pralhad Dalavi	Elon Multi Solution Design Services
14	Ajinkya Suresh Lohar	Elon Multi Solutions Design and Resource Pune Bangalore Highway Ambegaon Narhe Pune Maharashtra

15	Athave Aniket Ashok	Tata Motors PVBU , Pune
16	Bhosale Vaibhav Dattatray	AJINKYATARA AUTOMOTIVES PVT. Address: 83/4, Near Satara Textile Market, NH-4 Khed Chowk, Satara - 415.002
17	Dipraj Sudhir Shelar	Gajanan Honda Samarth Mandir Satara
18	Thombare sourabh sanjay	ACG PHARMA TECHNOLOGIES PVT LTD
19	Rushikesh Vasant Ghorpade	Tata Motors Limited, CVBU,Nigdi Bhosari Rd, Block F-2, MIDC, Pimpri Colony, Pimpri-Chinchwad, Maharashtra 411018
20	Harshada Jadhav	Nisaka Engineering Private Limited Tool manufacturer in Satara, Maharashtra
21	Lalge prajakta tulshidas	OM ENTERPRISES L- 46, Additional M.I.D.C., Satara – 415 004
22	Kshirsagar Rohan Shahaji	Joshi Jampala Engineering Satara
23	Prajwal SAWANT	Span Accociate
24	Bhosale Shubham Balasaheb	Span Associates unit-v , Plot No K2 ,additional MIDC,Satara
25	Shreyas Pravin Patil	ISAN DATA SYSTEMS PVT LTD
26	Mangesh Sunil katkar	Sandvik Coromant India Pvt. Ltd.
27	Shubham Suresh Rokade	NK Technologies
28	Chavan Pranav Anil	SPAN ASSOCIATES,ADDITIONAL MIDC,KODOLI,SATARA
29	CHAVAN PRASANNA ANANDRAO	Cooper Corporation,Satara
30	Shubham Umesh Sawant	Infinite Graphics Technology Pvt.Ltd
31	Pranit ghadge	Span associate new midc Satara

32	RAJOPADHYE SAMEER RAJENDRA	Infinite graphix technologies pvt.ltd. shivajinagar pune
33	Nikam Prathamesh Sanjay	Unicorn industries
34	Sawant Akshata Anil	NK Technology
35	Manuja Namdev Jadhav	Atlas Copco chakan Pune
36	Salunkhe Prajyot Vilas	Mutha Foundry
37	Bhintade Sagar Shankar	KSB Pumps LTD Shirwal
38	Jagtap Prajwal Balwant	Cummins india pvt.ltd At-Post-Surawadi Tal-Phaltan Dist-Satara
39	Girame Rushikesh Shantaram	Rajesh motors pvt ltd satara
40	Attar Danish Husen	SKF India Ltd. Pimpri Chinchwad, Chinchwad - 411033
41	Jadhav Vishal Ramchandra	Icon Engineering And Metal Works , Add. MIDC Satara
42	Pisal Prasad Tatyasao	Cummins technology pvt Ltd
43	Fardin Shaikh	Cummins Technology pvt ltd
44	Amar Prakash Salunkhe	Larsen & Toubro
45	Sutar jeevan kalidas	HP engineering , M-12/2, Addl. MIDC., Satara -415004
46	Pratik Hindurao Raskar	Icon engg and metal works MIDC Satara
47	NIRANJAN UMESH SALUNKHE	Hyundai construction equipment Pvt ltd
48	Vaibhav Sheshrao Bahir	HP Engineering M-12/2 MIDC satara- 415004
49	Dange Abrar Jahangir	GE INDIA INDUSTRIAL PVT LTD. Plot A, Chakan, 78/1, MIDC, Phase II, Wasuli, Maharashtra 410501

50	Yadav sujit ramesh	KNORR-BREMSE System for commercial vehicles pvt.ltd. hijewadi phase 2 pune maharashtra indian
51	Pawar shubham Shankar	Lupin biotech Ghotawde, Pune
52	Abhishek Sanjay Chavan	Jaya Hind Industries Pvt Ltd, Akurdi Pune
53	Salunkhe kunal sunil	TAFE-Tractor And Farm Equipment, Chakan Pune
54	DESAI AKSHAY SHANKAR	Eton
55	Desai Suraj Sunil	TATA Motors Passenger Vehicles limited Chikhali, Pune 411062
56	Suraj Dhanaji Yadav	Cooper corporation pvt.ltd
57	Saurabh Vijay Nikam	Atlas copco India ltd,dapodi,sweanagar,pune
58	Lambe Siddharth Umesh	Suyash Enterprises Pvt. Saidarshan Colony ,Saidapur
59	Kamble Shubham Bhagwan	Magna Automotive India Pvt.Ltd (Talegaon Dabhade)
60	GAIKWAD VAIBHAV JAGANNATH	Mahindra & Mahindra Limited.
61	Jamdade Soham Ramesh	JCB INDIA LTD PUNE
62	Sabale Shubham Dadaso	CEO-Appkida Technologies Pvt. Ltd Pimpri-Chinchwad, Maharashtra 411061
63	Vijay Bhimrao Pawar	SKF Bearing Ltd Chinchwad
64	Amit Jadhav	Shini Plastics Technologies India Pvt. Ltd.-Chakan MIDC Vasuli, Khed taluka, Maharashtra 410501
65	Yadav Anish Prabhakar	Icon Engineering and Metal Works. Add MIDC Satara

66	Sachin Devanand Desai	Sulzer India PVT. LTD, Kondhapuri, Pune
67	SAWALKAR VARAD VASUDEV	Amphenol Interconnect India

Table B 2.2.5 c Industry Internship Details**CAYm1(2021-22):**

Sr No.	Names of the Candidates	Company
1	Mali Kishor Kumar	Jay Maharashtra Engineering,Satara
2	Omkar Pravin Kadam	SAI GEARS,satara
3	Bhaskar Ashutosh Subhash	SAI GEARS,satara
4	Lankeshwar Abhishek Hanmant	SAI GEARS,satara
5	Pawar Sagar Dilip	SAI GEARS,satara
6	Waghmare Niranjana Shahaji	Pricol Limited ,pune
7	Pawar Adhishri Shivaji	Pricol Limited ,pune
8	Salunkhe Aishwarya Chandrakant	Menar Auto Components Pvt.Ltd,Bhosari Pune
9	Paramane Arti Devidas	Menar Auto Components Pvt.Ltd,Bhosari Pune
10	Shinde Kunal Narayan	Shinde Kunal Narayan
11	Jagtap Gaurav Pradip	Jagtap Gaurav Pradip
12	Pawar Vaibhav Ananda	Pawar Vaibhav Ananda
13	More Anit Balwant	Trimurti Tools, Satara
14	Jagtap Aditya Sunil	Dogus Soma JV,Mumbai
15	Patil Rohit Rawinder	Emerson Process Management,Pune
16	Chikane Rushikesh Shekhar	BSA Corporation Ltd,Pune
17	Kadam Gaurav Rajendra	SBRS Machines PVT.LTD.Bhosari,Pune
18	Bhilare Omkar Laxman	Shardadeep Automobile Pvt.Ltd.Satara
19	Nadaf Sahil Shekhal	Mutha Engineering Pvt.LTD.Satara
20	Bhosale Prathamesh Pramod	Unitech Corporation PVT.LTD.Pune
21	Gaikwad Aniket Sachin	DelVal flow Controls Private Limited,Satara
22	Jagtap Rushikesh Madhukar	ACG Associated Capsules Pvt.Ltd,Satara
23	Dhane Nikhil Sunil	DelVal flow Controls Private Limited,Satara
24	Jambhale Akshay Maruti	Jay Maharashtra Engineering,Satara
25	Thorat Vaibhav Ravindra	Jay Maharashtra Engineering,Satara
26	Ghorpade Harshad Ramdas	Mutha Engineering Pvt.LTD.Satara
27	Madane Akanksha Manik	Mutha Engineering Pvt.LTD.Satara
28	Panaskar Pratik Chandrakant	Mutha Engineering Pvt.LTD.Satara

29	Dhole Omkar Anil	Ognibene India PVT.LTD,Pune
30	Kumbhar Ganesh Suresh	Shri Jagadamba Engineering Woeks,Satara
31	Bhoite Rupesh Popatrao	Bharat Forge Ltd,Baramati
32	Dubal Nandkumar Sanjay	Kinetic Electric Motor CO.PVT.LTD,Pune
33	Shinde Sanket Hemant	Span Filtration Systms PVT.LTD.Pune
34	Ghadage Kishor Laxman	Ognibene India PVT.LTD,Pune
35	Bhosale Nikhil Bhauso	Om Enterprises,Satara
36	Pustake Utakarsh Ravindra	Om Enterprises,Satara
37	Jadhav Rushikesh Mahadev	Jay Maharashtra Engineering,Satara
38	Lokare Vinayak Shankar	Jay Maharashtra Engineering,Satara
39	Ahire Akshay Arun	Jay Maharashtra Engineering,Satara
40	Pawar Rajesh Ramchandra	Indreshwar Sugar Mills Ltd.Pune
41	Kalkundrikar Rahul Maruti	Varad Engineering,Satara
42	Kadam Abhijeet Deepak	Varad Engineering,Satara
43	Powar Ashutosh Anil	Advent Foodtech,Pune
44	Sawant Shubham Rajendra	Suzlon Energy Ltd.Pune
45	Bhoite Deepak Avinash	Cooper Corporation PVT.LTD.Satara
46	Kamthe Shriram Shashikant	Nilsan Engineering Solutions
47	Shinde Prathamesh Niraj	Bharat Forge Ltd,Pune
48	Jadhav Sushant Samadhan	Cooper Corporation PVT.LTD.Satara
49	Patil Shubham Sanjay	Cooper Corporation PVT.LTD.Satara
50	Chavan Shweta Hanmantrao	Yashaswi Academy For Skills
51	Mane Pratik Sanjay	Yashaswi Academy For Skills
52	Lembhe Akash Avinash	John Deere,Pune
53	Chavan Rushikesh Dasharath	ACG Associated Capsules Pvt.Ltd,Satara
54	Jadhav Swapnil Sitaram	Tech Mahindra ,Pune
55	Mulla Faraj Ismail	Peacock Allied Products PVT.LTD.Satara
56	Inamdar Omkar Suresh	Fortune Machines & Tools.CO, Satara
57	Jarag Lakhan Kisan	Peacock Allied Products PVT.LTD.Satara
58	Suryawanshi Pratiksha Ravindra	Precision Masters,Karad
59	Yadav Aniket Anil	Mahindra & Mahindra Limited.Pune
60	Khuspe Mayur Shankar	Mahindra & Mahindra Limited.Pune
61	Desai Muskan Nisar	ILJIN Global India PVT.LTD.Satara
62	Shinde Vesant Vikas	Shardadeep Automobile Pvt.Ltd.Satara
63	Desai Ranjeet Bhaskar	Jay Maharashtra Engineering,Satara
64	Jadhav Omkar Prakash	Shree Mahalaxmi Services , Pune
65	Shinde Prajwal Sunil	Shree Mahalaxmi Services , Pune
66	Kanase Akash Rajendra	SHREE SWAMI ENGINEERING WORKS,Satara
67	Mohite Vaibhav Vasant	Shree Mahalaxmi Services , Pune
68	Suryawanshi Hurshikesh Prakash	KSB,Pumps,Pune

69	Jagadale Aniket Raju	Nexteer Automotive India Private Limited, Bengaluru
70	Tikadar Sourav	Neosym Industry Limited,Pune
71	Shelke Rupesh Sunil	Shree Mahalaxmi Services , Pune
72	Sutar Jyoti Dattatray	Tata Cummins PVT LTD ,Phaltan
73	Bhosale Asmita Ananda	GE India Insustrial Pvt Ltd,Pune
74	Pawar Pramod Bhiku	SKF India Limited,Pune
75	Pawar Ashish Bhiku	SKF India Limited,Pune
76	Yadav Omkar Jayant	Gangotri Auto Engineering,Satara
77	Dixit Suraj Bhalchandra	Gangotri Auto Engineering,Satara
78	Pandharpatte Ajinkya Kalidas	Pandharpatte Ajinkya Kalidas
79	Chavan Shubham Sanjay	Chavan Shubham Sanjay
80	Kanase Raviraj Dadasaheb	Kanase Raviraj Dadasaheb
81	Shewale Nikhil Vilas	Kalhuri Stamping ,Karad
82	Pawar Vaibhav Rajaram	Shardadeep Automobile Pvt.Ltd.Satara
83	Deshmukh Rohan Pandurang	Sawant Engg.Works,Satara
84	Shewale Mayuri Bhimrao	Safim Brakes India Pvt.Ltd,
85	Shikalgar Aarjun Majanu	Randtsd India Pvt Ltd. Chennai
86	Sawant Nikita Namadev	Universal Solution,Pune
87	Bhosale Sakhi	Yashaswi Academy For Skills
88	Kadam Chandrasen Bharat	Amit Engineering works
89	Desai Pavan Vijay	BVG INDIA LTD, Satara
90	Madhave Rohit Kailas	Maharashtra Scooters LTD.Satara
91	Bhandare Prasad Dilip	Savi Engineering Workd
92	Attar Aman Akbar	Savi Engineering Workd
93	Pol Yougesh Shivaji	Om Enterprises,Satara
94	Jadhav Suraj Bajirao	Om Enterprises,Satara
95	Mujawar Nayum Ajim	Om Enterprises,Satara
96	Shinde Pratik Sudhakar	GS PEB & Civil Works PVT.LTD,Pune
97	Tavare Shambhuraj Kuber	Avadhut Engineering Services,Kolhapur
98	Monde Mayur Dilip	John Deere,Pune
99	Pawar Abhijeet Pradip	Shardadeep Automobile Pvt.Ltd.Satara
100	Kadam Swapnil Mohan	Shardadeep Automobile Pvt.Ltd.Satara
101	Bhosale Indrajeet Laxman	Shardadeep Automobile Pvt.Ltd.Satara
102	Ghorpade Akshay Gulab	Shardadeep Automobile Pvt.Ltd.Satara

Table B 2.2.5 d Student Training Information CAYm2(2020-2021)

1	Chavan Rushikesh Pradeep	SeaLink Infotech, Pune
2	Kakade Rushiraj Rajiv	Mutha Engineering Pvt Ltd Satara

3	Bhosale rohit Mohan	Precise Systems Satara
4	Sutar Sachin Basavraj	SBK Machinery & Consultancy Services, Koregaon
5	Mulik Akash Dipak	Abhijat Equipments Pvt Ltd Satara
6	Kadam ganesh Kamlakar	Kinetic TaigeneElectrical Co. Pvt Ltd, Pune
7	Kankekar Yogesh Ashok	Kinetic TaigeneElectrical Co. Pvt Ltd, Pune
8	Patil Snehal J	Kinetic TaigeneElectrical Co. Pvt Ltd, Pune
9	Pawale Hrituja Ramakant	Kinetic TaigeneElectrical Co. Pvt Ltd, Pune
10	Bagwan Rajin Rais	Transmetal industries Satara
11	Shinde Akshay Arvind	Transmetal industries Satara
12	Shinde Aniket Chandrashekhar	Transmetal industries Satara
13	Chavan Akash Sanjay	Transmetal industries Satara
14	Ubale Sagar Chandrakant	Om Enterprises, Satara
15	Gaikwad Prashant Tukaram	Om Enterprises, Satara
16	Deshpande Aditya Ajit	Om Enterprises, Satara
17	Bhosale Vishal Rajan	Om Enterprises, Satara
18	Teli Nilesh Hiralal	Om Enterprises, Satara
19	Mardhekar Parag Tanaji	Kavade Engineering Works Satara
20	Bhokare krushna Rajendra	Kavade Engineering Works Satara
21	Ghadhave Abhijeet Bhanudas	Kavade Engineering Works Satara
22	Deshmukh Aishwarya Santosh	Gaurav machine Tools, Kolhapur
23	Chavare Sourabh Subhash	Gaurav machine Tools, Kolhapur
24	Kharade dattatray Sadashiv	Gaurav machine Tools, Kolhapur
25	Gaikwad Vishal Raju	Gurukrupa Industries, Pune
26	Sutar Abhishek Baliram	Pricol limited, Pune
27	Shinde Indrajit Vilas	Speciality Sintered Pvt Ltd, Shirwal
28	Nadaf Waseem harun	ZF India Pvt Ltd, Chakan
29	Bhosale Snehal Santosh	Kavade Engineering Works Satara
30	Darekar Aniket Avinash	Spicer India Pvt Ltd, Satara
31	Naykude Aakash Sunil	Spicer India Pvt Ltd, Satara
32	Katkar Abhishek Shankarrao	Spicer India Pvt Ltd, Satara
33	Hasabe Anil Shivaji	Speciality Sintered Pvt Ltd, Shirwal
34	Jadhav Shantanu Vijay	ZF India Pvt Ltd, Chakan
35	Harane Digambar Ashok	ZF India Pvt Ltd, Chakan
36	Pawar Jaydeep Jagadev	karad Prjects and Motors Ltd, Tasawade
37	Patil Digvijay Ravindrakumar	S.V. Core Works Kirloskar Vadi
38	Kumbhar Siddhesh Dattatray	S.V. Core Works Kirloskar Vadi

39	Gaikwad Aniket Raju	Gurukrupa Industries, Pune
40	Mohotkar Mahesh Sanjay	Kavade Engineering Works Satara
41	Phalke Tushar Siddharth	Kavade Engineering Works Satara
42	More Shweta Subhash	Ashwini Academy for Skills, Wagholi.
43	Tarade Priyanka Dattatray	Ashwini Academy for Skills, Wagholi.
44	Salunkhe Akash Lahu	Alicon Cst Alloy Ltd, Shikrapur
45	Phalke Suraj namdev	S.B.E.M Pvt Ltd Pune
46	Bagane Vivek Vijaykumar	OEN India Ltd, Pune
47	Nikam Akash Sunil	Yash Industries, Karad
48	Gogavale Dhanraj laxman	OEN India Ltd, Pune
49	Pandharpatte Rugveda Ramesh	OEN India Ltd, Pune
50	Suryavanshi Aparna Vasant	Cummins India Pvt Ltd, Phaltan
51	Lad kavita Rajesh	Cummins India Pvt Ltd, Phaltan
52	Gaikwad Shubham Vivek	Kavade Engineering Works Satara
53	Borate Akash Narendra	Dana Anand India Pvt Ltd, Satara
54	S. Mohammad Rafeeq	Satara metal Works, Satara
55	Kodag Shubham Baban	Kinetic TaigeneElectrical Co. Pvt ltd, Pune
56	Nikam Akash Baburao	Kinetic TaigeneElectrical Co. Pvt ltd, Pune
57	Pimple Onkar D	Kinetic TaigeneElectrical Co. Pvt ltd, Pune
58	Dhanave Pratik Ramesh	Maark Industry Satara
59	Sapkal Vrushabh vasant	Maark Industry Satara
60	Bhosale Shraddha Yashwant	Kisanveer Sahakari Sakhar Kharkhana, Bhuinj
61	Sawant Nikhil Vishnu	Omkar Engineering Wai
62	Bhosale Sushant Ravindra	Omkar Engineering Wai
63	Shedge Akshata	PR Engineering Satara
64	Shirke Mayur Namdev	PR Engineering Satara
65	Patel Arbaaj Jiyauddin	P Bells India Satara
66	Rohile Nihal Anjumanali	Gurukrupa Industries, Pune
67	Kadam Pushpal Nayaku	Shripad Engineers, Baramati
68	Sathe Shubham Satish	Maark Industry Satara

Table B 2.2.5 e Student Training Information CAYm3(2019-20)

Sr. No	Name	Compony Name
1	PISAL SONALI ANIL	SHIVRAM INDUSTRIES
2	PATIL SHUBHAM ANANDA	TATA

3	SOHEL SIKANDAR MOAKSHI	OM INTERPRISES
4	PAWAR PRATHMESH PRAKSH	SAWANT ENGG WORKS
5	CHANDRKANT JAGGNATH SALUNKHE	MAHARSTRA SCOOTER
6	RAHUL ASHOK JADHAV	FABTECH TECHNOLOGIES
7	SURVSHE SHUBAHM SURESH	AMOL ENGG WORKS,KUPWAD
8	KETAN DADASO MANE	TRIMURTI ENGG,TASWADE
9	PRIYANKA MARUTI BHILARE	POWER FIBRICATERS.WAI MIDC
10	BHOSALE VAIBHAV DATTATRAY	PRIYANKA ENGG WORKS,SHINDEWADI
11	BHOSALE VAIBHAV DATTATRAY	PRIYANKA ENGG WORKS,SHINDEWADI
12	VIJAY SANJAY GHADAGE	BCON GEAR TRANSMISSION, SATARA
13	SHIVAJI SARJERAO PAWAR	SAISERVICE ELECTRICALS,SHIRLOLI MIDC
14	TESHREE SANJAY KADAM	CHNDRASSENELCTRICAL CO,GODOWALI
15	SNEHAL KAILAS POL	CHNDRASSENELCTRICAL CO,GODOWALI
16	MAHESH ANAND JADHAV	SAISERVICE ELECTRICALS,SHIRLOLI MIDC
17	PAWAR SHUSHANT VINAYAK	POWER ELECTRICAL AND MOTOR VAINDING WATHAR
18	SHINDE AKSHAY ARVIND	SHIVAM ENGG,SATARA
19	SHINDE ANIKET CHANDRASHEKAR	SHIVAM ENGG,SATARA
20	AVINASH RAMESH MATRE	ZERG CORPORATION,SATARA
21	PAWLE HRITUJA RAMAKANT	SHIVAM ENGG,SATARA
22	KADAM ABHIJEET DIPAK	SHIVAM INDUSTRIES ,SATARA
23	DHANE NIKHIL SUNIL	COOPER CORPORATION,SATARA
24	RUPESH POPATRAO BHOITE	SJ CONTRACTS,PUNE
25	ASAWALE SURAJ DNYANDEV	SHREE MACHINE TOOL,THANE
26	KIRAN TULASHIDAS DALAVI	GURUDATTA ENGG WORKS,PUSEGAON
27	AISHWARYA CHANDRAKANT SALUNKE	BK ENGG,TASWADE
28	GANESH SURESH KUMBHAR	DSK ENGG SURVICES
29	GHORPADE HARSHADA RAMDAS	SHIVRAM INDUSTRIES, SATARA
30	PRATIK CHANDRAKANT PANASKAR	COOPER CORPORATION,SATARA
31	RUSHIKESH DASHRAT CHAVAN	SHIVAM INDUSTRIES ,SATARA
32	VAIBHAV MOHAN MOHITE	SHIVAM INDUSTRIES ,SATARA
33	KRISHNA POPAT NARGOJE	SHIVAM INDUSTRIES ,SATARA
34	SAHIL SHEKHLEL NADAF	ADITYA ENGG WORKS ,SATARA
35	ANIKET SACHIN GAIKWAD	ADITYA ENGG WORKS ,SATARA
36	RUSHIKESH MADHUKAR JAGTAP	ADITYA ENGG WORKS ,SATARA
37	KISHOR LAXMAN GHADGE	PRESS COM ENGG SURVICES

38	NIKHIL BHAUSO BHOSALE	SHIVRAM INDUSTRIES, SATARA
39	ASHUTOSH ANIL PAWAR	REMON-LUXURY COTTON,KOLHAPUR
40	JOYTI APPASAHEB GUNDEWADI	AMOL ENGG WORKS,KUPWAD
41	SHIVANI RAJENDR KAKDE	SHIVRAM INDUSTRIES, SATARA
42	SAYALY PRBHAKAR BHOSALE	SHIVRAM INDUSTRIES, SATARA
43	SWAPNITA SATISH DEKHNE	SHIVRAM INDUSTRIES, SATARA
44	PRAGTI CHANDRKANT PATIL	TRIMURTI ENGG,TASWADE
45	ONKAR PANUDURANG MANE	TRIMURTI ENGG,TASWADE
46	RAVINA SADANAND PATIL	SDVS SAKHR KARKHANA,KAGAL
47	RUSHIKESH MAHAVEER BHABAN	POWDERCRAFT,KAGAL
48	SHUSHANT SAMBHAJI MANE	SHUBHAM BIZ FACILITY MANAGEMENT,CHINCHWAD
49	AJINKYA PRATAP BARGE	TECHNOBUZZ DIES AND MOULDS ,SATARA
50	TUSHAR MAHADEV GHANVAT	PRICOL WIPING SYSTEM ,SATARA
51	KANCHAN CHANDRAKANT GAIKWAD	POWER FAIBRICATORS ,WAI

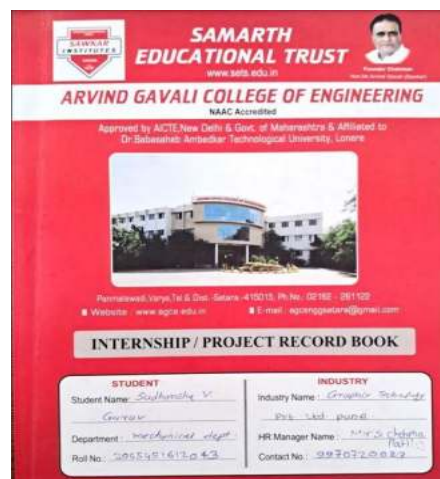


Figure B.2.2.5a Industrial/Internship/Summer Training Record Book

Sr. No.	Date	Task Completed	Student's Signature	Officer's Signature
1.		To study the standard		
2.	5-03-	operating process on		
3.	22	assembly line	<i>[Signature]</i>	<i>[Signature]</i>
4.				
5.				
6.				

Sr. No.	Date	Task Completed	Student's Signature	Officer's Signature
1.		To learn the		
2.	10-02-	control plan and the	<i>[Signature]</i>	<i>[Signature]</i>
3.	22	working safety points		
4.		in assembly line		
5.				
6.				

Sr. No.	Date	Task Completed	Student's Signature	Officer's Signature
1.		To study the main		
2.	15-03-	product working and	<i>[Signature]</i>	<i>[Signature]</i>
3.	22	their operation in		
4.		line assembly		
5.				
6.				

Suggestions for Candidate by Company Internship Officer :

Name of Faculty Mentor : *[Signature]* Name of Company Mentor : *[Signature]*

Signature of Faculty Mentor : *[Signature]* Signature of Company Mentor : *[Signature]*

Figure B.2.2.5 b Industrial/Internship/Summer training attendance

Post Training Assessment

487

To whom it may Concern

This is to certify that Mr. Mr. Sudhanshu Vijay Gaurav is a student of Mechanical Engg. Department of Arvind Gaurav College of Engineering Satara has been working with Infinite Graphix Technology, Pune. as internship from 11/12/22 to 31/5/23

Below is performance of the candidate evaluated on following parameters for academic purpose

Parameters	Needs Improvement	Satisfactory	Good	Excellent
Behaves			<input checked="" type="checkbox"/>	
Performs in a dependable manner				<input checked="" type="checkbox"/>
Cooperates with co-workers and supervisors				<input checked="" type="checkbox"/>
Shows interest in work				<input checked="" type="checkbox"/>
Learns quickly			<input checked="" type="checkbox"/>	
Shows initiative			<input checked="" type="checkbox"/>	
Produces high quality work			<input checked="" type="checkbox"/>	
Accepts responsibility			<input checked="" type="checkbox"/>	
Accepts criticism			<input checked="" type="checkbox"/>	
Demonstrates organizational skills			<input checked="" type="checkbox"/>	
Uses technical knowledge and expertise			<input checked="" type="checkbox"/>	
Shows good judgment			<input checked="" type="checkbox"/>	
Demonstrates creativity/ingenuity			<input checked="" type="checkbox"/>	
Analyzes problems effectively			<input checked="" type="checkbox"/>	
Is self-reliant			<input checked="" type="checkbox"/>	
Communicates well			<input checked="" type="checkbox"/>	
Writes effectively			<input checked="" type="checkbox"/>	
Has a professional attitude			<input checked="" type="checkbox"/>	
Gives a professional appearance			<input checked="" type="checkbox"/>	
Is punctual			<input checked="" type="checkbox"/>	
Uses time effectively			<input checked="" type="checkbox"/>	

(Ref: ACCE Internship Policy Guidelines and Procedure Page 20)

We wish him/her every success in life.

Industry Mentor
Name: Chetna Patil
Designation: HOD, HR Department
Signature: [Signature]

Figure B.2.2.5 c Sample Industrial/Internship/summer training Assessment Sheet

GRAPHIX TECHNOLOGIES

Infinite Graphix Technologies Pvt. Ltd.
THE COMPLETE DESIGN SOLUTIONS
M4743, Kadamwadi Prasad Building, Near Modern City
Above Bank of Maharashtra, Shivajinagar, Pune - 411005
Contact: 9870720023, E-mail: info@infinitegraphix.com
Website: www.graphixinfotech.com

INTERNSHIP LETTER

Date: 31-05-2023

To Whom It May Concern

This is to certify that **Mr. Sudhanshu Vijay Gaurav** a student of **Arvind Gaurav college of Engineering Satara**, Has done his internship as **Mechanical CAD Engineer (Intern)** at **Infinite Graphix Technologies Pvt Ltd, Pune** from **02-12-2022 To 31-05-2023**.

During this tenure of his work he was dedicated.
We found him pretty active in whatever task we have provided to him. He is a confident person. He is professionally sound, hard-working. He has the motivation to take initiative tasks and we are gratified that he had been helpful in the advancement of our organization. During his service he has been found sincere, reliable, trustworthy, sociable, pleasant and open to challenges. He has a genial temperament and can efficiently work in a team.

We are wishing all the best for his future endeavour.

Authorized Signatory,

Ms. Chetna Patil
HOD HR Department
Infinite Graphix Technologies Pvt Ltd,
Pune-411005.

Figure B.2.2.5 d Sample Industrial/Internship/Summer training completion certificate

Internship / Project work												
COURSE OUTCOMES												
Subject	Internship / Project work											
CO	On completion of this course, students will be able to :											Cognitive Level
CO1	Identify engineering processes relevant to the industry											L1
CO2	Understand the modern tools and techniques used in all types of industries											L2
CO3	Study of the resources required and planning to facilitate Project management.											L3
CO4	Analysis of industrial ecosystem											L4
Target Level :-												
CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO1	3	3	3	3	3	2	2	3	3	3	2	2
CO2	2	2	1	-	-	-	-	-	-	-	2	1
CO3	2	2	2	-	-	-	-	-	-	-	2	3
CO4	1	-	-	-	-	3	-	-	-	2	2	2
Avg	2	2.33	1.5	3	3	2	2	2.4	3	3	2	1.75
Attainment Level :-												
CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO1	2	2	2	2	2	1	1	2	2	2	2	2
CO2	2	2	1	-	-	-	-	-	-	-	2	1
CO3	2	2	2	-	-	-	-	-	-	-	2	3
CO4	1	-	-	-	-	3	-	-	-	2	2	2
Avg	1.75	2	1.5	2	2	2	2	2	2	2	2	2

Figure B.2.2.5 e Sample Industrial/Internship/Summer training outcome mapping to program outcome.



Figure B.2.2.5 f Training & Placement Officer Visit to Internship Company

C. Impact Analysis:

- These training programs have helped students in the development of good projects in their final year.
- Students learn the industry standards and workplace culture.
- Students gain the basic needed skills for the development of real-world projects.
- Gain valuable work experience.
- Students gain confidence.
- The communication skills of the students improved.
- To expand teamwork and leadership skills.
- The internship program helps students get placed in the same domain or same company as that internship.

Student Feedback on Initiative

- The feedback on the initiative taken by the program is collected from the students when he joins back the institute after the completion of the internship in the industry.
- The feedback is conducted to understand the satisfaction of the students with the initiative and the scope for improvement in the initiative for future students.
- It is observed that the initiative is helpful for the students from the perspective of career advancement and life-long learning.
- The feedback of the students is also taken while submitting the report. The sample feedback form is as below.

Internship/ Field Training Feedback

Students should give feedback of Internship/ Field Training.

agcepac2019@gmail.com (not shared) [Switch accounts](#)

***Required**

Are you satisfied with training initiative? *

Yes

No

Have you received internship/ training letter from organization? *

Yes

No

Have you got guidance from supervisor/ senior members? *

Yes

No

Have you observed safety measures/precautions taken while working? *

Yes

No

Have you applied engineering knowledge during training? *

Yes

No

Have you identified latest tools and technologies? *

Yes

No

Have you got opportunity to work in team? *

Yes

No

Was there ample opportunity of Learning? *

Yes

No

Would you recommend your juniors for training in this company? *

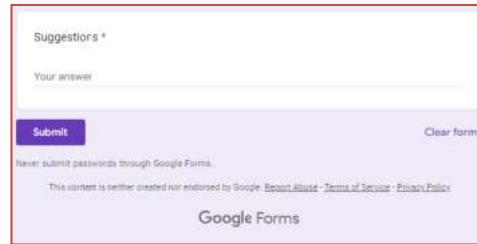
Yes

No

Have you got realistic preview of career field? *

Yes

No



The image shows a screenshot of a Google Forms submission interface. At the top, there is a section labeled "Suggestions *". Below this is a text input field with the placeholder text "Your answer". At the bottom of the form, there is a purple "Submit" button on the left and a "Clear form" link on the right. Below the form, there is a warning: "Never submit passwords through Google Forms." and a footer that reads "This content is neither created nor endorsed by Google. [Report Abuse](#) - [Terms of Service](#) - [Privacy Policy](#)". The "Google Forms" logo is centered at the bottom of the page.

Figure B.2.2.5 g Sample Feedback Form of Industrial Training/Internship

CRITERION 03	COURSE OUTCOMES AND PROGRAM OUTCOMES	120
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A.Y. 2022-23**3.1. Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)**

Program Outcomes as mentioned in Annexure-I and Program Specific Outcomes as defined by the Program.

A. PROGRAM OUTCOMES (POs)

The students of Mechanical Engineering will be able to:	
PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

B. PROGRAM SPECIFIC OUTCOMES (PSO)

Mechanical Engineering graduates will be able to	
PSO1	The students will be able to acquire competencies in the usage of design, thermal and manufacturing principles to develop a product and process.
PSO2	The students will be able to impart technological inputs and acquire managerial skills to become technocrats and entrepreneurs.

3.1.1. Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (05)

Sem	Course	CO	Course Outcome
SEM-3	Thermodynamics (BTMEC305)	BTMEC305.1	Define the terms like system, boundary, properties, equilibrium, work, heat, ideal gas, entropy etc. used in thermodynamics.
		BTMEC305.2	Explain different laws of thermodynamics and apply these to simple thermal systems to study energy balance .
		BTMEC305.3	Apply Carnot theorem to heat engine and heat pump, Clausius theorem, Clausius inequality
		BTMEC305.4	Analyze the universal gas constant, ideal processes with question for ideal gas, p-v, T-s, and h-s diagrams properties of steam. Solve problems related to temperature measurement, study flow energy equation, first law of thermodynamics etc.
SEM-4	Theory of Machines I (BTMEC 402)	BTMC402.1	Discuss the terminology and various concepts of mechanisms, friction and lubrication.
		BTMC402.2	Determine the velocity and acceleration of various types of mechanisms.
		BTMC402.3	Classify various follower motions by drawing the cam profiles.
		BTMC402.4	Evaluate the performance of clutch, brakes, dynamometers and balancing machines.
SEM-5	Theory of Machines II (BTMEC 504)	BTMOE504.1	Discuss the terminology and working principles for various types of transmission drives.
		BTMOE504.2	Calculate velocity ratio and power transmitted by transmission drives.
		BTMOE504.3	Analyze the performance of governor, flywheel and gyroscope
		BTMOE504.4	Evaluate the effect of various types of vibration on mechanical systems.
SEM-6	Applied Thermodynamics- II (BTMEC603)	BTMOE502.1	Define the nomenclature related to IC engines, fundamental difference between SI and CI engines.
		BTMOE502.2	Explain Various Engine Systems, Engine Testing and Performance of SI and CI Engines

		BTMOE502.3	Apply the methods of cooling, Refrigeration systems, Thermodynamics of Refrigeration, Air refrigeration system.
		BTMOE502.4	Analyze the types of Power Plant like Thermal Power Plant, Diesel Power Plant, Gas Turbine power plant, Hydro-electric Power Plant, Nuclear Power Plant
SEM-7	Industrial Engineering and management (BTMEC704B)	BTMEC704B.1	Define the terms related management like , functions of management, evolution of management theory, contributions of Taylor, Fayol and others
		BTMEC703.2	Explain Leading: Managing and human factor, motivation, leadership, morale, team building, communication. Controlling: The system and process of controlling control techniques, overall and preventive control
		BTMEC703.3	Apply Operations management in corporate profitability and competitiveness, types and characteristics of manufacturing systems, types and characteristics of services systems.
		BTMEC703.4	Analyze Concurrent Engineering: Producibility, manufacturability, productivity improvement, Total Quality Management: Just in time (JIT), total quality control, quality circles, six sigma
SEM-8	Non-Conventional Energy Resources (BTMEC802F)	BTMEC802F.1	Demonstrate the generation of electricity from various non-conventional sources of energy, have a working knowledge on types of fuel cells.
		BTMEC802F.2	Estimate the solar energy, Utilization of it, Principles involved in solar energy collection and conversion of it to electricity generation.
		BTMEC802F.3	Explore the concepts involved in wind energy conversion system by studying its components, types and performance
		BTMEC802F.4	Illustrate ocean energy and explain the operational methods of their utilization.

3.1.2. CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from the 3rd to the 8th semester) (05)

All the courses in curriculum are studied in detail and correlation with POs and PSOs are declared. Six matrices are mentioned here from the 3rd to the 8th semester. Record for all courses is available with the program.

CO-PO matrices

Course Name: BTMC305												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMES305.1	3											
BTMES305.2	3	2	2									2
BTMES305.3	2	3	3				2			3		3
BTMES305.4			3							2		2
Average	2.67	2.50	2.67				2.00			2.50		2.33

Course Name: BTMEC 402												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMC402.1	2			1		1				1		1
BTMC402.2	3	2	2	1		2						
BTMC402.3	3	3	2	3	2	2	1					1
BTMC402.4	3	3	2	3	2	3	1	1				
Average	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00		1.00	0.00	1.00

Course Name: BTMEC504												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMOE504C.1	2			1		1				1		1

BTMOE504C.2	3	2	2	1		2						
BTMOE504C.3	3	3	2	3	2	2	1					1
BTMOE504C.4	3	3	2	3	2	3	1	1				
Average	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00				1.00

	Course Name: BTMEC603											
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMEC603.1	3											
BTMEC603.2	3	2	2									2
BTMEC603.3	2	3	3			2						3
BTMEC603.4			3			2	2		1			2
Average	2.67	2.50	2.67			2.00	2.00		1.00			2.33

	Course Name: BTMEC704B											
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	P O4	PO5	PO 6	PO7	P O8	PO9	PO10	PO11	PO12
BTMEC704B .1	3											
BTMEC704B .2	3	2	2									2
BTMEC704B .3	2	3	3				2			3		3
BTMEC704B .4			3							2		2
Average	2.67	2.50	2.67				2.00			2.50		2.33

	Course Name: BTMEC802F											
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMEC802F.1	1			1		3	2			1		1
BTMEC802F.2	2	2	1	1		2	3					

BTMEC802F.3	2	1	2	2	2	2	3					1
BTMEC802F.4	3	2	2	2	2	3	3	1				
Average	2.00	1.67	1.67	1.50	2.00	2.50	2.75	1.00		1.00		1.00

CO-PSO matrices

Course Name: BTMEC305		
Course	PSO1	PSO2
BTMEC305.1	1	
BTMEC305.2		2
BTMEC305.3	2	2
BTMEC305.4	2	
Average	1.66	2.00

Course Name: BTMEC402		
Course	PSO1	PSO2
BTMEC402.1	1	
BTMEC402.2		2
BTMEC402.3		2
BTMEC402.4	2	
Average	1.50	2.00

Course Name: BTMEC504		
Course	PSO1	PSO2
BTMEC504 .1	1	1
BTMEC504 .2		2
BTMEC504 .3		2
BTMEC504 .4	2	
Average	1.50	1.66

Course Name: BTMEC603		
Course	PSO1	PSO2
BTMEC603.1	2	
BTMEC603.2		2
BTMEC603.3		
BTMEC603.4		
Average	2.00	2.00

Course Name: BTMEC704B		
Course	PSO1	PSO2
BTMEC704B.1	1	
BTMEC704B.2		2
BTMEC704B.3	2	2
BTMEC704B.4	2	
Average	1.66	2.00

Course Name: BTMEC801F		
Course	PSO1	PSO2
BTMEC801F .1	1	
BTMEC801F .2		2
BTMEC801F .3		2
BTMEC801F .4	2	
Average	1.50	2.00

3.1.3. Program level Course-PO matrix of all courses INCLUDING first year courses (10)

CO-PO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with POs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation is indicated by '-'. This correlation is derived from CO-PO mapping of the individual course. Average of all COs is taken and mapped at level 1, 2 and 3.

Class	Course Name & Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
FY-SEMI	Engineering Mathematics – I	1.50	2.25	2.00	2.00		1.00					1.50	1.33
	Engineering Physics	2.00	2.00	2.00	3.00		2.00	2.00					2.00
	Engineering Graphics	1.67	3.00	2.50	3.00	1.67					2.50		2.00
	Communication Skills	2.88				2.88	2.82		2.94		2.92		2.91
	Energy and Environment Engineering	2.33		2.50				3.00	2.00				
	Basic Civil and Mechanical Engineering	2.25	2.00	2.50	2.50		2.00	2.00	2.00		2.50	2.00	
	Engineering Physics Lab	2.65	2.45	2.48	2.71		2.94	2.94		2.94			2.70
FY-SEMII	Engineering Graphics Lab	1.67	3.00	2.50	3.00	1.67				2.50	2.50		2.50
	Communication Skills Lab	1.00				1.67	1.67		2.00		3.00		2.75
	Engineering Mathematics- II	2.75	2.00	1.00	1.50		1.00					3.00	1.33
	Engineering Chemistry	1.75	1.33				1.50	1.00		3.00			
	Engineering Mechanics	2.25	2.50	2.00			3.00			2.00			2.00
	Computer Programming in C	3.00	2.25	2.00						3.00	3.00		1.50
	Workshop Practices	3.00				2.00				3.00	1.00		
FY-SEMIII	Computer Programming Lab	1.75	2.00	2.25		3.00				2.00	2.50		
	Engineering Mechanics Lab	2.67	3.00	2.00			3.00	1.00		2.00	2.00		
	Engineering Chemistry Lab	1.75	1.33				1.50	1.00		3.00			
	Basic Electrical and Electronics Engineering	3.00					2.00	1.00					
	Mini Project	2.67	3.00			1.00	3.00	2.00	3.00	2.00	2.00		
	Engineering Mathematics-III	1.00	1.50	2.00		1.25				2.00		1.00	1.75
	Materials Science and Metallurgy	2.00	1.75	1.50	2.00	3.00	1.50	1.50	1.00	1.00	1.50	0.00	0.00

	Fluid Mechanics	1.50	1.63	1.75									0.88
	Machine Drawing and CAD	2.00	1.75	1.75									0.88
	Thermodynamics	1.63	1.66	1.75		3.00							0.88
	Basic Human Rights	3.00	2.75	2.50	2.75	2.50	3.00	3.00	2.00	3.00	2.00	1.00	3.00
	Materials Science and Metallurgy Lab	2.03	1.95	1.94		3.00				3.00			1.41
	Fluid Mechanics Lab	2.16	2.03	1.98		3.00				3.00			1.54
	Machine Drawing and CAD Lab	1.70	1.65	1.75		3.00							0.88
	Field Training /Internship/Industrial Training I	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00
SY-SEM IV	Manufacturing Processes - I	1.75	1.50	1.00			1.00	1.00			1.00		1.00
	Theory of Machines-I	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Strength of Materials	2.00	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Numerical Methods in Mechanical Engineering	3.00	3.00		1.00	3.00							
	Product Design Engineering – I	3.00	2.75	2.50	2.75	2.50	3.00	3.00	2.00	3.00	2.00	1.00	3.00
	Interpersonal Communication Skill& Self Development	2.00	2.00	1.67	2.00	1.67	1.67	2.00	1.50	3.00	2.00	2.00	2.00
	Manufacturing Processes Lab – I	1.75	1.50	1.00		3.00	1.00	1.00			1.00		1.00
	Theory of Machines Lab- I	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
	Strength of Materials Lab	3.00	2.66	2.50		3.00	3.00	2.00			2.00		3.00
	Numerical Methods Lab	3.00	3.00		1.00	3.00							
SEM V	Heat Transfer	2.25	2.50	2.67	2.00		1.00	1.00	1.00		1.00		2.00
	Applied Thermodynamics – I	2.50	2.50	1.67	2.00	1.00	1.33	1.00				1.00	1.00
	Machine Design – I	1.25	1.25	2.00	1.00	1.00	1.00						1.00
	Theory of Machines- II	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00		1.00	0.00	1.00
	Metrology and Quality Control	3.00	3.00	2.00	2.00	3.00						1.00	2.00
	Product Design Engineering - II	2.99	2.99	2.99	2.99	2.99	2.98	2.99	2.99	2.99	2.99	2.99	2.99
	Automobile Engineering	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Heat Transfer Lab	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
	Applied Thermodynamics Lab	3.00	2.25	2.50	2.50	3.00	2.00	2.00	0.00	3.00	2.00	1.67	3.00
	Machine Design Practice- I	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
	Theory of Machines Lab- II	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00

	Field training/Internship	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00
TY-SEM VI	Manufacturing Processes- II	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Machine Design-II	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Applied Thermodynamics- II	1.50	1.25		1.00		1.00		0.00	0.00	0.00		1.00
	IC Engines	2.67	2.50	2.67		3.00		2.00					2.33
	Renewable Energy Sources	1.50	2.50	2.67		3.00		2.00					2.33
	Solar Energy	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Metrology and Quality Control Lab	1.50	1.67	2.00	2.00	1.00	1.00	1.50					
	Machine Design Practice-II	3.00	2.00	2.00		3.00		1.00					2.00
	IC Engine Lab	2.00	3.00	3.00	2.00	2.00		2.00			2.00		2.00
	Refrigeration and Air Conditioning Lab	3.00	3.00	2.00	2.00	2.00		2.00			2.00		2.00
	Technical Project for Community Services	2.00	3.00	2.00	2.00	2.00		2.00			2.00		2.00
BTech-SEM VII	Mechatronics	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	CAD/CAM	2.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Manufacturing Processes - III	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Industrial Engineering and Management	2.67	2.50	2.67		3.00		2.00			2.50		2.33
	Wind Energy	3.00	3.00	2.67		3.00		2.00			2.50		2.33
	Manufacturing Processes Lab - II	2.75	3.00	2.00			1.00	1.00		1.00	1.00		1.00
	Mechatronics Lab	1.75	1.50	1.00		3.00	1.00	1.00			1.00		1.00
	CAD/CAM Lab	2.75	1.50	1.00		3.00	1.00	1.00			1.00		1.00
	Seminar	1.25	1.50	1.67	1.33	1.67			1.50	1.25	2.00		
	Field Training /Internship/Industrial Training III	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00
	Project Stage-I	2.00	2.00	1.67	2.00	1.67	1.67	2.00	1.50	3.00	2.00	2.00	2.00
BTech-SEM VIII	Fundamental of automotive systems	2.33	2.33	2.50	2.00	2.33	2.00	2.00		2.00	3.00	3.00	
	Non-Conventional Energy Resources	2.00	1.67	1.67	1.50	2.00		2.75	1.00				1.00
	Project Stage-II	2.00	2.00	1.67	2.00	1.67	1.67	2.00	1.50	3.00	2.00	2.00	2.00
	ACTUAL AVERAGE PO	2.40	2.36	2.04	2.23	2.48	1.79	1.72	1.64	2.02	1.81	1.88	1.80

Program level Course- PSO matrix:

CO-PSO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with PSOs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation are indicated by-. This correlation is derived from CO-PSO mapping of the individual course. Average of all Cos is taken and mapped at level 1, 2 and 3

Academic Year: 2020-21		Programme Specific Outcome (PSO)	
Class	Course	PSO1	PSO2
FY- SEMI	Engineering Mathematics – I	2.50	1.50
	Engineering Physics	2.00	2.50
	Engineering Graphics	2.00	
	Communication Skills	2.00	2.50
	Energy and Environment Engineering	2.00	2.00
	Basic Civil and Mechanical Engineering	2.50	2.00
	Engineering Physics Lab	1.67	2.50
	Engineering Graphics Lab	2.50	
	Communication Skills Lab	3.00	2.00
FY- SEMII	Engineering Mathematics- II	2.00	1.00
	Engineering Chemistry	3.00	
	Engineering Mechanics	3.00	2.00
	Computer Programming in C		
	Workshop Practices	2.00	3.00
	Computer Programming Lab		
	Engineering Mechanics Lab	3.00	1.00

	Engineering Chemistry Lab	2.00	
	Basic Electrical and Electronics Engineering		
	Mini Project	3.00	1.00
SY- SEMIII	Engineering Mathematics-III	1.99	1.98
	Materials Science and Metallurgy	2.88	2.95
	Fluid Mechanics	2.98	2.96
	Machine Drawing and CAD	2.98	2.96
	Thermodynamics	1.33	2.00
	Basic Human Rights	2.93	2.92
	Materials Science and Metallurgy Lab	2.64	2.71
	Fluid Mechanics Lab	2.74	2.74
	Machine Drawing and CAD Lab	2.74	2.74
	Field Training /Internship/Industrial Training I	2.85	2.90
SY- SEM IV	Manufacturing Processes - I	2.78	2.78
	Theory of Machines-I	2.78	2.76
	Strength of Materials	2.78	2.76
	Numerical Methods in Mechanical Engineering	2.76	2.86
	Product Design Engineering – I	2.93	2.92
	Interpersonal Communication Skill& Self Development	2.85	2.90
	Manufacturing Processes Lab – I	2.78	2.76
	Theory of Machines Lab- I	2.78	2.76
	Strength of Materials Lab	2.78	2.76
	Numerical Methods Lab	2.76	2.94
TY- SEM V	Heat Transfer	1.50	1.50
	Applied Thermodynamics – I	1.50	1.50
	Machine Design – I	1.50	1.50
	Theory of Machines- II	1.50	1.66

	Metrology and Quality Control	3.00	1.00
	Product Design Engineering - II	2.99	2.98
	Automobile Engineering	1.50	2.00
	Heat Transfer Lab	1.00	1.50
	Applied Thermodynamics Lab	1.75	2.00
	Machine Design Practice- I	1.00	1.50
	Theory of Machines Lab- II	1.00	1.50
	Field training/Internship	2.67	2.00
	Manufacturing Processes- II	3.00	1.00
	Machine Design-II	1.50	1.50
	Applied Thermodynamics- II	2.00	2.00
	IC Engines	2.00	2.00
	Renewable Energy Sources	3.00	1.00
	Solar Energy	1.00	1.00
	Metrology and Quality Control Lab	3.00	2.00
	Machine Design Practice-II	2.00	2.00
	IC Engine Lab	2.00	2.00
	Refrigeration and Air Conditioning Lab	2.00	2.00
	Technical Project for Community Services	2.67	2.00
	Mechatronics	3.00	1.00
	CAD/CAM	3.00	1.00
	Manufacturing Processes - III	3.00	1.00
	Industrial Engineering and Management	1.66	2.00
	Wind Energy	1.50	2.00
	Manufacturing Processes Lab - II	3.00	1.00

	Mechatronics Lab	3.00	1.00
	CAD/CAM Lab	3.00	1.00
	Seminar	1.25	1.00
	Field Training /Internship/Industrial Training III	2.67	2.00
	Project Stage-I	2.00	2.00
BTech- SEM VIII	Fundamental of automotive systems	1.50	2.00
	Non-conventional Energy Resources	1.50	2.00
	Project Stage-II	2.00	2.00
Average PSO		2.21	1.62

3.2 Attainment of Course Outcomes**(50)****3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based****(10)**

(Examples of data collection processes may include, but are not limited to tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams etc.)

The key aspects in Outcome Based Education (OBE) are the assessment of course outcomes. At the initial stage of OBE implementation, the Course Outcomes (COs) for each course are defined based on the Program Outcome (POs) and other requirements. At the end of each course, the COs need to be assessed and evaluated, to check whether it has been attained or not. Assessment is one more process, carried out by the department, that identifies, collects, and prepares data to evaluate the achievement of program educational objectives and program outcomes. Attainment is the action or fact of achieving a standard result towards accomplishment of desired goals. Primarily attainment is the standard of academic attainment as observed by test or examination result. Attainment of the COs can be measured by using direct and indirect tools. Direct attainment basically displays the student's knowledge and skills from their academic performance. It can be determined from the performance of the students in all the relevant assessment tools – like internal assessments, assignments, quiz and final university examination etc. These methods provide a sampling of what students know and/or actions they can perform, offering substantial.

This program consists of various types of courses for fulfillment of POs and PSOs. The process of data collection for attainment of COs is properly identified depending on the type of course. Major types of courses are

1. Theory
2. Practical/Oral/TW
3. Tutorial
4. Seminar
5. Project
6. Audit course

The Institution strives hard to ensure that the Learning across all the courses of the curriculum is Outcome oriented. There is continuous assessment of learning outcomes attainment and this procedure has been refined over a period of time.

The following are the two broadly classified tools used for assessment of Learning Outcome Attainment

- Direct Assessment Method:

Data collection mechanism includes direct assessment process which is

Theory

1. Continuous Assessment Test 1
2. Mid Semester Examination
3. Continuous Assessment Test 2
4. End Semester Examination

Lab

1. Continuous Assessment Test 1
2. Continuous Assessment Test 2
3. End Semester Examination

Data collection process for all above type of courses is clearly defined in table 3.2.1a given below.

Table 3.2.1a: Assessment Tools

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Mid Semester Examination [MSE]		One test/semester
3	Continuous Assessment Test 2 [CA2]		One/Semester
4	End Semester Examination [ESE]		One/Semester

Lab

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Continuous Assessment Test 2[CA2]		One test/semester
3	End Semester Examination [ESE]		One/Semester

Course Outcomes for the entire course are defined and they are 4 in number. As the program is affiliated to DBATU, external assessment is done as per the evaluation scheme of university and internal assessment is done as per the policy of the program.

All courses are categorized into 2 categories

1. Courses with theory examination: CO attainment is calculated considering 60 % of university examination and 40% of internal semester evaluation (CA1, MSE CA2)
2. Courses with practical examination: CO attainment is calculated considering 60% internal evaluation and 40% university examination evaluation

Attainment levels are assigned based on performance in Internal Semester Evaluation and University examinations

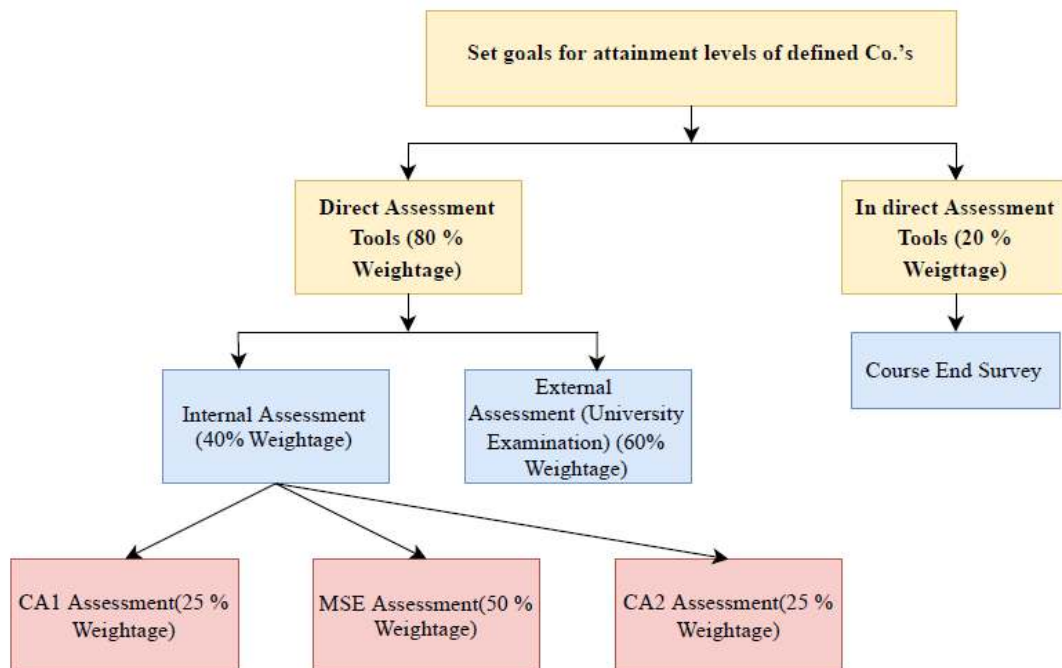
Theory

Sr. No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1[CA1]	Direct Assessment	3 - 71%-100% 2 - 51%-70% 1 - 40%-50%
2	Mid Semester Examination [MSE]		3 - 71%-100% 2 - 51%-70% 1 - 40%-50%
3	Continuous Assessment Test 2[CA2]		3 - 71%-100% 2 - 51%-70% 1 - 40%-50%
4	End Semester Examination [ESE]		3 - 71%-100% 2 - 51%-70% 1 - 40%-50%

Lab

Sr. No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1 [CA1]	Direct Assessment	3 - 81% -100% 2 - 61%-80% 1 - 40%-60%
2	Continuous Assessment Test 2 [CA2]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%
3	End Semester Examination [ESE]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%

Theory



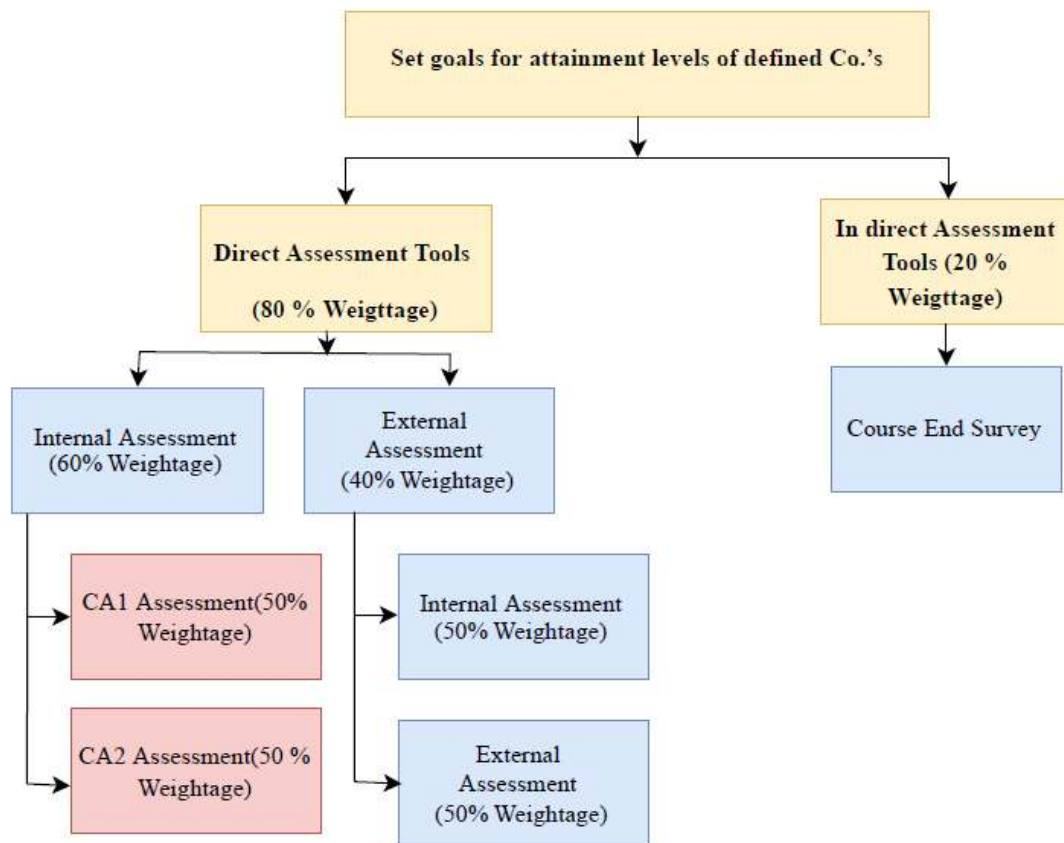
Lab

Fig2Process of defining CO attainment practical examination

3.2.2 Record of the attainment of Course Outcomes of all courses with respect to set attainment levels (40)

Course Name: Thermodynamics Year: 2020-21 Course Name: BTMC303 Sem-III						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Final Direct Course Attainment	Target	Remark
C303.1	[CA1]/MSE/ [CA2]/ [ESE]	1.2	1.8	3.00	1.8	Attained
C303.2		1.15	1.8	2.95	1.8	Attained
C303.3		1.2	1.8	3.00	1.8	Attained
C303.4		1.2	1.8	3.00	1.8	Attained

**Course Outcome
Attainment: 2.99**

Course Name: Theory of Machines I Year: 2020-21 Course Code: BTMEC 402 Sem-IV						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C402.1	[CA1]/MSE/ [CA2]/ [ESE]	1.2	1.8	2.95	1.8	Attained
C402.2		1.15	1.8	2.92	1.8	Attained
C402.3		1.2	1.8	2.95	1.8	Attained
C402.4		1.2	1.8	2.96	1.8	Attained

**Course Outcome
Attainment: 2.95**

Course Name: Theory of Machines II 2021-22						
Course Code: BTMEC 504 Sem-V						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C504.1	[CA1]/MSE/ [CA2]/ [ESE]	0.9	1.8	2.71	1.95	Attained
C504.2		1.2	1.8	2.95	1.95	Attained
C504.3		1.1	1.8	2.84	1.95	Attained
C504.4		1	1.8	2.78	1.95	Attained

Course Outcome

Attainment: 2.82

Course Name: Applied Thermodynamics- II Year: 2021-22						
Course Code: (BTMEC603)						
Sem-VI						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C603.1	[CA1]/MSE/ [CA2]/ [ESE]	1.2	1.8	2.94	1.95	Attained
C603.2		1.05	1.8	2.85	1.95	Attained
C603.3		1.2	1.8	2.99	1.95	Attained
C603.4		1.2	1.8	2.96	1.95	Attained

Course Outcome

Attainment: 2.93

Course Name: Industrial Engineering and management						
Year: 2022-23						
Course Code: BTMEC704B Sem-VII						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C704B.1	[CA1]/MSE/ [CA2]/ [ESE]	1.2	1.2	2.40	2.1	Attained
C704B.2		1.1	1.2	2.31	2.1	Attained
C704B.3		1.1	1.2	2.30	2.1	Attained
C704B.4		1.1	1.2	2.27	2.1	Attained

Course Outcome

Attainment: 2.32

Course Name: Non-Conventional Energy Resources Year : 2022-23						
Course Code: BTMEC802F						Sem-VIII
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C802F.1	[CA1]/MSE/ [CA2]/ [ESE]	0.9	1.2	2.16	2.1	Attained
C802F.2		1.05	1.2	2.27	2.1	Attained
C802F.3		1.1	1.2	2.30	2.1	Attained
C802F.4		1.1	1.2	2.27	2.1	Attained

Course Outcome

Attainment: 2.25

Course No	Course Name	CO1	CO2	CO3	CO4	Average CO Attainment
SY set CO attainment Target		1.8	1.38	1.8	1.8	1.8
BTBSC301	Engineering Mathematics-III	2.83	2.87	2.92	2.91	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEC302	Materials Science and Metallurgy	2.86	2.87	2.87	2.74	2.83
		Attained	Attained	Attained	Attained	Attained
BTMEC303	Fluid Mechanics	2.99	2.78	2.98	2.98	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEC304	Machine Drawing and CAD	2.93	2.94	2.97	2.84	2.92
		Attained	Attained	Attained	Attained	Attained
BTMEC305	Thermodynamics	2.97	2.93	2.97	2.97	2.96
		Attained	Attained	Attained	Attained	Attained
BTHM3401	Basic Human Rights	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL307	Materials Science and Metallurgy Lab	2.96	2.47	2.47	2.50	2.60
		Attained	Attained	Attained	Attained	Attained
BTMEL308	Fluid Mechanics Lab	2.96	2.48	2.48	2.00	2.48
		Attained	Attained	Attained	Attained	Attained
BTMEL309	Machine Drawing and CAD Lab	2.11	2.13	2.13	2.11	2.12
		Attained	Attained	Attained	Attained	Attained
BTMEL310	Field Training /Internship/Industrial Training I	2.55	2.54	2.53	2.54	2.54
		Attained	Attained	Attained	Attained	Attained
BTMEC401	Manufacturing Processes - I	2.81	2.88	2.65	2.58	2.73
		Attained	Attained	Attained	Attained	Attained
BTMEC402	Theory of Machines-I	2.95	2.96	2.95	2.92	2.94
		Attained	Attained	Attained	Attained	Attained
BTMEC403	Strength of Materials	2.72	2.88	2.95	2.96	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEC404	Numerical Methods in Mechanical Engineering	2.85	2.89	2.86	2.61	2.80
		Attained	Attained	Attained	Attained	Attained
BTID405	Product Design Engineering – I	2.95	2.45	2.93	2.94	2.82
		Attained	Attained	Attained	Attained	Attained
BTHM3402	Interpersonal Communication	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained

	Skill& Self Development					
BTMEL407	Manufacturing Processes Lab – I	2.40	2.43	2.44	2.40	2.42
		Attained	Attained	Attained	Attained	Attained
BTMEL408	Theory of Machines Lab- I	2.98	3.00	2.98	2.99	2.98
		Attained	Attained	Attained	Attained	Attained
BTMEL409	Strength of Materials Lab	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL410	Numerical Methods Lab	1.83	2.32	1.85	2.32	2.08
		Attained	Attained	Attained	Attained	Attained
TY set CO Attainment Target		1.95	1.95	1.95	1.95	1.95
BTMEC501	Heat Transfer	2.98	2.93	2.97	2.98	2.97
		Attained	Attained	Attained	Attained	Attained
BTMEC502	Applied Thermodynamics – I	2.73	2.91	2.89	2.81	2.84
		Attained	Attained	Attained	Attained	Attained
BTMEC503	Machine Design – I	2.88	2.81	2.78	2.70	2.79
		Attained	Attained	Attained	Attained	Attained
BTMEC504	Theory of Machines- II	2.71	2.95	2.84	2.78	2.82
		Attained	Attained	Attained	Attained	Attained
BTMEC505	Metrology and Quality Control	2.88	2.87	2.86	2.85	2.86
		Attained	Attained	Attained	Attained	Attained
BTID506	Product Design Engineering - II	2.95	2.96	2.93	2.95	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEC506A	Automobile Engineering	2.95	2.98	2.97	2.95	2.96
		Attained	Attained	Attained	Attained	Attained
BTMEL507	Heat Transfer Lab	2.94	2.41	2.92	2.68	2.68
		Attained	Attained	Attained	Attained	Attained
BTMEL508	Applied Thermodynamics Lab	2.64	2.64	2.61	2.14	2.51
		Attained	Attained	Attained	Attained	Attained
BTMEL509	Machine Design Practice- I	2.10	2.10	2.09	2.05	2.08
		Attained	Attained	Attained	Attained	Attained
BTMEL510	Theory of Machines Lab- II	2.63	2.63	2.60	2.62	2.62
		Attained	Attained	Attained	Attained	Attained
BTMEF511	Field Training/Internship	2.55	2.54	2.53	2.54	2.54
		Attained	Attained	Attained	Attained	Attained
		2.82	2.83	2.67	2.58	2.72

BTMEC601	Manufacturing Processes- II	Attained	Attained	Attained	Attained	Attained
BTMEC602	Machine Design-II	2.85	2.80	2.75	2.69	2.77
		Attained	Attained	Attained	Attained	Attained
BTMEC603	Applied Thermodynamics-II	2.94	2.85	2.99	2.96	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEC604B	IC Engines	2.97	2.99	2.74	2.98	2.92
		Attained	Attained	Attained	Attained	Attained
BTMEC605C	Renewable Energy Sources	2.25	2.28	2.30	2.26	2.27
		Attained	Attained	Attained	Attained	Attained
BTMEC606B	Solar Energy	2.95	2.95	2.94	2.95	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEC606B	Solar Energy	2.95	2.95	2.94	2.95	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEL607	Metrology and Quality Control Lab	2.39	2.86	2.39	2.88	2.63
		Attained	Attained	Attained	Attained	Attained
BTMEL608	Machine Design Practice-II	2.44	2.43	2.42	2.41	2.42
		Attained	Attained	Attained	Attained	Attained
BTMEL609	IC Engine Lab	2.88	2.88	2.91	2.92	2.90
		Attained	Attained	Attained	Attained	Attained
BTMEL610	Refrigeration and Air Conditioning Lab	2.44	2.89	2.43	2.91	2.67
		Attained	Attained	Attained	Attained	Attained
BTMEM611	Technical Project for Community Services	2.90	2.38	2.36	2.38	2.51
		Attained	Attained	Attained	Attained	Attained
BTech Set CO Attainment Target		2.1	2.1	2.1	2.1	2.1
BTMEC701	Mechatronics	2.94	2.85	2.92	2.83	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEC702	CAD/CAM	2.81	2.80	2.84	2.86	2.83
		Attained	Attained	Attained	Attained	Attained
BTMEC703	Manufacturing Processes - III	2.87	2.79	2.81	2.85	2.83
		Attained	Attained	Attained	Attained	Attained
BTMEC704B	Industrial Engineering and Management	2.40	2.31	2.30	2.27	2.32
		Attained	Attained	Attained	Attained	Attained
BTMEC705C	Wind Energy	2.87	2.76	2.72	2.86	2.80
		Attained	Attained	Attained	Attained	Attained

BTMEL706	Manufacturing Processes Lab - II	2.09	2.06	2.07	2.06	2.07
		Attained	Attained	Attained	Attained	Attained
BTMEL707	Mechatronics Lab	2.08	2.03	2.05	2.03	2.05
		Attained	Attained	Attained	Attained	Attained
BTMEL708	CAD/CAM Lab	2.07	2.03	2.05	2.03	2.05
		Attained	Attained	Attained	Attained	Attained
BTMEL709	Seminar	2.40	2.36	2.38	2.34	2.37
		Attained	Attained	Attained	Attained	Attained
BTMEL710	Field Training /Internship/Industrial Training III	2.42	2.40	2.40	2.40	2.41
		Attained	Attained	Attained	Attained	Attained
BTMEM711	Project Stage-I	2.09	2.06	2.07	2.06	2.07
		Attained	Attained	Attained	Attained	Attained
		Attained	Attained	Attained	Attained	Attained
BTMEC801A	Fundamental of Automotive Systems (BTMEC801A)	2.15	2.27	2.33	2.27	2.26
		Attained	Attained	Attained	Attained	Attained
BTMEC801F	Non-conventional Energy Resources (BTMEC802F)	2.16	2.27	2.30	2.27	2.25
		Attained	Attained	Attained	Attained	Attained
BTMEP803	Project Stage-II	2.57	2.06	2.07	2.06	2.19
		Attained	Attained	Attained	Attained	Attained

3.3. Attainment of Program Outcomes and Program Specific Outcomes (50)

3.3.1. Describe assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

(Describe the assessment tools and processes used to gather the data upon which the

evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

List of PO and PSO Assessment Tools:

Assessment tools are categorized into two types for Program Outcomes (POs), Program Specific Outcomes (PSOs).

1. Direct Assessment Method– Through CO attainment in relevant courses.
2. Indirect Assessment Method –Employer Feedback, Alumni feedback, Program Exit Survey.

Direct Assessment methods:

CO attainment of course shows knowledge and skills obtained by students from respective courses derived from their performance in the continuous assessment, unit tests, online examinations, in-semester examinations, end-semester examinations, reviews, assignments etc. These methods provide strong evidence of student learning.

Indirect Assessment methods:

Surveys of students are taken to know their learning. Feedback of various stake holders like employer, alumni etc is taken to know the capabilities and necessary improvements.

For e.g.

Program exit Feedback: To evaluate the success of program in providing students with opportunities to achieve the POs and PSOs every year. After completion of program students are able evaluate easily so here given 40% weightage.

Alumni Feedback: To evaluate the success of program in providing alumni with opportunities to achieve the POs and PSOs every year and given 30% weightage.

Employer Feedback: To provide information about our graduate's skills and capability and given 30 % weightage.

Process for Evaluation and Assessment of POs & PSOs

- The activity, questionnaires and frequency of feedback is defined by the Program for POs and PSOs attainment through in direct tools.
- The CO-PO mapping and CO attainment is considered as reference for PO attainment as a part of direct tool. If the CO average attainment (Internal & External) is achieved at level 3 then the PO attainment level is same CO-PO mapping level.
- If CO attainment level is 2/1/0 then CO - PO mapping level is transformed as per the CO attainment level as given below,
 1. If CO attainment level is 1 and CO-PO mapping is at level 2 then PO attainment level will be $(2*1)/3 = 0.667$, here value 3 is maximum CO attainment level.
 2. The same process is followed to calculate PSO attainment.

PO and PSO attainment are calculated by considering 80% weightage to direct assessment and 20% weightage to indirect assessment through surveys as shown in following figure

$$PO/PSO \text{ Attainment} = 0.8 * \text{Direct Attainment} + 0.2 * \text{Indirect Attainment}$$

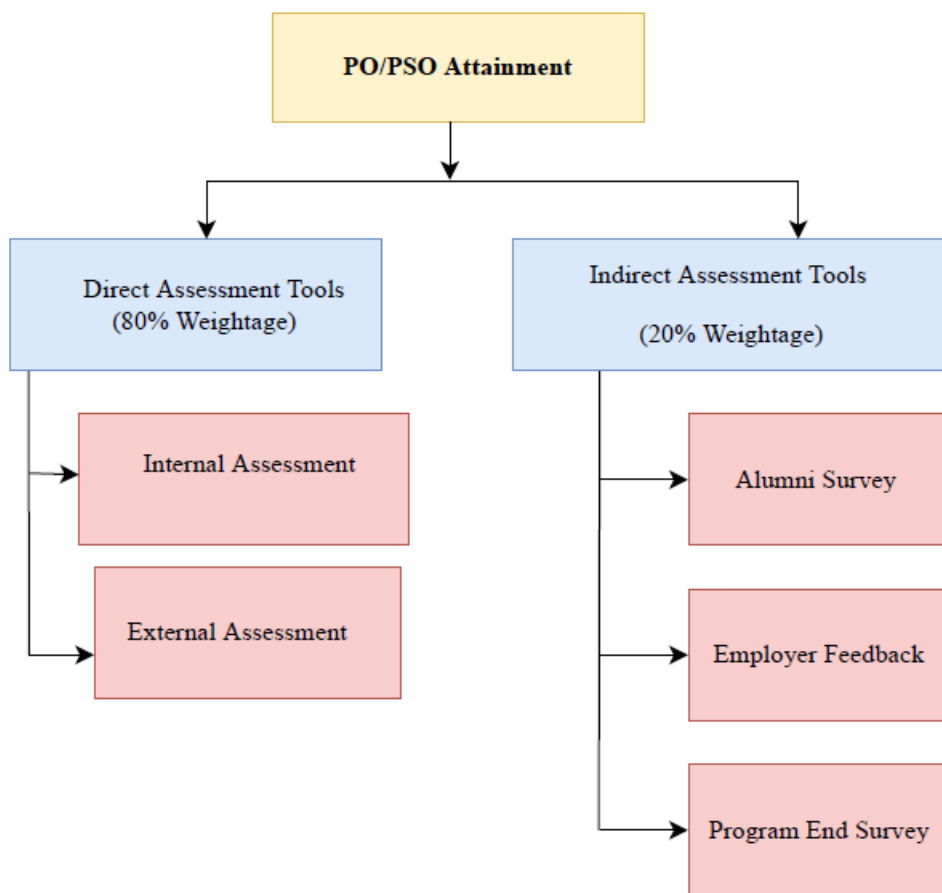


Fig 3 Process of defining PO/PSO Attainment

➤ **Direct Assessment Tools:**

Continuous Assessment Test1[CA1]
Mid Semester Examination [MSE]
Continuous Assessment Test 2[CA2]
End Semester Examination [ESE]
Lab Continuous Assessment Test 1
Lab Continuous Assessment Test 2

➤ **Indirect Assessment Tools:**

Program End Survey
Employer Feedback
Examiner Feedback

3.3.2. Provide results of evaluation of each PO&PSO**(40)**

Program shall set Program Outcome attainment levels for all POs & PSOs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course–PO & PSO matrix as indicated).

PO Attainment:

Course Name & Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Engineering Mathematics – I	1.85	1.85	1.80	1.78		1.80					1.80	1.84
Engineering Physics	1.85	1.71	1.95	1.98		1.75	1.69					1.79
Engineering Graphics	1.40	1.40	1.42	1.42	1.42					1.43		1.38
Communication Skills	2.73				2.81	2.84		2.82		2.80		2.80
Energy and Environment Engineering	2.66	2.69	2.66	2.58		2.61		2.63		2.70		
Basic Civil and Mechanical Engineering	2.41	2.29	2.39	2.45		2.51	2.43			2.42	2.63	
Engineering Physics Lab	2.65	2.45	2.48	2.94		2.94	2.94		2.47			2.70
Engineering Graphics Lab	2.76	2.98	2.98	2.98	2.76				2.98	2.75		2.76
Communication Skills Lab	1.95				2.52	2.62		2.59		2.43		2.47
Engineering Mathematics- II	1.89	1.89	1.87	1.92		1.87					1.87	1.89
Engineering Chemistry	2.95	2.92				2.98	2.94		2.87			
Engineering Mechanics	2.97	2.97	2.94			2.91			2.95			2.95
Computer Programming in C	2.91	2.91	2.90						2.93	2.93		2.90
Workshop Practices	2.93				2.93				2.93	2.93		

Computer Programming Lab	2.97	2.97	2.97						2.95	2.94		
Engineering Mechanics Lab	2.77	2.79	2.71			2.46	2.46		2.50	2.94		
Engineering Chemistry Lab	2.34	2.29				2.09	2.43		1.92			
Basic Electrical and Electronics Engineering	2.56					2.56	2.58					
Mini Project	2.48	2.48			2.49	2.45	2.48	2.48	2.47	2.49		
<u>Engineering Mathematics-III</u>	2.92	2.86	2.87									
<u>Materials Science and Metallurgy</u>	2.85	2.85	2.85	2.83	2.83	2.78	2.83	2.87	2.81	2.83		
<u>Fluid Mechanics</u>	2.92	2.86	2.93	2.98		2.98	2.98	2.98		2.98		2.91
<u>Machine Drawing and CAD</u>	<u>2.97</u>	<u>2.97</u>	<u>2.96</u>	<u>1.86</u>		<u>1.56</u>	<u>2.12</u>	<u>2.97</u>		<u>2.97</u>		<u>2.96</u>
<u>Thermodynamics</u>	2.49	2.34	2.40				1.89			2.40		2.40
<u>Basic Human Rights</u>	<u>2.93</u>	<u>2.92</u>	<u>2.93</u>	<u>2.16</u>	<u>2.93</u>	<u>1.56</u>	<u>1.89</u>	<u>2.93</u>	<u>2.93</u>	<u>2.93</u>	<u>2.92</u>	<u>2.93</u>
<u>Materials Science and Metallurgy Lab</u>	2.63	2.46	2.62		2.50	2.47	2.71		2.46	2.48		2.47
<u>Fluid Mechanics Lab</u>	2.59	1.48	2.33		2.00	2.48	1.30		1.25	1.80		1.70
<u>Machine Drawing and CAD Lab</u>	2.75	2.00	1.75		2.00				1.00	1.00		1.00
<u>Field Training /Internship/Industrial Training I</u>	<u>2.86</u>	<u>2.91</u>	<u>2.89</u>	<u>2.16</u>	<u>2.87</u>		<u>2.85</u>	<u>2.89</u>	<u>2.85</u>	<u>2.88</u>	<u>2.88</u>	<u>2.90</u>
<u>Manufacturing Processes - I</u>	2.74	2.83	2.73			2.73	2.73			2.73		2.73
<u>Theory of Machines-I</u>	2.95	2.95	2.94	2.95	2.95	2.95	2.95	2.96		2.95		2.95
<u>Strength of Materials</u>	<u>2.49</u>	<u>2.94</u>	<u>2.71</u>		<u>2.47</u>	<u>2.48</u>		<u>2.71</u>	<u>2.64</u>	<u>2.71</u>	<u>0.00</u>	<u>0.00</u>
<u>Numerical Methods in Mechanical Engineering</u>	<u>2.80</u>	<u>2.80</u>			<u>2.80</u>							
<u>Product Design Engineering – I</u>	2.82	2.85	2.84	2.81	2.95	2.93	2.94	2.82	2.82	2.82	2.94	2.82
<u>Interpersonal Communication Skill& Self Development</u>		<u>2.91</u>	<u>2.89</u>	<u>2.16</u>	<u>2.87</u>		<u>2.85</u>	<u>1.48</u>	<u>2.85</u>	<u>2.88</u>	<u>2.88</u>	<u>2.90</u>
<u>Manufacturing Processes Lab – I</u>	2.41	2.40	2.42			2.42	2.42			2.42		2.42
<u>Theory of Machines Lab- I</u>	2.99	2.99	2.99	2.99	2.99	2.98	2.99	2.99	2.99	2.99	2.99	2.99

<u>Strength of Materials Lab</u>	<u>2.47</u>	<u>2.48</u>		<u>1.88</u>	<u>2.64</u>		<u>0.00</u>					
<u>Numerical Methods Lab</u>		<u>2.71</u>		<u>2.12</u>	<u>2.71</u>							
<u>Heat Transfer</u>	2.96	2.95	2.96	2.97		2.98	2.98	2.98		2.97		2.96
<u>Applied Thermodynamics – I</u>	2.83	2.86	2.87	2.85	2.86	2.82	2.81				2.91	2.81
<u>Machine Design – I</u>	2.5	2.5	1.7	2.0		1.5	1.0	1.0		1.0		1.0
<u>Theory of Machines- II</u>	2.83	2.85	2.86	2.81	2.81	2.83	2.81	2.78		2.71		2.77
<u>Metrology and Quality Control</u>	2.87	2.87	2.86	2.86	2.87						2.87	2.87
<u>Product Design Engineering - II</u>	2.95	2.95	2.95	2.95	2.96	2.93	2.95	2.95	2.95	2.95	2.95	2.95
<u>Automobile Engineering</u>	2.96		2.98	2.95	2.98		2.97	2.95	2.97	2.95		2.96
<u>Heat Transfer Lab</u>	2.71	2.58	2.73		2.46	2.92	2.77		2.44	2.46		2.67
<u>Applied Thermodynamics Lab</u>	2.51	2.46	2.48	2.48	2.39	2.38	2.38		2.51	2.51	2.43	2.51
<u>Machine Design Practice- I</u>	2.50	2.50	1.67	2.00		1.50	1.00	1.00		1.00		1.00
Theory of Machines Lab- II	2.62	2.62	2.62	2.62	2.62	2.60	2.61	2.62	2.62	2.62	2.62	2.62
Field Training /Internship/Industrial Training II	2.86	2.91	2.89	2.01	2.87		2.22	1.25	2.85	2.88	2.88	2.90
Manufacturing Processes- II	2.72	2.72	2.72	2.65	2.74		2.82	2.82				2.72
<u>Machine Design-II</u>	2.0	1.5	2.0	2.0		1.0		1.0		1.0		1.0
<u>Applied Thermodynamics- II</u>	2.92	2.93	2.94			2.97	2.96		2.96			2.94
IC Engines	2.92	2.91	2.74	2.90	2.89	2.88	2.88	2.74			2.86	2.92
Renewable Energy Sources	1.8	2.0	1.5	1.0	2.0	3.0	3.0	3.0	2.0	1.7		1.8
Solar Energy	2.95	2.95	2.95	1.80	2.94		2.22					
Metrology and Quality Control Lab	2.63	2.71	2.39		2.69		2.63					2.63
Machine Design Practice-II	2.00	1.50	2.00	2.00		1.00		1.00		1.00		1.00
IC Engine Lab	2.89	2.91	2.90	2.90	2.89	2.90	2.90	null	2.89	2.90	2.88	2.90
Refrigeration and Air Conditioning Lab	2.72	2.59	2.61		2.71			2.20	2.43	2.90		2.62
Technical Project for Community Services	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00

Mechatronics	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00	
CAD/CAM	2.50	2.00	2.00	3.00	1.33							1.00	
Manufacturing Processes - III	3.0	3.0	1.8	2.0	3.0		2.3		2.0	2.0	2.0	1.3	
Industrial Engineering and Management	3.0	3.0	1.8	2.0	3.0		2.3		2.0	2.0	2.0	1.3	
Wind Energy	3.0	3.0	1.8	2.0	3.0		2.3		2.0	2.0	2.0	1.3	
Manufacturing Processes Lab - II	2.75	3.00	2.00			1.00	1.00		1.00	1.00		1.00	
Mechatronics Lab	2.75	2.75	1.50	3.00	2.33	1.00	1.00		1.00	1.00			
CAD/CAM Lab	1.00	2.00	1.75	1.67	3.00		3.00		3.00	2.50			
Seminar	3.00	2.75	1.50	3.00	2.00	1.00	1.00	2.00	1.00	1.67	2.00	2.00	
Field Training /Internship/Industrial Training III	3.00	2.75	3.00	3.00	3.00	2.75	2.75	2.50	2.75	2.75	2.50	2.25	
Project Stage-I	2.00	3.00		3.00	3.00	1.00	1.00	2.00	3.00	3.00	3.00	3.00	
Fundamental of automotive systems	2.3	2.3	2.5	2.0	2.3		2.0		2.0	3.0	3.0		
Non-Conventional Energy Resources	3.0	3.0	1.8	2.0	3.0		2.3		2.0	2.0	2.0	1.3	
Project Stage-II	2.00	3.00		2.33	3.00	1.00	1.00	2.00	3.00	3.00	3.00	3.00	
Direct Attainment	2.57	2.57	2.36	2.48	2.56	2.41	2.27	2.44	2.26	2.24	2.40	2.29	

PSO Attainment:

Class	Code	Course	PSO1	PSO2
FY- SEMI	BTBS101	Engineering Mathematics – I	1.87	1.78
	BTBS102	Engineering Physics	1.69	1.75
	BTES 103	Engineering Graphics	1.36	
	BTHM104	Communication Skills	2.72	2.86
	BTES105	Energy and Environment Engineering	2.69	2.58
	BTES106	Basic Civil and Mechanical Engineering	2.29	2.56
	BTBS107L	Engineering Physics Lab	2.45	2.95
	BTES108L	Engineering Graphics Lab	2.96	
	BTHM109L	Communication Skills Lab	2.41	2.92
FY- SEMII	BTBS201	Engineering Mathematics- II	1.87	1.87
	BTBS202	Engineering Chemistry	3.00	
	BTES203	Engineering Mechanics	2.91	2.98

	BTBS 204	Computer Programming in C		
	BTBS205	Workshop Practices	2.94	2.93
	BTBS206	Computer Programming Lab		
	BTES207L	Engineering Mechanics Lab	2.46	2.50
	BTBS208L	Engineering Chemistry Lab	2.41	
	BTES 209L	Basic Electrical and Electronics Engineering		
	BTES210L	Mini Project	2.48	2.47
SY- SEMIII	BTBSC301	Engineering Mathematics-III	2.85	
	BTMEC302	Materials Science and Metallurgy	2.88	2.95
	BTMEC303	Fluid Mechanics	2.98	2.96
	BTMEC304	Machine Drawing and CAD	2.98	2.96
	BTMEC305	Thermodynamics	2.97	2.95
	BTHM3401	Basic Human Rights	2.93	2.92
	BTMEL307	Materials Science and Metallurgy Lab	2.64	2.71
	BTMEL308	Fluid Mechanics Lab	2.74	2.74
	BTMEL309	Machine Drawing and CAD Lab	2.74	2.74
	BTMEF310	Field Training /Internship/Industrial Training I	2.85	2.90

SY- SEM IV	BTMEC401	Manufacturing Processes - I	2.78	2.78
	BTMEC402	Theory of Machines- I	2.78	2.76
	BTMEC403	Strength of Materials	2.78	2.76
	BTMEC404	Numerical Methods in Mechanical Engineering	2.76	2.86
	BTID405	Product Design Engineering – I	2.93	2.92
	BTHM3402	Interpersonal Communication Skill& Self Development	2.85	2.90
	BTMEL407	Manufacturing Processes Lab – I	2.78	2.76
	BTMEL408	Theory of Machines Lab- I	2.78	2.76
	BTMEL409	Strength of Materials Lab	2.78	2.76
	BTMEL410	Numerical Methods Lab	2.76	2.94
TY- SEM V	BTMEC501	<u>Heat Transfer</u>	2.96	2.95
	BTMEC502	<u>Applied Thermodynamics – I</u>	1.50	1.50
	BTMEC503	<u>Machine Design – I</u>	2.87	2.90
	BTMEC504	<u>Theory of Machines- II</u>	2.90	2.88
	BTMEC505	<u>Metrology and Quality Control</u>	2.88	2.88
	BTID506	<u>Product Design Engineering - II</u>	2.99	2.98
	BTMEC506A	<u>Automobile Engineering</u>	2.90	2.88
	BTMEL507	<u>Heat Transfer Lab</u>	2.99	2.98
	BTMEL508	<u>Applied Thermodynamics Lab</u>	2.93	2.93
	BTMEL509	<u>Machine Design Practice- I</u>	2.99	2.98
	BTMEL510	Theory of Machines Lab- II	2.99	2.98
	BTMEF511	Field Training /Internship/Industrial Training II	2.85	2.90
TY- SEM VI	BTMEC601	<u>Manufacturing Processes- II</u>	2.71	2.71
	BTMEC602	<u>Machine Design-II</u>	2.87	2.90

	BTMEC603	<u>Applied Thermodynamics- II</u>	2.95	2.92
	BTMEC604B	<u>IC Engines</u>	2.95	2.92
	BTMEC605C	<u>Renewable Energy Sources</u>	2.81	2.81
	BTMEC606B	<u>Solar Energy</u>	2.95	2.95
	BTMEL607	<u>Metrology and Quality Control Lab</u>	2.40	2.40
	BTMEL608	<u>Machine Design Practice-II</u>	1.00	1.50
	BTMEL609	<u>IC Engine Lab</u>	1.50	1.00
	BTMEL610	Refrigeration and Air Conditioning Lab	1.50	1.00
	BTMEM611	Technical Project for Community Services	2.85	2.90
BTech-SEM VII	BTMEC701	<u>Mechatronics</u>	2.80	2.80
	BTMEC702	<u>CAD/CAM</u>	2.80	2.80
	BTMEC703	<u>Manufacturing Processes - III</u>	2.84	2.84
	BTMEC704B	<u>Industrial Engineering and Management</u>	2.97	2.89
	BTMEC705C	<u>Wind Energy</u>	2.97	2.89
	BTMEL706	<u>Manufacturing Processes Lab - II</u>	2.68	2.68
	BTMEL707	<u>Mechatronics Lab</u>	2.68	2.68
	BTMEL708	<u>CAD/CAM Lab</u>	2.68	2.68
	BTMES709	<u>Seminar</u>	2.48	2.69
	BTMEF710	<u>Field Training /Internship/Industrial Training III</u>	2.85	2.90
	BTMEP711	<u>Project Stage-I</u>	2.85	2.90
BTech-SEM VIII	BTMEC801A	<u>Fundamental of automotive systems</u>	2.75	2.76
	BTMEC802F	<u>Non-Conventional Energy Resources</u>	2.86	2.80
	BTMEP803	<u>Project Stage-II</u>	2.85	2.90
Average PSO			2.51	2.21

PO and PSO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
Attainment	2.60	2.50	2.34	2.43	2.48	2.34	2.25	2.37	2.23	2.25	2.38	2.26	2.44	2.24
Direct Attainment	2.57	2.57	2.36	2.48	2.57	2.41	2.27	2.44	2.26	2.24	2.40	2.29	2.51	2.21
Indirect Attainment	2.72	2.22	2.26	2.26	2.09	2.08	2.14	2.07	2.11	2.27	2.33	2.15	2.16	2.35

A.Y. 2021-22

3.1 Establish the correlation between the courses and the Program

Outcomes (POs) and Program Specific Outcomes (PSOs) (20)

Program Outcomes as mentioned in Annexure-I and Program Specific Outcomes as defined by the Program.

A. PROGRAM OUTCOMES (POs)

The students of Mechanical Engineering will be able to:	
PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

B. PROGRAM SPECIFIC OUTCOMES (PSO)

Mechanical Engineering graduates will be able to	
PSO1	The students will be able to acquire competencies in the usage of design, thermal and manufacturing principles to develop a product and process.
PSO2	The students will be able to impart technological inputs and acquire managerial skills to become technocrats and entrepreneurs.

3.1.1 Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (05)

Sem	Course	CO	Course Outcome
SEM-3	Thermodynamics (BTMC303)	BTMEC303.1	Define the terms like system, boundary, properties, equilibrium, work, heat, ideal gas, entropy etc. used in thermodynamics.
		BTMEC303.2	Explain different laws of thermodynamics and apply these to simple thermal systems to study energy balance.
		BTMEC303.3	Apply Carnot theorem to heat engine and heat pump, Clausius theorem, Clausius inequality
		BTMEC303.4	Analyze the universal gas constant, ideal processes with equation for ideal gas, p-v, T-s, and h-s diagrams properties of steam. Solve problems related to temperature measurement, study flow energy equation, first law of thermodynamics etc.
SEM-4	Theory of Machines I (BTMEC 402)	BTMC402.1	Discuss the terminology and various concepts of mechanisms, friction and lubrication.
		BTMC402.2	Determine the velocity and acceleration of various types of mechanisms.
		BTMC402.3	Classify various follower motions by drawing the cam profiles.
		BTMC402.4	Evaluate the performance of clutch, brakes, dynamometers and balancing machines.
SEM-5	Theory of Machines II (BTMEC 504)	BTMOE504.1	Discuss the terminology and working principles for various types of transmission drives.
		BTMOE504.2	Calculate velocity ratio and power transmitted by transmission drives.
		BTMOE504.3	Analyze the performance of governor, flywheel and gyroscope

		BTMOE504.4	Evaluate the effect of various types of vibration on mechanical systems.
SEM-6	Applied Thermodynamics- II (BTMEC603)	BTMOE502.1	Define the nomenclature related to IC engines, fundamental difference between SI and CI engines.
		BTMOE502.2	Explain Various Engine Systems, Engine Testing and Performance of SI and CI Engines
		BTMOE502.3	Apply the methods of cooling, Refrigeration systems, Thermodynamics of Refrigeration, Air refrigeration system.
		BTMOE502.4	Analyze the types of Power Plant like Thermal Power Plant, Diesel Power Plant, Gas Turbine power plant, Hydro-electric Power Plant, Nuclear Power Plant
SEM-7	Industrial Engineering and management (BTMEC704B)	BTMEC704B.1	Define the terms related management like , functions of management, evolution of management theory, contributions of Taylor, Fayol and others
		BTMEC703.2	Explain Leading: Managing and human factor, motivation, leadership, morale, team building, communication. Controlling: The system and process of controlling control techniques, overall and preventive control
		BTMEC703.3	Apply Operations management in corporate profitability and competitiveness, types and characteristics of manufacturing systems, types and characteristics of services systems.
		BTMEC703.4	Analyze Concurrent Engineering: Producibility, manufacturability, productivity improvement, Total Quality Management: Just in time (JIT), total quality control, quality circles, six sigma
SEM-8	Non-Conventional Energy Resources (BTMEC802F)	BTMEC802F.1	Demonstrate the generation of electricity from various non-conventional sources of energy, have a working knowledge on types of fuel cells.
		BTMEC802F.2	Estimate the solar energy, Utilization of it, Principles involved in solar energy collection and conversion of it to electricity generation.

		BTMEC802F.3	Explore the concepts involved in wind energy conversion system by studying its components, types and performance
		BTMEC802F.4	Illustrate ocean energy and explain the operational methods of their utilization.

3.1.3 CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from the 3rd to the 8th semester) (05)

All the courses in curriculum are studied in detail and correlation with POs and PSOs are declared. Six matrices are mentioned here from the 3rd to the 8th semester. Record for all courses is available with the program.

CO-PO matrices

Course Name: BTMC303												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMES303.1	3											
BTMES303.2	3	2	2									2
BTMES303.3	2	3	3				2			3		3
BTMES303.4			3							2		2
Average	2.67	2.50	2.67				2.00			2.50		2.33
Course Name: BTMEC 402												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMC402.1	2			1		1				1		1
BTMC402.2	3	2	2	1		2						
BTMC402.3	3	3	2	3	2	2	1					1
BTMC402.4	3	3	2	3	2	3	1	1				
Average	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00		1.00	0.00	1.00

	Course Name: BTMEC504											
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMOE504C.1	2			1		1				1		1
BTMOE504C.2	3	2	2	1		2						
BTMOE504C.3	3	3	2	3	2	2	1					1
BTMOE504C.4	3	3	2	3	2	3	1	1				
Average	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00

	Course Name: BTMEC603											
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMEC603.1	3											
BTMEC603.2	3	2	2									2
BTMEC603.3	2	3	3			2						3
BTMEC603.4			3			2	2		1			2
Average	2.67	2.50	2.67			2.00	2.00		1.00			2.33

	Course Name: BTMEC704B											
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	P O4	PO5	PO 6	PO7	P O8	PO9	PO10	PO11	PO12
BTMEC704B .1	3											
BTMEC704B .2	3	2	2									2
BTMEC704B .3	2	3	3				2			3		3
BTMEC704B .4			3							2		2
Average	2.67	2.50	2.67				2.00			2.50		2.33

		Course Name: BTMEC802F											
Course Outcome	Program Outcome (PO)												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	
BTMEC802F.1	1			1		3	2			1		1	
BTMEC802F.2	2	2	1	1		2	3						
BTMEC802F.3	2	1	2	2	2	2	3					1	
BTMEC802F.4	3	2	2	2	2	3	3	1					
Average	2.00	1.67	1.67	1.50	2.00	2.50	2.75	1.00		1.00		1.00	

CO-PSO matrices

Course Name: BTMEC305		
Course	PSO1	PSO2
BTMES303.1	1	
BTMES303.2	2	2
BTMES303.3		2
BTMES303.4	2	
Average	1.33	2.00

Course Name: BTMEC402		
Course	PSO1	PSO2
BTMC402.1	1	
BTMC402.2		2
BTMC402.3		2
BTMC402.4	2	
Average	1.50	2.00

Course Name: BTMEC504		
Course	PSO1	PSO2
BTMEC504 .1	1	1
BTMEC504 .2		2
BTMEC504 .3		2
BTMEC504 .4	2	
Average	1.50	1.66

Course Name: BTMEC603		
Course	PSO1	PSO2
BTMEC603.1	2	
BTMEC603.2		2
BTMEC603.3		
BTMEC603.4		
Average	2.00	2.00

Course Name: BTMEC704B		
Course	PSO1	PSO2
BTMEC704B.1	1	
BTMEC704B.2		2
BTMEC704B.3	2	2
BTMEC704B.4	2	
Average	1.66	2.00

Course Name: BTMEC801F		
Course	PSO1	PSO2
BTMEC801F .1	1	
BTMEC801F .2		2
BTMEC801F .3		2
BTMEC801F .4	2	
Average	1.50	2.00

3.1.3 Program level Course-PO matrix of all courses INCLUDING first year courses (10)

CO-PO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with POs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation is indicated by '-'. This correlation is derived from CO-PO mapping of the individual course. Average of all COs is taken and mapped at level 1, 2 and 3.

Class	Course Name & Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
FY-SEMI	Engineering Mathematics – I	2.75	1.75	2.00	3.00		2.00					2.00	1.50
	Engineering Physics	2.25	1.50	2.00	1.00		1.00	1.00					1.50
	Engineering Graphics	1.67	3.00	2.50	3.00	1.67					2.50		2.50
	Communication Skills	1.00				1.67	1.67		2.00		3.00		2.75
	Energy and Environment Engineering	2.33	2.00	2.50	3.00		1.50	3.00	2.00		2.00	1.00	
	Basic Civil and Mechanical Engineering	2.25		1.50	1.00		1.50	1.00			1.67	1.00	
	Engineering Physics Lab	2.00	2.00	2.00			3.00	3.00		2.00			2.00
	Engineering Graphics Lab	1.67	3.00	2.50	3.00	1.67				2.50	2.50		2.50
	Communication Skills Lab	1.00				1.67	1.67		2.00		3.00		2.75
	FY-SEMII	Engineering Mathematics- II	2.75	2.00	1.00	1.50		1.00					3.00
Engineering Chemistry		1.75	1.33				1.50	1.00		3.00			
Engineering Mechanics		2.25	2.50	2.00			3.00			2.00			2.00
Computer Programming in C		3.00	2.25	2.00						3.00	3.00		1.50
Workshop Practices		3.00				2.00				3.00	1.00		
Computer Programming Lab		1.75	2.00	2.25		3.00				2.00	2.50		
Engineering Mechanics Lab		2.67	3.00	2.00			3.00	1.00		2.00	2.00		
Engineering Chemistry Lab		1.75	1.33				1.50	1.00		3.00			
Basic Electrical and Electronics Engineering		3.00					2.00	1.00					
Mini Project		2.67	3.00			1.00	3.00	2.00	3.00	2.00	2.00		
SY-SEMIII	Engineering Mathematics-III	1.00	1.50	2.00		1.25				2.00		1.00	1.75
	Materials Science and Metallurgy	2.00	1.75	1.50	2.00	3.00	1.50	1.50	1.00	1.00	1.50	0.00	0.00

	Fluid Mechanics	1.50	1.63	1.75									0.88
	Machine Drawing and CAD	2.00	1.75	1.75									0.88
	Thermodynamics	1.63	1.66	1.75		3.00							0.88
	Basic Human Rights	3.00	2.75	2.50	2.75	2.50	3.00	3.00	2.00	3.00	2.00	1.00	3.00
	Materials Science and Metallurgy Lab	2.03	1.95	1.94		3.00				3.00			1.41
	Fluid Mechanics Lab	2.16	2.03	1.98		3.00				3.00			1.54
	Machine Drawing and CAD Lab	1.70	1.65	1.75		3.00							0.88
	Field Training /Internship/Industrial Training I	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00
SY-SEM IV	Manufacturing Processes - I	1.75	1.50	1.00			1.00	1.00			1.00		1.00
	Theory of Machines-I	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Strength of Materials	2.00	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Numerical Methods in Mechanical Engineering	3.00	3.00		1.00	3.00							
	Product Design Engineering – I	3.00	2.75	2.50	2.75	2.50	3.00	3.00	2.00	3.00	2.00	1.00	3.00
	Interpersonal Communication Skill& Self Development	2.00	2.00	1.67	2.00	1.67	1.67	2.00	1.50	3.00	2.00	2.00	2.00
	Manufacturing Processes Lab – I	1.75	1.50	1.00		3.00	1.00	1.00			1.00		1.00
	Theory of Machines Lab- I	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
	Strength of Materials Lab	3.00	2.66	2.50		3.00	3.00	2.00			2.00		3.00
	Numerical Methods Lab	3.00	3.00		1.00	3.00							
TY-SEM V	Heat Transfer	2.25	2.50	2.67	2.00		1.00	1.00	1.00		1.00		2.00
	Applied Thermodynamics – I	2.50	2.50	1.67	2.00	1.00	1.33	1.00	0.00	0.00	0.00	1.00	1.00
	Machine Design – I	1.25	1.25	2.00	1.00	1.00	1.00		0.00	0.00	0.00		1.00
	Theory of Machines- II	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Metrology and Quality Control	3.00	3.00	2.00	2.00	3.00						1.00	2.00
	Product Design Engineering - II	2.99	2.99	2.99	2.99	2.99	2.98	2.99	2.99	2.99	2.99	2.99	2.99

	Automobile Engineering	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Heat Transfer Lab	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
	Applied Thermodynamics Lab	3.00	2.25	2.50	2.50	3.00	2.00	2.00	0.00	3.00	2.00	1.67	3.00
	Machine Design Practice- I	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
	Theory of Machines Lab- II	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
TY-SEM VI	Field training/Internship	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00
	Manufacturing Processes- II	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Machine Design-II	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Applied Thermodynamics- II	1.50	1.25		1.00		1.00		0.00	0.00	0.00		1.00
	IC Engines	2.67	2.50	2.67		3.00		2.00					2.33
	Renewable Energy Sources	1.50	2.50	2.67		3.00		2.00					2.33
	Solar Energy	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Metrology and Quality Control Lab	1.50	1.67	2.00	2.00	1.00	1.00	1.50					
	Machine Design Practice-II	3.00	2.00	2.00		3.00		1.00					2.00
	IC Engine Lab	2.00	3.00	3.00	2.00	2.00		2.00			2.00		2.00
	Refrigeration and Air Conditioning Lab	3.00	3.00	2.00	2.00	2.00		2.00			2.00		2.00
	Technical Project for Community Services	2.00	3.00	2.00	2.00	2.00		2.00			2.00		2.00
BTech-SEM VII	Mechatronics	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	CAD/CAM	2.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Manufacturing Processes - III	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Industrial Engineering and Management	2.67	2.50	2.67		3.00		2.00			2.50		2.33
	Wind Energy	3.00	3.00	2.67		3.00		2.00			2.50		2.33
	Manufacturing Processes Lab - II	2.75	3.00	2.00			1.00	1.00		1.00	1.00		1.00
	Mechatronics Lab	1.75	1.50	1.00		3.00	1.00	1.00			1.00		1.00
	CAD/CAM Lab	2.75	1.50	1.00		3.00	1.00	1.00			1.00		1.00
	Seminar	1.25	1.50	1.67	1.33	1.67			1.50	1.25	2.00		
		Field Training /Internship/Industrial Training III	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00
	Project Stage-I	2.00	2.00	1.67	2.00	1.67	1.67	2.00	1.50	3.00	2.00	2.00	2.00

BTech-SEM VIII	Fundamental of automotive systems	2.33	2.33	2.50	2.00	2.33	2.00	2.00		2.00	3.00	3.00	
	Non-Conventional Energy Resources	2.00	1.67	1.67	1.50	2.00		2.75	1.00				1.00
	Project Stage-II	2.00	2.00	1.67	2.00	1.67	1.67	2.00	1.50	3.00	2.00	2.00	2.00
	ACTUAL AVERAGE PO	2.35	2.27	2.09	1.99	2.17	1.92	1.71	1.71	2.27	1.87	1.77	1.96

Program level Course- PSO matrix:

CO-PSO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with PSOs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation are indicated by-. This correlation is derived from CO-PSO mapping of the individual course. Average of all Cos is taken and mapped at level 1, 2 and 3

Academic Year: 2020-21		Programme Specific Outcome (PSO)	
Class	Course	PSO1	PSO2
FY- SEMI	Engineering Mathematics – I	1.00	2.00
	Engineering Physics	1.00	2.00
	Engineering Graphics	1.00	
	Communication Skills	1.00	3.00
	Energy and Environment Engineering	1.00	2.00
	Basic Civil and Mechanical Engineering	1.00	2.00
	Engineering Physics Lab	1.00	2.00
	Engineering Graphics Lab	1.00	
	Communication Skills Lab	3.00	2.00
FY- SEMII	Engineering Mathematics- II	2.00	1.00

	Engineering Chemistry	3.00	
	Engineering Mechanics	3.00	2.00
	Computer Programming in C		
	Workshop Practices	2.00	3.00
	Computer Programming Lab		
	Engineering Mechanics Lab	3.00	1.00
	Engineering Chemistry Lab	2.00	
	Basic Electrical and Electronics Engineering		
	Mini Project	3.00	1.00
SY- SEMIII	Engineering Mathematics-III	1.99	1.98
	Materials Science and Metallurgy	2.88	2.95
	Fluid Mechanics	2.98	2.96
	Machine Drawing and CAD	2.98	2.96
	Thermodynamics	1.33	2.00
	Basic Human Rights	2.93	2.92
	Materials Science and Metallurgy Lab	2.64	2.71
	Fluid Mechanics Lab	2.74	2.74
	Machine Drawing and CAD Lab	2.74	2.74
	Field Training /Internship/Industrial Training I	2.85	2.90
SY- SEM IV	Manufacturing Processes - I	2.78	2.78
	Theory of Machines-I	2.78	2.76
	Strength of Materials	2.78	2.76
	Numerical Methods in Mechanical Engineering	2.76	2.86
	Product Design Engineering – I	2.93	2.92
	Interpersonal Communication Skill& Self Development	2.85	2.90
	Manufacturing Processes Lab – I	2.78	2.76
	Theory of Machines Lab- I	2.78	2.76

	Strength of Materials Lab	2.78	2.76
	Numerical Methods Lab	2.76	2.94
TY- SEM V	Heat Transfer	1.50	1.50
	Applied Thermodynamics – I	1.50	1.50
	Machine Design – I	1.50	1.50
	Theory of Machines- II	1.50	1.66
	Metrology and Quality Control	3.00	1.00
	Product Design Engineering - II	2.99	2.98
	Automobile Engineering	1.50	2.00
	Heat Transfer Lab	1.00	1.50
	Applied Thermodynamics Lab	1.75	2.00
	Machine Design Practice- I	1.00	1.50
	Theory of Machines Lab- II	1.00	1.50
	Field training/Internship	2.67	2.00
	TY- SEM VI		
Manufacturing Processes- II		3.00	1.00
Machine Design-II		1.50	1.50
Applied Thermodynamics- II		2.00	2.00
IC Engines		2.00	2.00
Renewable Energy Sources		3.00	1.00
Solar Energy		1.00	1.00
Metrology and Quality Control Lab		3.00	2.00
Machine Design Practice-II		2.00	2.00
IC Engine Lab		2.00	2.00
Refrigeration and Air Conditioning Lab		2.00	2.00

	Technical Project for Community Services	2.67	2.00
BTech- SEM VII	Mechatronics	3.00	1.00
	CAD/CAM	3.00	1.00
	Manufacturing Processes - III	3.00	1.00
	Industrial Engineering and Management	1.66	2.00
	Wind Energy	1.50	2.00
	Manufacturing Processes Lab - II	3.00	1.00
	Mechatronics Lab	3.00	1.00
	CAD/CAM Lab	3.00	1.00
	Seminar	1.25	1.00
	Field Training /Internship/Industrial Training III	2.67	2.00
	Project Stage-I	2.00	2.00
BTech- SEM VIII	Fundamental of automotive systems	1.50	2.00
	Non-conventional Energy Resources	1.50	2.00
	Project Stage-II	2.00	2.00
Average PSO		2.00	1.65

3.2 Attainment of Course Outcomes (50)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

(Examples of data collection processes may include, but are not limited to tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams etc.)

The key aspects in Outcome Based Education (OBE) are the assessment of course outcomes. At the initial stage of OBE implementation, the Course Outcomes (COs) for each course are defined based on the Program Outcome (POs) and other requirements. At the end of each course, the COs needs to be assessed and evaluated, to check whether it has been attained or not. Assessment is one more processes, carried out by the department, that identify, collect, and prepare data to evaluate the achievement of program educational objectives and program outcomes. Attainment is the action or fact of achieving a standard result towards accomplishment of desired goals. Primarily attainment is the standard of academic attainment as observed by test or examination result. Attainment of the COs can be measured by using direct and indirect tools. Direct attainment basically displays the student's knowledge and skills from their academic performance. It can be determined from the performance of the students in all the relevant assessment tools – like internal assessments, assignments, quiz and final university examination etc. These methods provide a sampling of what students know and /or actions they can perform, offering substantial.

This program consists of various types of courses for fulfillment of POs and PSOs. The process of data collection for attainment of COs is properly identified depending on the type of course. Major types of courses are

1. Theory
2. Practical/Oral/TW
3. Tutorial
4. Seminar
5. Project
6. Audit course

The Institution strives hard to ensure that the Learning across all the courses of the curriculum is Outcome oriented. There is continuous assessment of learning outcomes attainment and this procedure has been refined over a period of time.

The following are the two broadly classified tools used for assessment of Learning Outcome Attainment

- Direct Assessment Method:

Data collection mechanism includes direct assessment process which is

Theory

5. Continuous Assessment Test 1
6. Mid Semester Examination
7. Continuous Assessment Test 2
8. End Semester Examination

Lab

4. Continuous Assessment Test 1
5. Continuous Assessment Test 2
6. End Semester Examination

Data collection process for all above type of courses is clearly defined in table 3.2.1a given below.

Table 3.2.1a: Assessment Tools

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Mid Semester Examination [MSE]		One test/semester
3	Continuous Assessment Test 2 [CA2]		One/Semester
4	End Semester Examination [ESE]		One/Semester

Lab

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Continuous Assessment Test 2[CA2]		One test/semester
3	End Semester Examination [ESE]		One/Semester

Course Outcomes for the entire course are defined and they are 4 in number. As the program is affiliated to DBATU, external assessment is done as per the evaluation scheme of university and internal assessment is done as per the policy of the program.

All courses are categorized into 2 categories

3. Courses with theory examination: CO attainment is calculated considering 60 % of university

examination and 40% of internal semester evaluation (CA1, MSE CA2)

4. Courses with practical examination: CO attainment is calculated considering 60% internal evaluation and 40% university examination evaluation

Attainment levels are assigned based on performance in Internal Semester Evaluation and University examinations

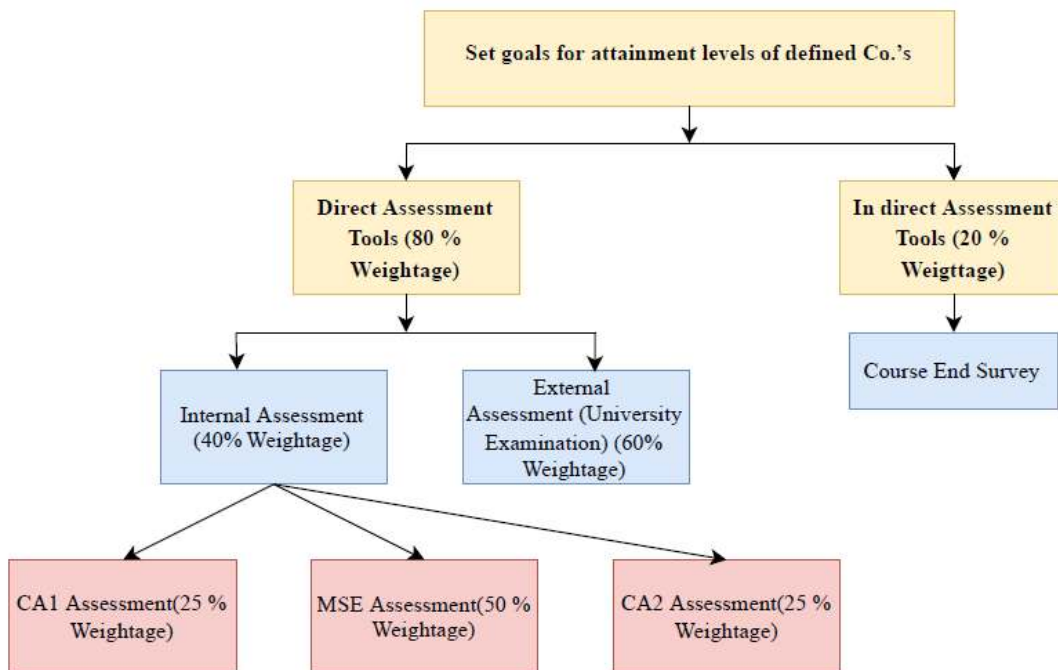
Theory

Sr. No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1[CA1]	Direct Assessment	3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
2	Mid Semester Examination [MSE]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
3	Continuous Assessment Test 2[CA2]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
4	End Semester Examination [ESE]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%

Lab

Sr. No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1 [CA1]	Direct Assessment	3 - 81% -100% 2 - 61%-80% 1 - 40%-60%
2	Continuous Assessment Test 2 [CA2]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%
3	End Semester Examination [ESE]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%

Theory



Lab

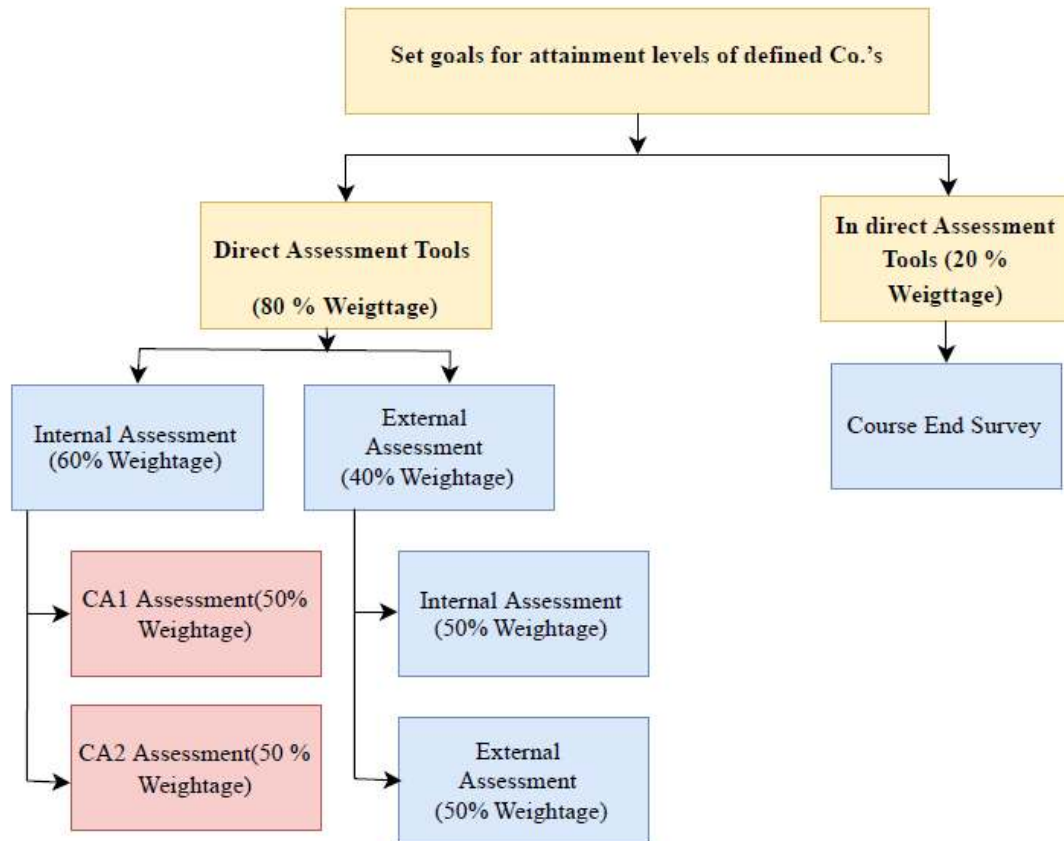


Fig2 Process of defining CO attainment practical examination

3.2.2 Record of the attainment of Course Outcomes of all courses with respect to set attainment levels (40)

Course Name: Thermodynamics Year: 2019-20 Course Name: BTMC303 Sem-III						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Final Direct Course Attainment	Target	Remark
C303.1	[CA1]/ [CA2]/ [ESE]	1.2	3	3.00	1.8	Attained
C303.2		1.15	3	2.95	1.8	Attained
C303.3		1.2	3	3.00	1.8	Attained
C303.4		1.2	3	3.00	1.8	Attained

Course Outcome Attainment: 2.99

Course Name: Theory of Machines I Year: 2019-20 Course Code: BTMEC 402 Sem-IV						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C402.1	[CA1]/ [CA2]/ [ESE]	0.9	3	2.70	1.8	Attained
C402.2		1.1	3	2.90	1.8	Attained
C402.3		1.2	3	3.00	1.8	Attained
C402.4		1.2	3	3.00	1.8	Attained

Course Outcome Attainment: 2.90

Course Name: Theory of Machines II 2020-21						
Course Code: BTMEC 504 Sem-V						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C504.1	[CA1]/ [CA2]/ [ESE]	1	3	2.80	1.95	Attained
C504.2		1.1	3	2.90	1.95	Attained
C504.3		1.15	3	2.95	1.95	Attained
C504.4		1.2	3	3.00	1.95	Attained

Course Outcome

Attainment: 2.91

Course Name: Applied Thermodynamics- II Year Year: 2020-21						
Course Code: (BTMEC603)						
Sem-VI						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C603.1	[CA1]/ [CA2]/ [ESE]	1.2	3	3.00	1.95	Attained
C603.2		1.15	3	2.95	1.95	Attained
C603.3		1.2	3	3.00	1.95	Attained
C603.4		1.2	3	3.00	1.95	Attained

Course Outcome

Attainment: 2.99

Course Name: Industrial Engineering and management						
Year: 2020-21						
Course Code: BTMEC704B Sem-VII						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C704B.1	[CA1]/ [CA2]/ [ESE]	1.2	3	3.00	2.1	Attained
C704B.2		1.0	3	2.80	2.1	Attained
C704B.3		1.2	3	3.00	2.1	Attained
C704B.4		1.2	3	3.00	2.1	Attained

Course Outcome

Attainment: 2.95

Course Name: Non-Conventional Energy Resources Year : 2021-22						
Course Code: BTMEC802F						
Sem-VIII						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
C802F.1	[CA1]/ [CA2]/ [ESE]	1.2	3	3.00	2.1	Attained
C802F.2		1.2	3	3.00	2.1	Attained
C802F.3		1.2	3	2.95	2.1	Attained
C802F.4		1.2	3	3.00	2.1	Attained

Course Outcome

Attainment: 2.99

Course No	Course Name	CO1	CO2	CO3	CO4	Average CO Attainment
SY Set attainment Target		1.8	1.8	1.8	1.8	1.8
BTBSC301	Engineering Mathematics-III	2.00	1.97	1.95	1.97	1.97
		Attained	Attained	Attained	Attained	Attained
BTMEC302	Materials Science and Metallurgy	2.93	2.94	2.97	2.84	2.92
		Attained	Attained	Attained	Attained	Attained
BTMEC303	Fluid Mechanics	2.99	2.93	2.97	2.97	2.97
		Attained	Attained	Attained	Attained	Attained
		2.93	2.94	2.97	2.84	2.92

BTMEC304	Machine Drawing and CAD	Attained	Attained	Attained	Attained	Attained
BTMEC305	Thermodynamics	2.97	2.93	2.97	2.97	2.96
		Attained	Attained	Attained	Attained	Attained
BTHM3401	Basic Human Rights	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL307	Materials Science and Metallurgy Lab	2.96	2.47	2.94	2.49	2.72
		Attained	Attained	Attained	Attained	Attained
BTMEL308	Fluid Mechanics Lab	2.98	2.50	2.98	2.50	2.74
		Attained	Attained	Attained	Attained	Attained
BTMEL309	Machine Drawing and CAD Lab	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL310	Field Training /Internship/Industrial Training I	2.55	2.54	2.53	2.54	2.54
		Attained	Attained	Attained	Attained	Attained
BTMEC401	Manufacturing Processes - I	2.83	2.87	2.72	2.69	2.78
		Attained	Attained	Attained	Attained	Attained
BTMEC402	Theory of Machines-I	2.72	2.88	2.95	2.96	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEC403	Strength of Materials	2.72	2.88	2.95	2.96	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEC404	Numerical Methods in Mechanical Engineering	2.85	2.89	2.86	2.61	2.80
		Attained	Attained	Attained	Attained	Attained
BTID405	Product Design Engineering – I	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTHM3402	Interpersonal Communication Skill& Self Development	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL407	Manufacturing Processes Lab – I	2.37	2.40	2.39	2.42	2.39
		Attained	Attained	Attained	Attained	Attained
BTMEL408	Theory of Machines Lab- I	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL409	Strength of Materials Lab	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
		1.83	2.32	1.85	2.32	2.08

BTMEL410	Numerical Methods Lab	Attained	Attained	Attained	Attained	Attained
TY Set attainment Target		1.95	1.95	1.95	1.95	1.95
BTMEC501	Heat Transfer	2.95	2.92	2.96	2.96	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEC502	Applied Thermodynamics – I	2.76	2.90	2.90	2.92	2.87
		Attained	Attained	Attained	Attained	Attained
BTMEC503	Machine Design – I	2.91	2.92	2.95	2.95	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEC504	Theory of Machines- II	2.79	2.91	2.91	2.93	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEC505	Metrology and Quality Control	2.89	2.91	2.94	2.95	2.92
		Attained	Attained	Attained	Attained	Attained
BTID506	Product Design Engineering - II	2.81	2.91	2.91	2.93	2.89
		Attained	Attained	Attained	Attained	Attained
BTMEC506A	Automobile Engineering	2.98	3.00	2.98	2.99	2.99
		Attained	Attained	Attained	Attained	Attained
BTMEL507	Heat Transfer Lab	2.25	2.33	2.33	2.35	2.31
		Attained	Attained	Attained	Attained	Attained
BTMEL508	Applied Thermodynamics Lab	2.92	2.94	2.94	2.92	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL509	Machine Design Practice- I	2.38	2.45	2.45	2.46	2.44
		Attained	Attained	Attained	Attained	Attained
BTMEL510	Theory of Machines Lab- II	2.81	2.84	2.84	2.83	2.83
		Attained	Attained	Attained	Attained	Attained
BTMEF511	Field Training/Internship	2.55	2.54	2.53	2.54	2.54
		Attained	Attained	Attained	Attained	Attained
BTMEC601	Manufacturing Processes- II	2.79	2.84	2.65	2.55	2.71
		Attained	Attained	Attained	Attained	Attained
BTMEC602	Machine Design- II	2.76	2.90	2.90	2.92	2.87
		Attained	Attained	Attained	Attained	Attained
BTMEC603	Applied Thermodynamics- II	2.95	2.92	2.96	2.96	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEC604B	IC Engines	2.95	2.92	2.96	2.96	2.95
		Attained	Attained	Attained	Attained	Attained

BTMEC605C	Renewable Energy Sources	2.89	2.93	2.77	2.65	2.81
		Attained	Attained	Attained	Attained	Attained
BTMEC606B	Solar Energy	2.95	2.95	2.94	2.95	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEC606B	Solar Energy	2.95	2.95	2.94	2.95	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEL607	Metrology and Quality Control Lab	2.39	2.40	2.42	2.37	2.40
		Attained	Attained	Attained	Attained	Attained
BTMEL608	Machine Design Practice-II	2.39	2.40	2.42	2.37	2.40
		Attained	Attained	Attained	Attained	Attained
BTMEL609	IC Engine Lab	2.44	2.89	2.43	2.91	2.67
		Attained	Attained	Attained	Attained	Attained
BTMEL610	Refrigeration and Air Conditioning Lab	2.44	2.89	2.43	2.91	2.67
		Attained	Attained	Attained	Attained	Attained
BTMEM611	Technical Project for Community Services	2.55	2.54	2.53	2.54	2.54
		Attained	Attained	Attained	Attained	Attained
B.Tech Set Attainment Target		2.1	2.1	2.1	2.1	2.1
BTMEC701	Mechatronics	2.93	2.93	2.73	2.61	2.80
		Attained	Attained	Attained	Attained	Attained
BTMEC702	CAD/CAM	2.88	2.84	2.76	2.88	2.84
		Attained	Attained	Attained	Attained	Attained
BTMEC703	Manufacturing Processes - III	2.88	2.84	2.76	2.88	2.84
		Attained	Attained	Attained	Attained	Attained
BTMEC704B	Industrial Engineering and Management	2.97	2.81	2.97	2.97	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEC705C	Wind Energy	2.97	2.81	2.97	2.97	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEL706	Manufacturing Processes Lab - II	2.37	2.85	2.80	2.70	2.68
		Attained	Attained	Attained	Attained	Attained
BTMEL707	Mechatronics Lab	2.51	2.51	2.51	2.51	2.51
		Attained	Attained	Attained	Attained	Attained
BTMEL708	CAD/CAM Lab	2.37	2.85	2.80	2.70	2.68
		Attained	Attained	Attained	Attained	Attained
BTMEL709	Seminar	2.24	2.54	2.53	2.85	2.54
		Attained	Attained	Attained	Attained	Attained
		2.55	2.54	2.53	2.54	2.54

BTMEL710	Field Training /Internship/Industrial Training III	Attained	Attained	Attained	Attained	Attained
BTMEM711	Project Stage-I	2.85	2.86	2.85	2.95	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEL708	CAD/CAM Lab	2.37	2.85	2.80	2.70	2.68
		Attained	Attained	Attained	Attained	Attained
BTMEC801A	Fundamental of Automotive Systems (BTMEC801A)	2.87	2.80	2.73	2.69	2.77
		Attained	Attained	Attained	Attained	Attained
BTMEC801F	Non-conventional Energy Resources (BTMEC802F)	2.87	2.80	2.81	2.85	2.83
		Attained	Attained	Attained	Attained	Attained
BTMEP803	Project Stage-II	2.85	2.86	2.85	2.95	2.88
		Attained	Attained	Attained	Attained	Attained

3.3 Attainment of Program Outcomes and Program Specific Outcomes (50)

3.3.1 Describe assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

(Describe the assessment tools and processes used to gather the data upon which the

evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

List of PO and PSO Assessment Tools:

Assessment tools are categorized into two types for Program Outcomes (POs), Program Specific Outcomes (PSOs).

3. Direct Assessment Method– Through CO attainment in relevant courses.
4. Indirect Assessment Method –Employer Feedback, Alumni feedback, Program Exit Survey.

Direct Assessment methods:

CO attainment of course shows knowledge and skills obtained by students from respective courses derived from their performance in the continuous assessment, unit tests, online examinations, in-semester examinations, end-semester examinations, reviews, assignments etc. These methods provide strong evidence of student learning.

Indirect Assessment methods:

Surveys of students are taken to know their learning. Feedback of various stake holders like employer, alumni etc. is taken to know the capabilities and necessary improvements.

For e.g.

Program exit Feedback: To evaluate the success of program in providing students with opportunities to achieve the POs and PSOs every year. After completion of program students are able evaluate easily so here given 40% weightage.

Alumni Feedback: To evaluate the success of program in providing alumni with opportunities to achieve the POs and PSOs every year and given 30% weightage.

Employer Feedback: To provide information about our graduate's skills and capability and given 30 % weightage.

$$\text{PO/PSO Indirect Attainment} = 0.4 * \text{Program exit Feedback} + 0.3 * \text{Alumni Feedback} + 0.3 * \text{Employer Feedback}$$

Process for Evaluation and Assessment of POs & PSOs

➤ The activity, questionnaires and frequency of feedback is defined by the Program for POs and PSOs attainment through in direct tools.

➤ The CO-PO and PSO mapping and CO attainment is considered as reference for PO and PSO attainment as a part of direct tool. Here sums weighted formula is used

$$\begin{aligned} \text{i.e., CO w. r. t. PO attainment} &= (\text{CO1 attainment} * \text{CO-PO and PSO mapping}) + \\ &(\text{CO1 attainment} * \text{CO-PO and PSO mapping}) + \\ &(\text{CO1 attainment} * \text{CO-PO and PSO mapping}) + \\ &(\text{CO1 attainment} * \text{CO-PO and PSO mapping}) \end{aligned}$$

Sum of mapping level

The same process is followed to calculate PSO attainment.

PO and PSO attainment are calculated by considering 80% weightage to direct assessment and 20% weightage to indirect assessment through surveys as shown in following figure

$$\text{PO/PSO Attainment} = 0.8 * \text{Direct Attainment} + 0.2 * \text{Indirect Attainment}$$

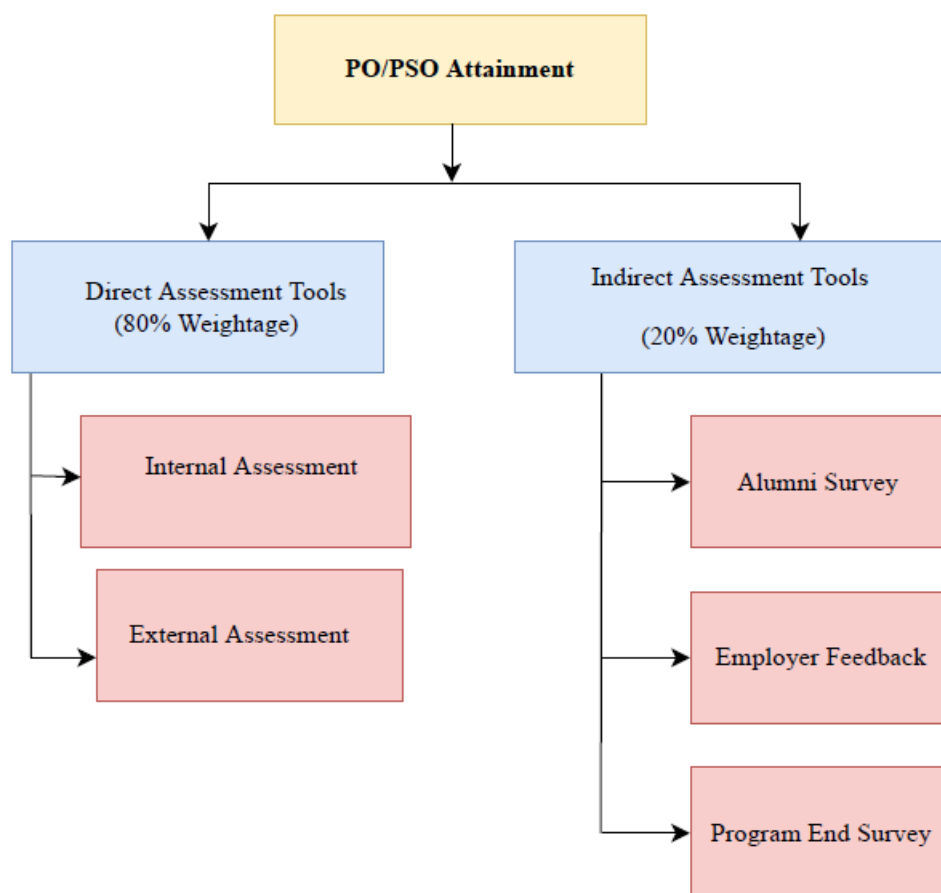


Fig 3 Process of defining PO/PSO Attainment

➤ Direct Assessment Tools:

Continuous Assessment Test1[CA1]
Mid Semester Examination [MSE]
Continuous Assessment Test 2[CA2]
End Semester Examination [ESE]
Lab Continuous Assessment Test 1
Lab Continuous Assessment Test 2

➤ Indirect Assessment Tools:

Course End Survey
Program End Survey
Employer Feedback
Examiner Feedback

3.3.2 Provide results of evaluation of each PO&PSO (40)

Program shall set Program Outcome attainment levels for all POs & PSOs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course–PO & PSO matrix as indicated).

PO Attainment:

Course Name & Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Engineering Mathematics – I	1.85	1.85	1.80	1.78		1.80					1.80	1.84
Engineering Physics	1.85	1.71	1.95	1.98		1.75	1.69					1.79
Engineering Graphics	1.40	1.40	1.42	1.42	1.42					1.43		1.38
Communication Skills	2.73				2.81	2.84		2.82		2.80		2.80
Energy and Environment Engineering	2.66	2.69	2.66	2.58		2.61		2.63		2.70		
Basic Civil and Mechanical Engineering	2.41	2.29	2.39	2.45		2.51	2.43			2.42	2.63	
Engineering Physics Lab	2.65	2.45	2.48	2.94		2.94	2.94		2.47			2.70
Engineering Graphics Lab	2.76	2.98	2.98	2.98	2.76				2.98	2.75		2.76
Communication Skills Lab	1.95				2.52	2.62		2.59		2.43		2.47
Engineering Mathematics- II	1.89	1.89	1.87	1.92		1.87					1.87	1.89
Engineering Chemistry	2.95	2.92				2.98	2.94		2.87			
Engineering Mechanics	2.97	2.97	2.94			2.91			2.95			2.95
Computer Programming in C	2.91	2.91	2.90						2.93	2.93		2.90
Workshop Practices	2.93				2.93				2.93	2.93		
Computer Programming Lab	2.97	2.97	2.97						2.95	2.94		

Engineering Mechanics Lab	2.77	2.79	2.71			2.46	2.46		2.50	2.94		
Engineering Chemistry Lab	2.34	2.29				2.09	2.43		1.92			
Basic Electrical and Electronics Engineering	2.56					2.56	2.58					
Mini Project	2.48	2.48			2.49	2.45	2.48	2.48	2.47	2.49		
<u>Engineering Mathematics-III</u>	<u>1.95</u>	<u>1.99</u>	<u>1.97</u>		<u>1.98</u>				<u>1.97</u>		<u>1.97</u>	<u>1.98</u>
<u>Materials Science and Metallurgy</u>	<u>2.93</u>	<u>2.93</u>	<u>2.93</u>	<u>1.85</u>	<u>2.92</u>	<u>1.48</u>	<u>1.52</u>	<u>1.08</u>	<u>2.91</u>	<u>2.93</u>		
<u>Fluid Mechanics</u>	<u>2.96</u>	<u>2.95</u>	<u>2.96</u>	<u>1.87</u>		<u>1.48</u>	<u>2.12</u>	<u>1.08</u>		<u>2.97</u>		<u>2.96</u>
<u>Machine Drawing and CAD</u>	<u>2.97</u>	<u>2.97</u>	<u>2.96</u>	<u>1.86</u>		<u>1.56</u>	<u>2.12</u>	<u>2.97</u>		<u>2.97</u>		<u>2.96</u>
<u>Thermodynamics</u>	<u>2.96</u>	<u>2.95</u>	<u>2.96</u>				<u>1.83</u>			<u>2.97</u>		<u>2.96</u>
<u>Basic Human Rights</u>	<u>2.93</u>	<u>2.92</u>	<u>2.93</u>	<u>2.16</u>	<u>2.93</u>	<u>1.56</u>	<u>1.89</u>	<u>2.93</u>	<u>2.93</u>	<u>2.93</u>	<u>2.92</u>	<u>2.93</u>
<u>Materials Science and Metallurgy Lab</u>	<u>2.74</u>	<u>2.47</u>	<u>2.76</u>		<u>2.49</u>	<u>2.16</u>	<u>1.89</u>		<u>2.47</u>	<u>2.48</u>		<u>2.71</u>
<u>Fluid Mechanics Lab</u>	<u>2.76</u>	<u>2.66</u>	<u>2.78</u>		<u>2.50</u>		<u>2.82</u>		<u>2.50</u>	<u>2.50</u>		<u>2.74</u>
<u>Machine Drawing and CAD Lab</u>	<u>2.95</u>	<u>2.95</u>	<u>2.78</u>		<u>2.50</u>		<u>1.48</u>		<u>2.50</u>	<u>2.50</u>		<u>2.74</u>
<u>Field Training /Internship/Industrial Training I</u>	<u>2.86</u>	<u>2.91</u>	<u>2.89</u>	<u>2.16</u>	<u>2.87</u>		<u>2.85</u>	<u>2.89</u>	<u>2.85</u>	<u>2.88</u>	<u>2.88</u>	<u>2.90</u>
<u>Manufacturing Processes - I</u>	<u>2.78</u>	<u>2.84</u>	<u>2.78</u>				<u>2.78</u>			<u>2.78</u>		<u>2.78</u>
<u>Theory of Machines-I</u>	<u>2.49</u>	<u>2.16</u>	<u>1.89</u>		<u>2.47</u>			<u>2.71</u>	<u>2.64</u>	<u>2.71</u>	<u>0.00</u>	<u>0.00</u>
<u>Strength of Materials</u>	<u>2.49</u>	<u>2.94</u>	<u>2.71</u>		<u>2.47</u>	<u>2.48</u>		<u>2.71</u>	<u>2.64</u>	<u>2.71</u>	<u>0.00</u>	<u>0.00</u>
<u>Numerical Methods in Mechanical Engineering</u>	<u>2.80</u>	<u>2.80</u>			<u>2.80</u>							
<u>Product Design Engineering – I</u>	<u>2.93</u>	<u>2.92</u>	<u>2.93</u>		<u>2.93</u>		<u>2.93</u>	<u>1.45</u>	<u>2.93</u>	<u>2.93</u>	<u>2.92</u>	<u>2.93</u>
<u>Interpersonal Communication Skill& Self Development</u>		<u>2.91</u>	<u>2.89</u>	<u>2.16</u>	<u>2.87</u>		<u>2.85</u>	<u>1.48</u>	<u>2.85</u>	<u>2.88</u>	<u>2.88</u>	<u>2.90</u>
<u>Manufacturing Processes Lab – I</u>			<u>2.78</u>					<u>2.78</u>	<u>2.78</u>	<u>2.78</u>	<u>0.00</u>	<u>0.00</u>
<u>Theory of Machines Lab- I</u>	<u>2.47</u>			<u>1.89</u>	<u>2.64</u>		<u>0.00</u>					
<u>Strength of Materials Lab</u>	<u>2.47</u>	<u>2.48</u>		<u>1.88</u>	<u>2.64</u>		<u>0.00</u>					

Numerical Methods Lab		<u>2.71</u>		<u>2.12</u>	<u>2.71</u>							
Heat Transfer	<u>2.94</u>	<u>2.94</u>	<u>2.95</u>			<u>2.18</u>	<u>2.96</u>	<u>1.42</u>		<u>2.96</u>		<u>2.95</u>
Applied Thermodynamics – I	<u>2.50</u>	<u>2.50</u>	<u>1.67</u>		<u>1.00</u>	<u>1.33</u>	<u>1.00</u>				<u>1.00</u>	<u>1.00</u>
Machine Design – I	<u>2.88</u>		<u>2.92</u>		<u>2.92</u>	<u>2.90</u>		<u>2.87</u>		<u>2.91</u>		<u>2.87</u>
Theory of Machines- II	<u>2.92</u>	<u>2.92</u>	<u>2.91</u>		<u>2.91</u>	<u>2.93</u>	<u>2.96</u>		<u>2.79</u>		<u>2.85</u>	<u>2.90</u>
Metrology and Quality Control	<u>2.88</u>	<u>2.88</u>	<u>2.88</u>	<u>2.20</u>	<u>2.87</u>						<u>2.88</u>	<u>2.88</u>
Product Design Engineering - II	<u>2.99</u>	<u>2.99</u>	<u>2.99</u>	<u>2.12</u>	<u>2.99</u>	<u>2.21</u>	<u>2.22</u>	<u>1.50</u>	<u>2.99</u>	<u>2.99</u>	<u>2.99</u>	<u>2.99</u>
Automobile Engineering	<u>2.92</u>	<u>2.92</u>	<u>2.91</u>		<u>2.91</u>	<u>2.22</u>	<u>2.22</u>		<u>2.79</u>		<u>2.85</u>	<u>2.90</u>
Heat Transfer Lab	<u>2.99</u>	<u>2.99</u>	<u>2.99</u>		<u>2.99</u>	<u>2.22</u>	<u>2.22</u>	<u>2.02</u>	<u>2.99</u>	<u>2.99</u>	<u>1.05</u>	<u>2.99</u>
Applied Thermodynamics Lab	<u>2.93</u>	<u>2.93</u>	<u>2.93</u>	<u>1.89</u>	<u>2.92</u>	<u>2.21</u>	<u>2.22</u>	<u>1.89</u>	<u>2.93</u>	<u>2.93</u>	<u>2.93</u>	<u>2.93</u>
Machine Design Practice- I	<u>2.99</u>	<u>2.99</u>	<u>2.99</u>	<u>1.88</u>	<u>2.99</u>		<u>2.22</u>	<u>1.05</u>	<u>2.99</u>	<u>2.99</u>	<u>2.99</u>	<u>2.99</u>
Theory of Machines Lab- II	2.99	2.99	2.99	2.03	2.99		2.22	1.25	2.99	2.99	2.99	2.99
Field Training /Internship/Industrial Training II	2.86	2.91	2.89	2.01	2.87		2.22	1.25	2.85	2.88	2.88	2.90
Manufacturing Processes- II	2.71	2.71	2.70	2.03	2.72		2.79	2.79				2.71
Machine Design-II	<u>2.88</u>	<u>2.88</u>		<u>2.12</u>		<u>1.50</u>		<u>1.25</u>		<u>2.91</u>		<u>2.87</u>
Applied Thermodynamics- II	<u>2.94</u>	<u>2.95</u>	<u>2.95</u>			<u>2.21</u>	<u>2.23</u>		<u>2.96</u>			<u>2.95</u>
IC Engines	2.88	2.95	2.95			2.21	2.23		2.96			2.95
Renewable Energy Sources	2.81	2.81	2.80	1.80	2.83		2.21	2.89				2.81
Solar Energy	2.95	2.95	2.95	1.80	2.94		2.22					
Metrology and Quality Control Lab	2.40	2.40	2.39		2.38		2.12					2.40
Machine Design Practice-II	2.72	2.59	2.61		2.71			2.20	2.43	2.90		2.62
IC Engine Lab	2.40	2.59	2.61		2.71			2.19	2.43	2.90		2.62
Refrigeration and Air Conditioning Lab	2.72	2.59	2.61		2.71			2.20	2.43	2.90		2.62
Technical Project for Community Services	2.86	2.91	2.89		2.87	2.21	2.21	2.20	2.85	2.88	1.25	2.90
Mechatronics	2.80	2.80	2.80	1.80	2.83		1.85	2.22				2.80
CAD/CAM	2.84	2.80	2.85	2.02	2.83		1.25	2.20				2.80

Manufacturing Processes - III	2.84	2.84	2.85	2.01	2.82		1.56	2.20				2.84
Industrial Engineering and Management	2.92	2.81	2.94		2.97	2.21	1.55		2.81	2.87		2.89
Wind Energy	2.80	2.81	2.94		2.97	2.21	1.54		2.81	2.87		2.89
Manufacturing Processes Lab - II	2.67	2.83	2.72			2.68	1.90		2.68	2.68		2.68
Mechatronics Lab	2.53	2.83	2.72			1.56	1.68		2.68	2.68		2.68
CAD/CAM Lab	2.67	2.80	2.72			2.68	1.55		2.68	2.68		2.68
Seminar	2.54	2.64	2.66		2.48			1.05	2.54	2.39		
Field Training /Internship/Industrial Training III	2.54	2.54	2.54		2.55	2.21	2.54	2.21	2.54	2.55	1.05	2.54
Project Stage-I	2.55	2.91	2.54		2.55	1.58	2.21	2.20	2.85	2.88	1.05	2.90
Fundamental of automotive systems	2.91	2.96	3.00		2.88	1.25	2.20		3.00	3.00	1.12	
Non-Conventional Energy Resources	2.83	2.82	2.82	2.21	2.83	1.23	2.21	1.13		2.87		2.84
Project Stage-II	2.86	2.91	2.89	2.19	2.87	1.58	2.13	1.12	2.85	2.88	1.13	2.90
Attainment	2.66	2.68	2.69	2.63	2.67	2.62	2.74	2.74	2.70	2.71	2.66	2.68

PSO Attainment:

Class	Code	Course	PSO1	PSO2
FY-SEMI	BTBS101	Engineering Mathematics – I	1.87	1.78
	BTBS102	Engineering Physics	1.69	1.75
	BTES 103	Engineering Graphics	1.36	
	BTHM104	Communication Skills	2.72	2.86

	BTES105	Energy and Environment Engineering	2.69	2.58
	BTES106	Basic Civil and Mechanical Engineering	2.29	2.56
	BTBS107L	Engineering Physics Lab	2.45	2.95
	BTES108L	Engineering Graphics Lab	2.96	
	BTHM109L	Communication Skills Lab	2.41	2.92
FY- SEMII	BTBS201	Engineering Mathematics- II	1.87	1.87
	BTBS202	Engineering Chemistry	3.00	
	BTES203	Engineering Mechanics	2.91	2.98
	BTBS 204	Computer Programming in C		
	BTBS205	Workshop Practices	2.94	2.93
	BTBS206	Computer Programming Lab		
	BTES207L	Engineering Mechanics Lab	2.46	2.50
	BTBS208L	Engineering Chemistry Lab	2.41	

	BTES 209L	Basic Electrical and Electronics Engineering		
	BTES210L	Mini Project	2.48	2.47
SY- SEMIII	BTBSC301	Engineering Mathematics-III	1.99	1.98
	BTMEC302	Materials Science and Metallurgy	2.88	2.95
	BTMEC303	Fluid Mechanics	2.98	2.96
	BTMEC304	Machine Drawing and CAD	2.98	2.96
	BTMEC305	Thermodynamics	2.97	2.95
	BTHM3401	Basic Human Rights	2.93	2.92
	BTMEL307	Materials Science and Metallurgy Lab	2.64	2.71
	BTMEL308	Fluid Mechanics Lab	2.74	2.74
	BTMEL309	Machine Drawing and CAD Lab	2.74	2.74
	BTMEF310	Field Training /Internship/Industrial Training I	2.85	2.90
SY- SEM IV	BTMEC401	Manufacturing Processes - I	2.78	2.78
	BTMEC402	Theory of Machines- I	2.78	2.76
	BTMEC403	Strength of Materials	2.78	2.76
	BTMEC404	Numerical Methods in Mechanical Engineering	2.76	2.86
	BTID405	Product Design Engineering – I	2.93	2.92
	BTHM3402	Interpersonal Communication Skill& Self Development	2.85	2.90
	BTMEL407	Manufacturing Processes Lab – I	2.78	2.76

	BTMEL408	Theory of Machines Lab- I	2.78	2.76
	BTMEL409	Strength of Materials Lab	2.78	2.76
	BTMEL410	Numerical Methods Lab	2.76	2.94
TY- SEM V	BTMEC501	<u>Heat Transfer</u>	2.96	2.95
	BTMEC502	<u>Applied Thermodynamics – I</u>	1.50	1.50
	BTMEC503	<u>Machine Design – I</u>	2.87	2.90
	BTMEC504	<u>Theory of Machines- II</u>	2.90	2.88
	BTMEC505	<u>Metrology and Quality Control</u>	2.88	2.88
	BTID506	<u>Product Design Engineering - II</u>	2.99	2.98
	BTMEC506A	<u>Automobile Engineering</u>	2.90	2.88
	BTMEL507	<u>Heat Transfer Lab</u>	2.99	2.98
	BTMEL508	<u>Applied Thermodynamics Lab</u>	2.93	2.93
	BTMEL509	<u>Machine Design Practice- I</u>	2.99	2.98
	BTMEL510	Theory of Machines Lab- II	2.99	2.98
	BTMEF511	Field Training /Internship/Industrial Training II	2.85	2.90
TY- SEM VI	BTMEC601	<u>Manufacturing Processes- II</u>	2.71	2.71
	BTMEC602	<u>Machine Design-II</u>	2.87	2.90
	BTMEC603	<u>Applied Thermodynamics- II</u>	2.95	2.92
	BTMEC604B	<u>IC Engines</u>	2.95	2.92
	BTMEC605C	<u>Renewable Energy Sources</u>	2.81	2.81
	BTMEC606B	<u>Solar Energy</u>	2.95	2.95
	BTMEL607	<u>Metrology and Quality Control Lab</u>	2.40	2.40
	BTMEL608	<u>Machine Design Practice-II</u>	1.00	1.50
	BTMEL609	<u>IC Engine Lab</u>	1.50	1.00

	BTMEL610	Refrigeration and Air Conditioning Lab	1.50	1.00
	BTMEM611	Technical Project for Community Services	2.85	2.90
BTech- SEM VII	BTMEC701	<u>Mechatronics</u>	2.80	2.80
	BTMEC702	<u>CAD/CAM</u>	2.80	2.80
	BTMEC703	<u>Manufacturing Processes - III</u>	2.84	2.84
	BTMEC704B	<u>Industrial Engineering and Management</u>	2.97	2.89
	BTMEC705C	<u>Wind Energy</u>	2.97	2.89
	BTMEL706	<u>Manufacturing Processes Lab - II</u>	2.68	2.68
	BTMEL707	<u>Mechatronics Lab</u>	2.68	2.68
	BTMEL708	<u>CAD/CAM Lab</u>	2.68	2.68
	BTMES709	<u>Seminar</u>	2.48	2.69
	BTMEF710	<u>Field Training /Internship/Industrial Training III</u>	2.85	2.90
	BTMEP711	<u>Project Stage-I</u>	2.85	2.90
BTech- SEM VIII	BTMEC801A	<u>Fundamental of automotive systems</u>	2.75	2.76
	BTMEC802F	<u>Non-Conventional Energy Resources</u>	2.86	2.80
	BTMEP803	<u>Project Stage-II</u>	2.85	2.90
Average PSO			2.65	2.70

PO and PSO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
Attainment	2.65	2.62	2.63	2.54	2.58	2.55	2.66	2.65	2.62	2.65	2.62	2.61	2.55	2.59
Direct Attainment	2.66	2.68	2.69	2.63	2.67	2.62	2.74	2.74	2.70	2.71	2.66	2.68	2.65	2.70
Indirect Attainment	2.58	2.37	2.38	2.20	2.22	2.30	2.31	2.29	2.27	2.42	2.46	2.30	2.17	2.15

A. Y. 2020-21

3.1 Establish the correlation between the courses and the Program

Outcomes (POs) and Program Specific Outcomes (PSOs) (20)

Program Outcomes as mentioned in Annexure-I and Program Specific Outcomes as defined by the Program.

A. PROGRAM OUTCOMES (POs)

The students of Mechanical Engineering will be able to:	
PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

B. PROGRAM SPECIFIC OUTCOMES (PSO)

Mechanical Engineering graduates will be able to	
PSO1	The students will be able to acquire competencies in the usage of design, thermal and manufacturing principles to develop a product and process.
PSO2	The students will be able to impart technological inputs and acquire managerial skills to become technocrats and entrepreneurs.

3.1.1 Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (05)

Sem	Course	CO	Course Outcome
SEM-3	Material Science and Metallurgy (BTMEC302)	BTMEC302.1	Study various crystal structures of materials
		BTMEC302.2	Understand mechanical properties of materials and calculations of same using appropriate equations and Evaluate phase diagrams of various materials
		BTMEC302.3	Evaluate phase diagrams of various materials and Suggest appropriate heat treatment process for a given application
		BTMEC302.4	Prepare samples of different materials for metallography and Recommend appropriate NDT technique for a given application

SEM-4	Theory of Machines I (BTMEC402)	BTMEC402.1	Discuss the terminology and various concepts of mechanisms, friction and lubrication.
		BTMEC402.2	Determine the velocity and acceleration of various types of mechanisms.
		BTMEC402.3	Classify various follower motions by drawing the cam profiles.
		BTMEC402.4	Evaluate the performance of clutch, brakes, dynamometers and balancing machines.
SEM-5	Theory of Machines II (BTMEC 504)	BTMEC504.1	Discuss the terminology and working principles for various types of transmission drives.
		BTMEC504.2	Calculate velocity ratio and power transmitted by transmission drives.
		BTMEC504.3	Analyze the performance of governor, flywheel and gyroscope
		BTMEC504.4	Evaluate the effect of various types of vibration on mechanical systems.

SEM-6	Applied Thermodynamics- II (BTMEC603)	BTMEC603.1	Define the nomenclature related to IC engines, fundamental difference between SI and CI engines.
		BTMEC603.2	Explain Various Engine Systems, Engine Testing and Performance of SI and CI Engines
		BTMEC603.3	Apply the methods of cooling, Refrigeration systems, Thermodynamics of Refrigeration, Air refrigeration system.
		BTMEC603.4	Analyze the types of Power Plant like Thermal Power Plant, Diesel Power Plant, Gas Turbine power plant, Hydro-electric Power Plant, Nuclear Power Plant
SEM-7	Industrial Engineering and management (BTMEC704B)	BTMEC704B.1	Define the terms related management like , functions of management, evolution of management theory, contributions of Taylor, Fayol and others
		BTMEC704B.2	Explain Leading: Managing and human factor, motivation, leadership, morale, team building, communication. Controlling: The system and process of controlling control techniques, overall and preventive control
		BTMEC704B.3	Apply Operations management in corporate profitability and competitiveness, types and characteristics of manufacturing systems, types and characteristics of services systems.
		BTMEC704B.4	Analyze Concurrent Engineering: Producibility, manufacturability, productivity improvement, Total Quality Management: Just in time (JIT), total quality control, quality circles, six sigma
SEM-8	Non-Conventional Energy Resources (BTMEC802F)	BTMEC802F.1	Demonstrate the generation of electricity from various non-conventional sources of energy, have a working knowledge on types of fuel cells.
		BTMEC802F.2	Estimate the solar energy, Utilization of it, Principles involved in solar energy collection and conversion of it to electricity generation.
		BTMEC802F.3	Explore the concepts involved in wind energy conversion system by studying its components, types and performance
		BTMEC802F.4	Illustrate ocean energy and explain the operational methods of their utilization.

**3.3.1 CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from the 3rd to the 8th semester)
(05)**

All the courses in curriculum are studied in detail and correlation with POs and PSOs are declared. Six matrices are mentioned here from the 3rd to the 8th semester. Record for all courses is available with the program.

CO-PO matrices

Course Name: BTMEC305												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMEC305.1	2	2	1									
BTMEC305.2	3	2	2	3	2							
BTMEC305.3	2	2	2	1	2	1	2	1	1	2		
BTMEC305.4	1	1	1	2	2	2	1		1	1		
Average	2.00	1.75	1.50	2.00	3.00	1.50	1.50	1.00	1.00	1.50		
Course Name: BTMEC402												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMEC402.1	3			1								2
BTMEC402.2	3	2	2	1								2
BTMEC402.3	3	3	2	3								1
BTMEC402.4	3	3	2	3								2
Average	3.00	2.67	2.00	2.00								1.75

		Course Name: BTMEC504											
Course Outcome	Program Outcome (PO)												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	
BTMOE504C.1	2			1		1				1		1	
BTMOE504C.2	3	2	2	1		2							
BTMOE504C.3	3	3	2	3	2	2	1					1	
BTMOE504C.4	3	3	2	3	2	3	1	1					
Average	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00		1.00		1.00	

		Course Name: BTMEC603											
Course Outcome	Program Outcome (PO)												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	
BTMEC603.1	3												
BTMEC603.2	3	2	2									2	
BTMEC603.3	2	3	3			2						3	
BTMEC603.4			3			2	2		1			2	
Average	2.67	2.50	2.67		3.00		2.00		1.00			2.33	

		Course Name: BTMEC704B											
Course Outcome	Program Outcome (PO)												
	PO1	PO2	PO3	P O4	PO5	PO 6	PO7	P O8	PO9	PO10	PO11	PO12	
BTMEC704B .1	3												
BTMEC704B .2	3	2	2									2	
BTMEC704B .3	2	3	3				2			3		3	
BTMEC704B .4			3							2		2	
Average	2.67	2.50	2.67		3.00		2.00			2.50		2.33	

Course Name: BTMEC802F												
Course Outcome	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTMEC802F.1	3	1	1	1		3	3	1		2		2
BTMEC802F.2	3	2	2	2		3	3	2		2	2	1
BTMEC802F.3	3	2	2			3	3	1		1	2	2
BTMEC802F.4	3	2	2			3	3	1		1		1
Average	3.0	1.8	1.8	1.5		3.0	3.0	1.3		1.5		1.5

CO-PSO matrices

Course Name: BTMEC302		
Course	PSO1	PSO2
BTMEC302.1	2	
BTMEC302.2		2
BTMEC302.3		2
BTMEC302.4	2	
Average	2.00	2.00

Course Name: BTMEC402		
Course	PSO1	PSO2
BTMC402.1	1	1
BTMC402.2	2	2
BTMC402.3	1	1
BTMC402.4	2	2
Average	1.50	1.50

Course Name: BTMEC504		
Course	PSO1	PSO2
BTMEC504 .1	1	
BTMEC504 .2		2
BTMEC504 .3		2
BTMEC504 .4	2	
Average	1.50	2.00

Course Name: BTMEC603		
Course	PSO1	PSO2
BTMEC603.1	2	
BTMEC603.2		2
BTMEC603.3		
BTMEC603.4		
Average	2.00	2.00

Course Name: BTMEC704B		
Course	PSO1	PSO2
BTMEC704B.1	1	
BTMEC704B.2		2
BTMEC704B.3		2
BTMEC704B.4	2	
Average	1.50	2.00

Course Name: BTMEC802F		
Course	PSO1	PSO2
BTMEC802F.1	3	
BTMEC802F.2		2
BTMEC802F.3		1
BTMEC802F.4	2	
Average	2.5	1.5

3.1.3 Program level Course-PO matrix of all courses INCLUDING first year courses (10)

CO-PO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with POs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation is indicated by '-'. This correlation is derived from CO-PO mapping of the individual course. Average of all COs is taken and mapped at level 1, 2 and 3.

Class	Course Name & Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
FY-SEMI	Engineering Mathematics – I	2.00	2.33	2.00	2.00		1.00					2.00	1.50
	Communication Skills	2.50				2.00	3.00		1.50		2.50		1.50
	Engineering Physics	2.00	2.00	2.00	3.00		1.50	2.00					2.00
	Engineering Graphics	1.67	3.00	2.00	3.00	2.50					2.50		2.00
	Basic Civil Engineering	2.25	2.00	2.50	2.50		2.00	2.00	2.00		2.50	2.00	
	Energy and Environment Engineering	2.00	2.50	2.00	1.50		1.50	3.00	2.00		2.00	1.00	
	Communication Skills Lab	2.50				2.50	3.00		2.50		2.50		1.67
	Engineering Physics Lab	2.33	2.00	2.00	3.00		2.50	2.00		2.50			2.00
	Engineering Graphics Lab	1.50	2.50	2.50	2.50	2.00				2.00	2.50		2.50
	Basic Civil Engineering Lab	2.25	2.50	2.50	2.50		2.50	2.00	2.00		2.50	2.50	
	Workshop Practices	2.50				2.00				2.00	2.00		
FY-SEMII	Engineering Mathematics- II	1.50	2.67	2.00	2.00		2.50					2.00	1.50
	Engineering Mechanics	2.50	3.00	2.00			1.50			1.50			
	Engineering Chemistry	2.00	1.50				2.00	2.00		2.00			
	Basic Electrical Engineering	2.50					2.00	1.50					
	Basic Electronics Engineering	2.50					2.00	2.00					
	Basic Computer Programming	2.25	2.50	2.50						2.00	2.00		
	Engineering Mechanics Laboratory	2.50	2.00	2.00			2.00	2.50		2.50	2.50		
	Engineering Chemistry Laboratory	2.33	2.00				2.50	2.00		2.50			

	Basic Electrical Engineering Laboratory	3.00					2.50	2.00					
	Basic Electronics Engineering Laboratory	3.00					2.50	2.00					
	Basic Computer Programming Laboratory	2.25	1.50	2.50						2.50	2.50		
SY-SEMIII	Engineering Mathematics-III	1.00	1.50	2.00									
	Materials Science and Metallurgy	2.00	1.75	1.50	2.00	3.00	1.50	1.50	1.00	1.00	1.50		
	Fluid Mechanics	3.00	3.00	1.75	2.00	3.00		2.25		2.00	2.00	2.00	1.25
	Machine Drawing and CAD	2.00	1.75	1.50	2.00	2.00	1.50	1.50	1.00	1.00	1.50		
	Thermodynamics	3.00	3.00	1.75	2.00	3.00		2.25		2.00	2.00	2.00	1.25
	Basic Human Rights	1.60	1.40	1.00	2.00	1.20	1.00	1.00	1.00	1.00	1.00	1.00	3.00
	Materials Science and Metallurgy Lab	2.25	2.00	2.00		3.00	2.00	2.00		2.00	2.50		2.00
	Fluid Mechanics Lab	2.25	1.50	2.50		3.00	3.00	1.50		1.50	2.00		2.00
	Machine Drawing and CAD Lab	2.50	1.00	1.00		1.00				2.00	1.33		1.25
	Field Training /Internship/Industrial Training I	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00
SY-SEM IV	Manufacturing Processes - I	1.75	1.50	1.00			1.00	1.00			1.00		1.00
	Theory of Machines-I	3.00	2.67	2.00	2.00								1.75
	Strength of Materials	2.50	2.50	3.00	2.67								2.25
	Numerical Methods in Mechanical Engineering	3.00	3.00		1.00	2.00							
	Product Design Engineering – I	3.00	2.75	2.50	2.75	2.50	3.00	3.00	2.00	3.00	2.00	1.00	3.00
	Interpersonal Communication Skill& Self Development								2.00	2.00	1.67	1.75	2.75
	Manufacturing Processes Lab – I	1.75	1.50	1.00			1.00	1.00			1.00		1.00
	Theory of Machines Lab- I	3.00	2.50	1.67	2.00	1.00				2.00	2.00		1.50
	Strength of Materials Lab	1.00	1.25	2.00	1.50		1.00		1.00				
	Numerical Methods Lab	3.00	3.00		1.00	3.00							

TY-SEM V	Heat Transfer	2.25	2.50	2.67	2.00		1.00	1.00	1.00		1.00		2.00
	Applied Thermodynamics – I	2.50	2.50	1.67	2.00	1.00	1.33	1.00		0.00		0.00	1.00
	Machine Design – I	2.50	2.50	1.67	2.00	1.00	1.33	1.00		0.00		0.00	1.00
	Theory of Machines- II	2.75	2.67	2.00	2.00	2.00	2.00	1.00	1.00	0.00	1.00	0.00	1.00
	Metrology and Quality Control	3.00	3.00	2.00	2.00	3.00						1.00	2.00
	Product Design Engineering - II	3.00	2.75	2.50	2.75	2.50	3.00	3.00	2.00	3.00	2.00	1.00	3.00
	Automobile Engineering	3.00		3.00	3.00	3.00		2.00	2.00	2.67	2.00		2.67
	Heat Transfer Lab	2.25	1.50	2.50		3.00	3.00	1.50		1.50	2.00		2.00
	Applied Thermodynamics Lab	3.00	2.25	2.50		3.00	2.00	2.00			2.00		3.00
	Machine Design Practice- I	2.50	2.50	1.67		3.00	1.50	1.00			1.00		1.00
	Theory of Machines Lab- II	3.00	2.75	2.50		3.00	3.00	2.00			2.00		3.00
	Field Training /Internship/Industrial Training II	2.67	2.00	3.00	2.00	2.50	3.00	2.00	3.00	2.67	2.50	3.00	3.00
TY-SEM VI	Manufacturing Processes- II	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Machine Design-II	2.00	1.50	2.00	2.00		1.00		1.00		1.00		1.00
	Applied Thermodynamics- II	2.67	2.50	2.67		3.00		2.00					2.33
	IC Engines	3.00	2.50	2.00	2.25	1.67		2.50	1.00			1.00	1.00
	Renewable Energy Sources	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Solar Energy	2.00	1.50	2.00	2.00		1.00		1.00		1.00		1.00
	Metrology and Quality Control Lab	3.00	2.00	2.00		3.00		1.00					2.00
	Machine Design Practice-II	2.00	1.50	2.00		3.00	1.00				1.00		1.00
	IC Engine Lab	2.00	1.75	1.00	2.00	2.50	1.00	1.00		1.67	1.00	2.00	1.00
	Refrigeration and Air Conditioning Lab	1.00	2.00	1.75	1.67	3.00		3.00		3.00	2.50	3.00	2.00
	Technical Project for Community Services	1.00	1.33	1.75	1.67	3.00		3.00		3.00	2.50	1.67	2.00
BTech-SEM VII	Mechatronics	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	CAD/CAM	2.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00

	Manufacturing Processes - III	3.00	3.00	1.33	2.00	3.00		2.00	2.00				1.00
	Industrial Engineering and Management	2.67	2.50	2.67		3.00		2.00			2.50		2.33
	Wind Energy	3.00	2.75	1.50	3.00	2.00	1.00	1.00		1.00	1.67		2.00
	Manufacturing Processes Lab - II	2.75	3.00	2.00			1.00	1.00		1.00	1.00		1.00
	Mechatronics Lab	2.75	2.75	1.50	3.00	2.33	1.00	1.00		1.00	1.00		
	CAD/CAM Lab	1.00	2.00	1.75	1.67	3.00		3.00		3.00	2.50	3.00	2.00
	Seminar	3.00	2.75	1.50	3.00	2.00	1.00	1.00		1.00	1.67		2.00
	Field Training /Internship/Industrial Training III	2.25	1.50	2.50		3.00	3.00	1.50		1.50	2.00		2.00
	Project Stage-I	2.00	3.00		1.50	3.00	1.00	1.00	2.00	3.00	3.00	3.00	3.00
BTech-SEM VIII	Fundamental of automotive systems	3.00	2.00	2.00	1.75		1.50	1.00	1.25		1.25		1.25
	Non-Conventional Energy Resources	3.00	1.75	1.75	1.50		3.00	3.00	1.25		1.50		1.50
	Project Stage-II	2.00	3.00				1.00	1.00		3.00	3.00		3.00
ACTUAL AVERAGE PO		2.39	2.27	1.97	2.12	2.51	1.86	1.79	1.70	1.89	1.87	1.69	1.81

Program level Course- PSO matrix:

CO-PSO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with PSOs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation are indicated by-. This correlation is derived from CO-PSO mapping of the individual course. Average of all Cos is taken and mapped at level 1, 2 and 3

Academic Year: 2020-21		Program Specific Outcome (PSO)	
Class	Course	PSO1	PSO2
FY- SEMI	Engineering Mathematics – I	2.50	1.50
	Communication Skills	2.00	2.50
	Engineering Physics	1.50	2.50
	Engineering Graphics	2.00	
	Basic Civil Engineering	2.50	2.00
	Energy and Environment Engineering	2.00	1.50
	Communication Skills Lab	2.00	2.50
	Engineering Physics Lab	2.00	2.50
	Engineering Graphics Lab	2.50	
	Basic Civil Engineering Lab	2.50	2.00
Workshop Practices	1.50	2.50	
FY- SEMII	Engineering Mathematics- II	2.50	1.50
	Engineering Mechanics	2.50	1.50
	Engineering Chemistry	2.50	
	Basic Electrical Engineering		
	Basic Electronics Engineering		

	Basic Computer Programming		
	Engineering Mechanics Laboratory	2.50	2.50
	Engineering Chemistry Laboratory	2.00	
	Basic Electrical Engineering Laboratory		
	Basic Electronics Engineering Laboratory		
	Basic Computer Programming Laboratory		
SY- SEMIII	Engineering Mathematics-III	2.00	
	Materials Science and Metallurgy	2.00	2.00
	Fluid Mechanics	3.00	1.00
	Machine Drawing and CAD	2.00	2.00
	Thermodynamics	3.00	1.00
	Basic Human Rights	3.00	2.00
	Materials Science and Metallurgy Lab	1.50	2.00
	Fluid Mechanics Lab	2.00	2.00
	Machine Drawing and CAD Lab	1.75	1.25
	Field Training /Internship/Industrial Training I	2.67	2.00
SY- SEM IV	Manufacturing Processes - I	3.00	1.00
	Theory of Machines-I	1.50	1.50
	Strength of Materials	1.50	1.75
	Numerical Methods in Mechanical Engineering		
	Product Design Engineering – I	1.00	1.50
	Interpersonal Communication Skill& Self Development	1.00	1.75
	Manufacturing Processes Lab – I	3.00	1.00
	Theory of Machines Lab- I	1.50	1.50
	Strength of Materials Lab		2.25
	Numerical Methods Lab	2.50	1.00

TY- SEM V	Heat Transfer	1.50	1.50
	Applied Thermodynamics – I	1.50	1.50
	Machine Design – I	1.50	1.50
	Theory of Machines- II	1.50	2.00
	Metrology and Quality Control	3.00	1.00
	Product Design Engineering - II	1.00	1.50
	Automobile Engineering		
	Heat Transfer Lab	2.00	2.00
	Applied Thermodynamics Lab	1.75	2.00
	Machine Design Practice- I	1.50	1.50
	Theory of Machines Lab- II	1.00	1.50
	Field Training /Internship/Industrial Training II	2.67	2.00
TY- SEM VI	Manufacturing Processes- II	3.00	1.00
	Machine Design-II	1.50	1.50
	Applied Thermodynamics- II	2.00	2.00
	IC Engines	3.00	1.00
	Renewable Energy Sources	3.00	1.00
	Solar Energy	1.50	1.50
	Metrology and Quality Control Lab	3.00	2.00
	Machine Design Practice-II	1.50	1.50
	IC Engine Lab	3.00	1.50
	Refrigeration and Air Conditioning Lab	3.00	1.00
Technical Project for Community Services	3.00	1.00	
BTech- SEM VII	Mechatronics	3.00	1.00
	CAD/CAM	3.00	1.00
	Manufacturing Processes - III	3.00	1.00

	Industrial Engineering and Management	1.50	2.00
	Wind Energy	3.00	1.75
	Manufacturing Processes Lab - II	3.00	1.00
	Mechatronics Lab	3.00	1.00
	CAD/CAM Lab	3.00	1.00
	Seminar	3.00	1.75
	Field Training /Internship/Industrial Training III	2.00	2.00
	Project Stage-I		
BTech- SEM VIII	Fundamental of automotive systems	1.50	1.50
	Non-Conventional Energy Resources	2.50	1.50
	Project Stage-II		
Average PSO		2.22	1.60

3.2 Attainment of Course Outcomes (50)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

(Examples of data collection processes may include, but are not limited to tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams etc.)

The key aspects in Outcome Based Education (OBE) are the assessment of course outcomes. At the initial stage of OBE implementation, the Course Outcomes (COs) for each course are defined based on the Program Outcome (POs) and other requirements. At the end of each course, the COs need to be assessed and evaluated, to check whether it has been attained or not. Assessment is one more process, carried out by the department, that identifies, collects, and prepares data to evaluate the achievement of program educational objectives and program outcomes. Attainment is the action or fact of achieving a standard result towards accomplishment of desired goals. Primarily attainment is the standard of academic attainment as observed by test or examination result. Attainment of the COs can be measured by using direct and indirect tools. Direct attainment basically displays the student's knowledge and skills from their academic performance. It can be determined from the performance of the students in all the relevant assessment tools – like internal assessments, assignments, quiz and final university examination etc. These methods provide a sampling of what students know and/or actions they can perform, offering substantial.

This program consists of various types of courses for fulfillment of POs and PSOs. The process of data collection for attainment of COs is properly identified depending on the type of course. Major types of courses are

1. Theory
2. Practical/Oral/TW
3. Tutorial
4. Seminar
5. Project
6. Audit course

The Institution strives hard to ensure that the Learning across all the courses of the curriculum is Outcome oriented. There is continuous assessment of learning outcomes attainment and this procedure has been refined over a period of time.

The following are the two broadly classified tools used for assessment of Learning Outcome Attainment

• Direct Assessment Method:

Data collection mechanism includes direct assessment process which is

Theory

1. Continuous Assessment Test 1
2. Mid Semester Examination
3. Continuous Assessment Test 2
4. End Semester Examination

Lab

1. Continuous Assessment Test 1
2. Continuous Assessment Test 2
3. End Semester Examination

Data collection process for all above type of courses is clearly defined in table 3.2.1a given below.

Table 3.2.1a: Assessment Tools

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Mid Semester Examination [MSE]		One test/semester
3	Continuous Assessment Test 2 [CA2]		One/Semester
4	End Semester Examination [ESE]		One/Semester

Lab

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Continuous Assessment Test 2[CA2]		One test/semester
3	End Semester Examination [ESE]		One/Semester

Course Outcomes for the entire course are defined and they are 4 in number. As the program is affiliated to DBATU, external assessment is done as per the evaluation scheme of university and internal assessment is done as per the policy of the program.

All courses are categorized into 2 categories

5. Courses with theory examination: CO attainment is calculated considering 60 % of university examination and 40% of internal semester evaluation (CA1, MSE CA2)
6. Courses with practical examination: CO attainment is calculated considering 60% internal evaluation and 40% university examination evaluation

Attainment levels are assigned based on performance in Internal Semester Evaluation and University examinations

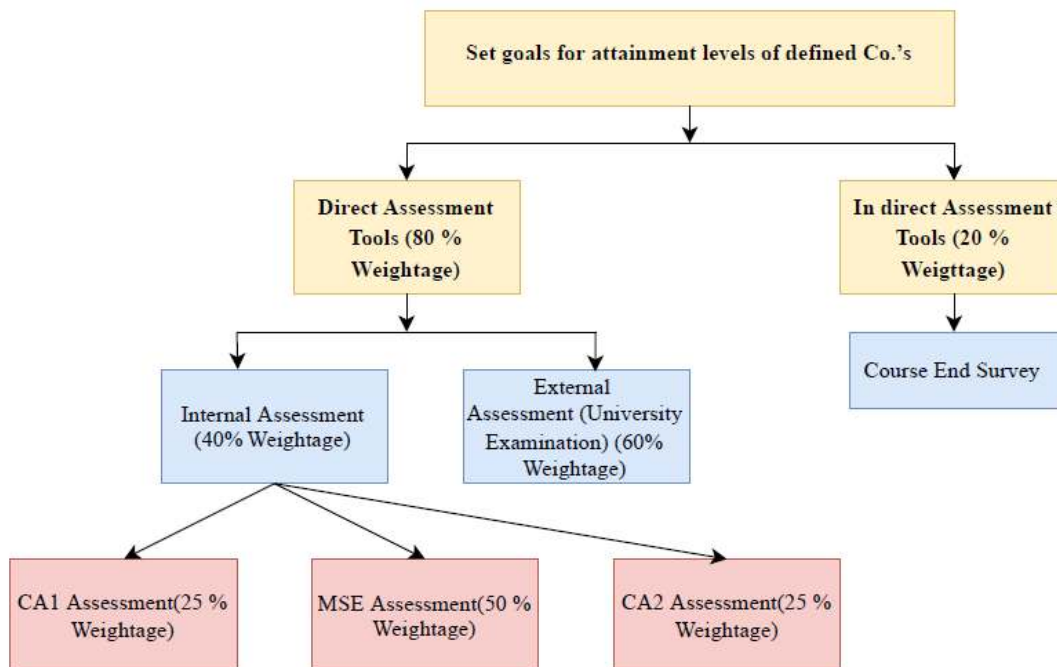
Theory

Sr. No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1[CA1]	Direct Assessment	3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
2	Mid Semester Examination [MSE]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
3	Continuous Assessment Test 2[CA2]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
4	End Semester Examination [ESE]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%

Lab

Sr.No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1 [CA1]	Direct Assessment	3 - 81% -100% 2 - 61%-80% 1 - 40%-60%
2	Continuous Assessment Test 2 [CA2]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%
3	End Semester Examination [ESE]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%

Theory



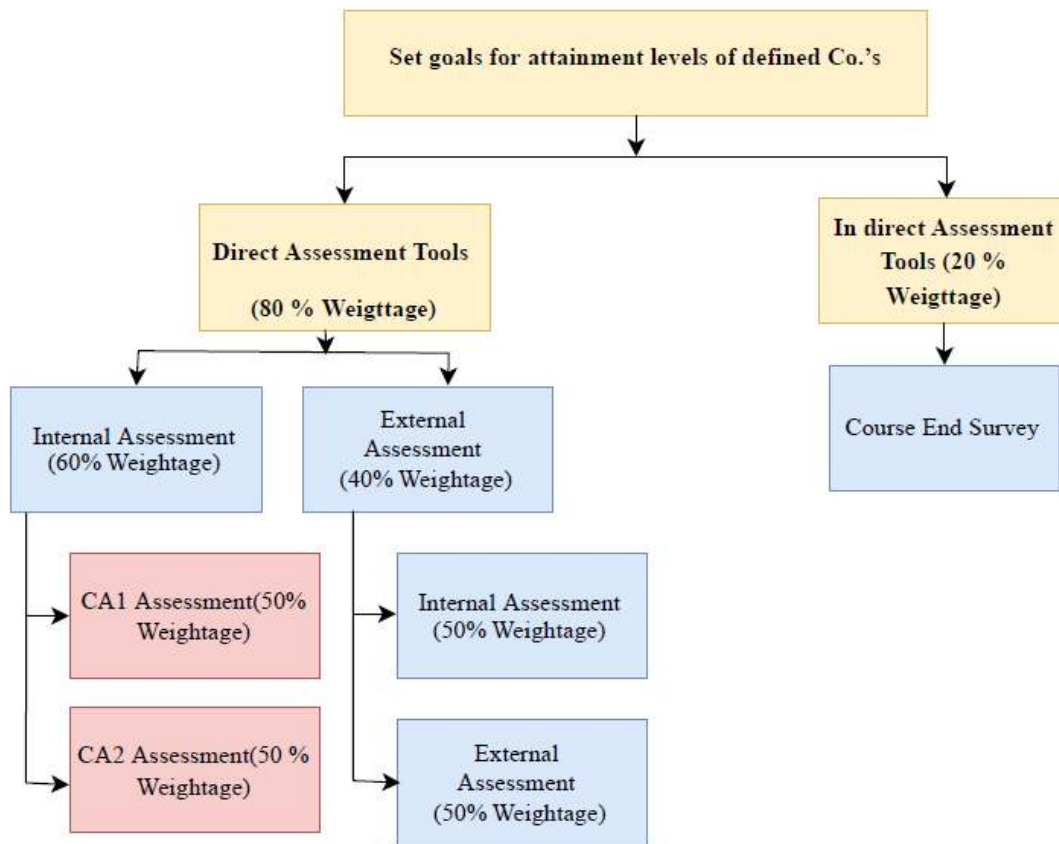
Lab

Fig2 Process of defining CO attainment practical examination

3.2.2 Record of the attainment of Course Outcomes of all courses with respect to set attainment levels (40)

Course Name: Materials Science and Metallurgy						
Year: 2020-21						
Course Name: BTMEC302						
Sem-III						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Final Direct Course Attainment	Target	Remark
BTMEC302.1	[CA1]/ [CA2]/ [ESE]	1.2	3	2.86	1.8	Attained
BTMEC302.2		1.15	3	2.86	1.8	Attained
BTMEC302.3		1.2	3	2.88	1.8	Attained
BTMEC302.4		1.1	3	2.79	1.8	Attained

Course Outcome Attainment: 2.85

Course Name: Theory of Machines I Year: 2020-21						
Course Code: BTMEC402						
Sem-IV						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTMEC402.1	[CA1]/ [CA2]/ [ESE]	1	3	2.66	1.8	Attained
BTMEC402.2		1	3	2.70	1.8	Attained
BTMEC402.3		1	3	2.57	1.8	Attained
BTMEC402.4		1	3	2.61	1.8	Attained

Course Outcome**Attainment: 2.63**

Course Name: Theory of Machines II 2020-21						
Course Code: BTMEC 504 Sem-V						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTMEC50 4.1	[CA1]/ [CA2]/ [ESE]	1.2	3	2.96	1.95	Attained
BTMEC50 4.2		1.15	3	2.92	1.95	Attained
BTMEC50 4.3		1.2	3	2.95	1.95	Attained
BTMEC50 4.4		1.2	3	2.96	1.95	Attained

Course Outcome**Attainment: 2.95**

Course Name: Applied Thermodynamics- II Year Year: 2020-21						
Course Code: (BTMEC603)						
Sem-VI						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTMEC60 3.1	[CA1]/ [CA2]/ [ESE]	1.2	2	2.50	1.95	Attained
BTMEC60 3.2		1.15	2	2.46	1.95	Attained
BTMEC60 3.3		1.2	2	2.50	1.95	Attained
BTMEC60 3.4		1.2	2	2.50	1.95	Attained

Course Outcome**Attainment: 2.49**

Course Name: Industrial Engineering and management						
Year: 2020-21						
Course Code: BTMEC704B Sem-VII						
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTMEC704B.1	[CA1]/ [CA2]/ [ESE]	1.2	3	2.99	2.1	Attained
BTMEC704B.2		1.15	3	2.95	2.1	Attained
BTMEC704B.3		1.2	3	2.99	2.1	Attained
BTMEC704B.4		1.2	3	2.99	2.1	Attained

**Course Outcome
Attainment: 2.98**

Course Name: Non-Conventional Energy Resources Year : 2020-21						
Course Code: BTMEC802F						Sem-VIII
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTMEC802F.1	[CA1]/ [CA2]/ [ESE]	1.1	3	2.80	2.1	Attained
BTMEC802F.2		1.1	3	2.76	2.1	Attained
BTMEC802F.3		1.2	3	2.85	2.1	Attained
BTMEC802F.4		1.2	3	2.85	2.1	Attained

**Course Outcome
Attainment: 2.81**

Course No	Course Name	CO1	CO2	CO3	CO4	Average CO Attainment
SY Set CO Attainment Target		1.8	1.8	1.8	1.8	1.8
BTBSC301	Engineering Mathematics-III	2.91	2.79	2.64	2.91	2.81
		Attained	Attained	Attained	Attained	Attained
BTMEC302	Materials Science and Metallurgy	2.86	2.86	2.88	2.79	2.85
		Attained	Attained	Attained	Attained	Attained
BTMEC303	Fluid Mechanics	2.84	2.62	2.69	2.86	2.75
		Attained	Attained	Attained	Attained	Attained
BTMEC304	Machine Drawing and CAD	2.62	2.84	2.73	2.54	2.68
		Attained	Attained	Attained	Attained	Attained
BTMEC305	Thermodynamics	2.84	2.62	2.69	2.86	2.75
		Attained	Attained	Attained	Attained	Attained
BTHM3401	Basic Human Rights	2.34	2.70	2.94	2.96	2.74
		Attained	Attained	Attained	Attained	Attained
BTMEL307	Materials Science and Metallurgy Lab	2.96	3.00	3.00	3.00	2.99
		Attained	Attained	Attained	Attained	Attained
BTMEL308	Fluid Mechanics Lab	2.97	2.49	2.01	2.49	2.49
		Attained	Attained	Attained	Attained	Attained
BTMEL309	Machine Drawing and CAD Lab	2.62	2.94	2.95	2.95	2.87
		Attained	Attained	Attained	Attained	Attained
BTMEF310	Field Training /Internship/Industrial Training I	2.55	2.54	2.53	2.54	2.68
		Attained	Attained	Attained	Attained	Attained
BTMEC401	Manufacturing Processes - I	2.93	2.88	2.73	2.60	2.79
		Attained	Attained	Attained	Attained	Attained
BTMEC402	Theory of Machines-I	2.66	2.70	2.57	2.61	2.63
		Attained	Attained	Attained	Attained	Attained
BTMEC403	Strength of Materials	2.60	2.92	2.93	2.93	2.84
		Attained	Attained	Attained	Attained	Attained
BTMEC404	Numerical Methods in Mechanical Engineering	2.03	2.03	2.54	2.68	2.32
		Attained	Attained	Attained	Attained	Attained
BTID405	Product Design Engineering – I	2.66	2.70	2.57	2.61	2.63
		Attained	Attained	Attained	Attained	Attained
BTHM3402	Interpersonal Communication	2.49	2.79	2.57	2.68	2.63
		Attained	Attained	Attained	Attained	Attained

	Skill& Self Development					
BTMEL407	Manufacturing Processes Lab – I	2.52	2.68	2.74	2.81	2.73
		Attained	Attained	Attained	Attained	Attained
BTMEL408	Theory of Machines Lab- I	2.47	2.00	2.90	2.96	2.58
		Attained	Attained	Attained	Attained	Attained
BTMEL409	Strength of Materials Lab	2.82	2.83	2.86	2.74	2.81
		Attained	Attained	Attained	Attained	Attained
BTMEL410	Numerical Methods Lab	2.92	2.95	2.91	2.86	2.91
		Attained	Attained	Attained	Attained	Attained
TY Set CO attainment Target		1.95	1.95	1.95	1.95	1.95
BTMEC501	Heat Transfer	2.99	2.94	2.98	2.98	2.98
		Attained	Attained	Attained	Attained	Attained
BTMEC502	Applied Thermodynamics – I	2.96	2.97	2.96	2.94	2.96
		Attained	Attained	Attained	Attained	Attained
BTMEC503	Machine Design – I	2.96	2.97	2.92	2.94	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEC504	Theory of Machines- II	2.96	2.92	2.95	2.96	2.95
		Attained	Attained	Attained	Attained	Attained
BTMEC505	Metrology and Quality Control	1.47	1.42	1.45	1.41	1.44
		Attained	Attained	Attained	Attained	Attained
BTID506	Product Design Engineering - II	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEC506A	Automobile Engineering	2.95	2.93	2.68	2.68	2.81
		Attained	Attained	Attained	Attained	Attained
BTMEL507	Heat Transfer Lab	2.94	2.46	2.94	2.46	2.70
		Attained	Attained	Attained	Attained	Attained
BTMEL508	Applied Thermodynamics Lab	2.96	2.97	2.96	2.94	2.96
		Attained	Attained	Attained	Attained	Attained
BTMEL509	Machine Design Practice- I	2.96	2.97	2.96	2.94	2.96
		Attained	Attained	Attained	Attained	Attained
BTMEL510	Theory of Machines Lab- II	2.93	2.93	2.92	2.93	2.93
		Attained	Attained	Attained	Attained	Attained
BTMEF511	Field Training /Internship/Industrial Training II	2.90	2.38	2.36	2.38	2.51
		Attained	Attained	Attained	Attained	Attained

BTMEC601	Manufacturing Processes- II	2.79	2.84	2.65	2.54	2.71
		Attained	Attained	Attained	Attained	Attained
BTMEC602	Machine Design- II	2.96	2.97	2.96	2.94	2.96
		Attained	Attained	Attained	Attained	Attained
BTMEC603	Applied Thermodynamics- II	2.50	2.46	2.50	2.50	2.49
		Attained	Attained	Attained	Attained	Attained
BTMEC604B	IC Engines	2.89	2.99	2.77	2.66	2.83
		Attained	Attained	Attained	Attained	Attained
BTMEC605C	Renewable Energy Sources	2.82	2.92	2.89	2.94	2.89
		Attained	Attained	Attained	Attained	Attained
BTMEC606B	Solar Energy	2.96	2.97	2.96	2.94	2.96
		Attained	Attained	Attained	Attained	Attained
BTMEL607	Metrology and Quality Control Lab	2.39	2.41	2.39	2.43	2.41
		Attained	Attained	Attained	Attained	Attained
BTMEL608	Machine Design Practice-II	2.98	2.98	2.98	2.94	2.97
		Attained	Attained	Attained	Attained	Attained
BTMEL609	IC Engine Lab	2.40	2.84	2.85	2.84	2.73
		Attained	Attained	Attained	Attained	Attained
BTMEL610	Refrigeration and Air Conditioning Lab	2.40	2.84	2.37	2.36	2.49
		Attained	Attained	Attained	Attained	Attained
BTMEM611	Technical Project for Community Services	2.40	2.84	2.38	2.36	2.50
		Attained	Attained	Attained	Attained	Attained
BTech Set CO attainment Target		2.1	2.1	2.1	2.1	2.1
BTMEC701	Mechatronics	2.93	2.93	2.97	2.61	2.86
		Attained	Attained	Attained	Attained	Attained
BTMEC702	CAD/CAM	2.91	2.88	2.85	2.84	2.87
		Attained	Attained	Attained	Attained	Attained
BTMEC703	Manufacturing Processes - III	2.87	2.88	2.65	2.58	2.75
		Attained	Attained	Attained	Attained	Attained
BTMEC704B	Industrial Engineering and Management	2.99	2.95	2.99	2.99	2.98
		Attained	Attained	Attained	Attained	Attained
BTMEC705C	Wind Energy	2.88	2.85	2.87	2.84	2.86
		Attained	Attained	Attained	Attained	Attained
BTMEL706	Manufacturing Processes Lab - II	2.39	2.88	2.42	2.88	2.64
		Attained	Attained	Attained	Attained	Attained
		2.39	2.32	2.36	2.80	2.47

BTMEL707	Mechatronics Lab	Attained	Attained	Attained	Attained	Attained
BTMEL708	CAD/CAM Lab	2.41	2.85	2.38	2.38	2.50
		Attained	Attained	Attained	Attained	Attained
BTMES709	Seminar	2.88	2.85	2.87	2.84	2.86
		Attained	Attained	Attained	Attained	Attained
BTMEF710	Field Training /Internship/Industrial Training III	2.92	2.92	2.92	2.44	2.80
		Attained	Attained	Attained	Attained	Attained
BTMEP711	Project Stage-I	2.81	2.93	2.94	2.85	2.88
		Attained	Attained	Attained	Attained	Attained
BTMEC801A	Fundamental of automotive systems	2.88	2.80	2.77	2.69	2.79
		Attained	Attained	Attained	Attained	Attained
BTMEC802F	Non-Conventional Energy Resources	2.80	2.76	2.85	2.85	2.81
		Attained	Attained	Attained	Attained	Attained
BTMEP803	Project Stage-II	2.57	2.06	2.07	2.06	2.19
		Attained	Attained	Attained	Attained	Attained

3.3 Attainment of Program Outcomes and Program Specific Outcomes (50)

3.3.1 Describe assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

(Describe the assessment tools and processes used to gather the data upon which the evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

List of PO and PSO Assessment Tools:

Assessment tools are categorized into two types for Program Outcomes (POs), Program Specific Outcomes (PSOs).

5. Direct Assessment Method– Through CO attainment in relevant courses.
6. Indirect Assessment Method –Employer Feedback, Alumni feedback, Program Exit Survey.

Direct Assessment methods:

CO attainment of course shows knowledge and skills obtained by students from respective courses derived from their performance in the continuous assessment, unit tests, online examinations, in-semester examinations, end-semester examinations, reviews, assignments etc. These methods provide strong evidence of student learning.

Indirect Assessment methods:

Surveys of students are taken to know their learning. Feedback of various stake holders like employer, alumni etc is taken to know the capabilities and necessary improvements.

For e.g.

Program exit Feedback: To evaluate the success of program in providing students with opportunities to achieve the POs and PSOs every year. After completion of program students are able evaluate easily so here given 40% weightage.

Alumni Feedback: To evaluate the success of program in providing alumni with opportunities to achieve the POs and PSOs every year and given 30% weightage.

Employer Feedback: To provide information about our graduate's skills and capability and given 30 % weightage.

$$\text{PO/PSO Indirect Attainment} = 0.4 * \text{Program exit Feedback} + 0.3 * \text{Alumni Feedback} + 0.3 * \text{Employer Feedback}$$

Process for Evaluation and Assessment of POs & PSOs

- The activity, questionnaires and frequency of feedback is defined by the Program for POs and PSOs attainment through in direct tools.
- The CO-PO and PSO mapping and CO attainment is considered as reference for PO and PSO attainment as a part of direct tool. Here sums weighted formula is used
i.e., CO w. r. t. PO attainment = $(\text{CO1 attainment} * \text{CO-PO and PSO mapping}) +$
 $(\text{CO1 attainment} * \text{CO-PO and PSO mapping}) +$
 $(\text{CO1 attainment} * \text{CO-PO and PSO mapping}) +$
 $(\text{CO1 attainment} * \text{CO-PO and PSO mapping})$

Sum of mapping level

The same process is followed to calculate PSO attainment.

PO and PSO attainment are calculated by considering 80% weightage to direct assessment and 20% weightage to indirect assessment through surveys as shown in following figure

$$\text{PO/PSO Attainment} = 0.8 * \text{Direct Attainment} + 0.2 * \text{Indirect Attainment}$$

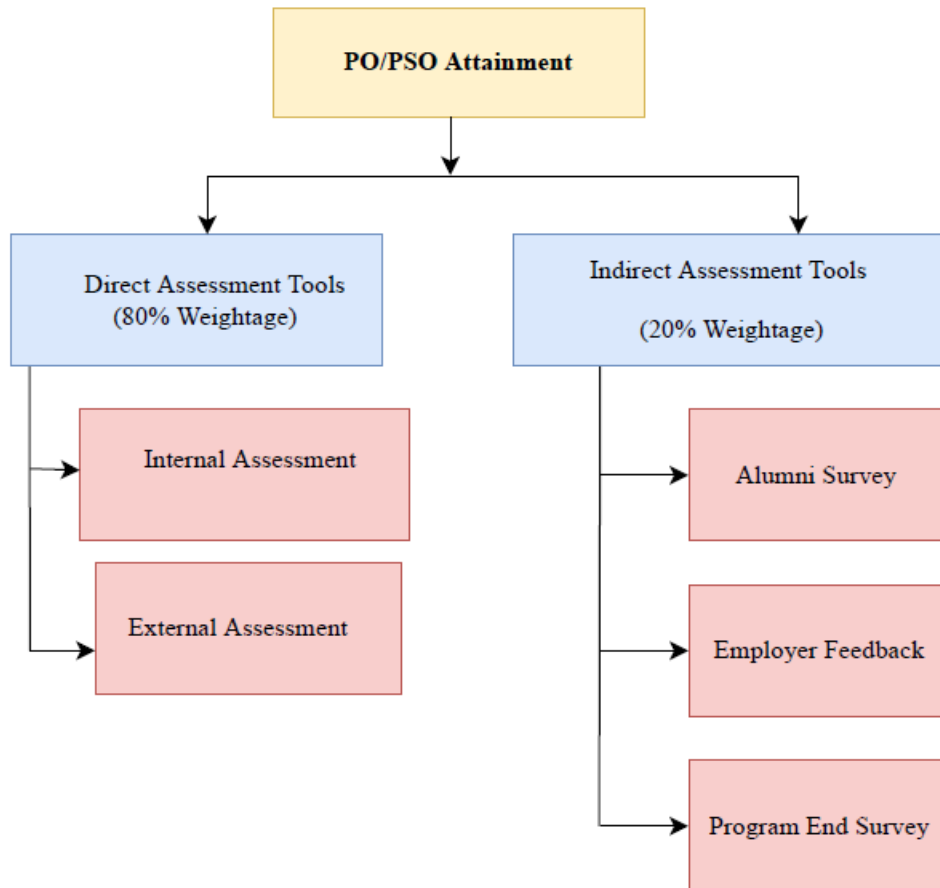


Fig 3 Process of defining PO/PSO Attainment

➤ **Direct Assessment Tools:**

Continuous Assessment Test1[CA1]
Mid Semester Examination [MSE]
Continuous Assessment Test 2[CA2]
End Semester Examination [ESE]
Lab Continuous Assessment Test 1
Lab Continuous Assessment Test 2

➤ **Indirect Assessment Tools:**

Program End Survey
Employer Feedback
Examiner Feedback

3.3.2 Provide results of evaluation of each PO&PSO**(40)**

Program shall set Program Outcome attainment levels for all POs & PSOs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course–PO & PSO matrix as indicated).

PO Attainment:

Course Name & Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Engineering Mathematics – I	2.93	2.94	2.95	2.95		2.95					2.93	2.94
Communication Skills	2.93				2.93	2.92		2.93		2.94		2.93
Engineering Physics	2.94	2.95	2.95	2.95		2.94	2.94					2.94
Engineering Graphics	2.95	2.95	2.95	2.95	2.95					2.95		2.95
Basic Civil Engineering	2.94	2.96	2.93	2.94		2.94		2.93		2.93	2.94	
Energy and Environment Engineering	2.94	2.95	2.94	2.94		2.95	2.94	2.94		2.94	2.94	
Communication Skills Lab	2.77				2.78	2.97		2.97		2.67		2.68
Engineering Physics Lab	2.94	2.93	2.97	2.96		2.94	2.95		2.93			2.92
Engineering Graphics Lab	2.92	2.92	2.96	2.95	2.97				2.93	2.95		2.94
Basic Civil Engineering Lab	2.94	2.92	2.94	2.92		2.94	2.92	2.94		2.94	2.92	
Workshop Practices	2.97				2.81				2.73	2.89		
Engineering Mathematics- II	2.93	2.94	2.96	2.95		2.93					2.93	2.94
Engineering Mechanics	2.94	2.94	2.94			2.94			2.94			
Engineering Chemistry	2.94	2.95				2.95	2.94		2.95			

Basic Electrical Engineering	2.93					2.94	2.93					
Basic Electronics Engineering	2.94					2.94	2.94					
Basic Computer Programming	2.95	2.96	2.96						2.97	2.95		
Engineering Mechanics Laboratory	2.94	2.93	2.94			2.92	2.94		2.95	2.94		
Engineering Chemistry Laboratory	2.92	2.91				2.91	2.91		2.91			
Basic Electrical Engineering Laboratory	2.94					2.94	2.94					
Basic Electronics Engineering Laboratory	2.94					2.94	2.94					
Basic Computer Programming Laboratory	2.94	2.95	2.93						2.93	2.94		
Engineering Mathematics-III	2.64	2.91	2.79									
Materials Science and Metallurgy	2.86	2.86	2.86	2.84	2.85	2.82	2.85	2.88	2.84	2.85		
Fluid Mechanics	2.75	2.75	1.59	1.84	2.72		2.07		1.75	1.82	1.83	1.15
Machine Drawing and CAD	2.60	2.62	2.57	2.50	2.50	2.52	2.51	2.51	2.51	2.51		
Thermodynamics	2.75	2.75	1.59	1.84	2.72		2.07		1.75	1.82	1.83	1.15
Basic Human Rights	1.33	1.40	0.67	0.49	1.11	0.98	0.42		0.98	0.25	0.98	2.74
Materials Science and Metallurgy Lab	2.99	3.00	2.99		3.00	3.00	2.98		3.00	3.00		3.00
Fluid Mechanics Lab	2.55	2.33	2.49		2.49	2.01	2.81		2.49	2.49		2.25
Machine Drawing and CAD Lab	2.50	1.00	1.00	0.00	1.00	0.00	0.00	0.00	2.00	1.00	0.00	1.25

Field Training /Internship/Industrial Training I	2.80	2.83	2.93	2.93	2.79	2.93	2.93	2.93	2.92	2.80	2.92	2.75
Manufacturing Processes - I	1.75	1.50	1.00			1.00	1.00			1.00		1.00
Theory of Machines-I	2.63	2.62	2.63	2.61								2.64
Strength of Materials	2.83	2.92	2.93	2.93								2.82
Numerical Methods in Mechanical Engineering	2.81	2.81		2.81	2.81							
Product Design Engineering – I	2.63	2.62	2.63	2.61								2.64
Interpersonal Communication Skill& Self Development								2.63	2.65	2.55	2.67	2.63
Manufacturing Processes Lab – I	2.69	2.60	2.68			2.68	2.68			2.68		2.68
Theory of Machines Lab- I	2.58	2.51	2.67	2.59	2.96				2.58	2.58		2.47
Strength of Materials Lab	2.76	2.73	2.71	2.76		2.93		2.91				
Numerical Methods Lab	2.68	2.68		2.68	2.68							
Heat Transfer	2.97	2.96	2.97	2.98		2.98	2.98	2.98		2.98		2.97
Applied Thermodynamics – I	2.96	2.96	2.96	2.95	2.95	2.95	2.95				2.97	2.95
Machine Design – I	2.95	2.95	2.95	2.94	2.95	2.95	2.94				2.97	2.94
Theory of Machines- II	2.95	2.95	2.94	2.95	2.95	2.95	2.95	2.96		2.96		2.95
Metrology and Quality Control	1.44	1.44	1.44	1.43	1.44						1.44	1.44
Product Design Engineering - II	2.93	2.92	2.93	2.92	2.93	2.92	2.93	2.93	2.93	2.93	2.92	2.93
Automobile Engineering	2.82		2.68	2.68	2.68		2.80	2.95	2.84	2.95		2.78

Heat Transfer Lab	2.73	2.62	2.75		2.46	2.94	2.78		2.46	2.46		2.70
Applied Thermodynamics Lab	2.96	2.96	2.96	2.96	2.95	2.95	2.95		2.96	2.96	2.95	2.96
Machine Design Practice- I	2.96	2.96	2.96	2.95		2.96	2.95	2.96		2.96		2.96
Theory of Machines Lab- II	2.93	2.92	2.93	2.92	2.93	2.92	2.92	2.93	2.93	2.93	2.92	2.93
Field Training /Internship/Industrial Training II	2.29		2.38			2.36	1.59		2.11	2.15		2.64
Manufacturing Processes- II	2.71	2.71	2.69	2.62	2.72		2.79	2.79				2.71
Machine Design-II	2.00	1.50	2.00	2.00		1.00		1.00		1.00		1.00
Applied Thermodynamics- II	2.49	2.49	2.49			2.50	2.50		2.50			2.49
IC Engines	2.47	2.02	1.68	1.81	1.31	1.89	1.89	0.84			0.77	0.82
Renewable Energy Sources	2.79	2.79	2.80	2.70	2.83		2.93	2.93				2.79
Solar Energy	2.96	2.96	2.94	2.94		2.96		2.96		2.96		2.95
Metrology and Quality Control Lab	2.41	2.41	2.39		2.41		2.41					2.41
Machine Design Practice-II	2.96	2.97	2.94	2.94		2.97		2.97		2.97		2.97
IC Engine Lab	1.78	1.90	0.91			0.71	0.71		1.18	0.91		0.91
Refrigeration and Air Conditioning Lab	0.79	1.82	1.50				2.36		2.49	2.06		1.66
Technical Project for Community Services	0.79	0.87	1.46				2.36		2.50	2.06		1.66
Mechatronics	2.87	2.87	2.87	2.80	2.97		2.93	2.93				2.87
CAD/CAM	2.84	2.80	2.85	2.71	2.83		2.93	2.93				2.80
Manufacturing Processes - III	2.75	2.75	2.74	2.65	2.76		2.87	2.87				2.75

Industrial Engineering and Management	2.98	2.95	2.98		2.99	2.99	2.97		2.95	2.97		2.97	
Wind Energy	2.86	2.86	1.43			0.95	0.95		0.95	1.20		0.48	
Manufacturing Processes Lab - II	2.66	2.65	2.70			2.64	2.64		2.64	2.64		2.64	
Mechatronics Lab	2.27	2.34	1.21			0.82	0.82		0.82	0.86			
CAD/CAM Lab	2.31	2.62	1.27			0.83	0.83		0.83	0.79			
Seminar	2.86	2.86	1.43			0.95	0.95		0.95	1.20		0.48	
Field Training /Internship/Industrial Training III	2.87	2.92	2.83		2.44	2.92	2.92		2.60	2.44		2.92	
Project Stage-I	2.59	2.93		2.59	2.59	2.93	2.93	2.59	2.59	2.88	2.88	2.88	
Fundamental of automotive systems	2.33	2.31	1.53	1.83		1.38	0.93	0.93		0.93		0.93	
Non-Conventional Energy Resources	2.81	1.64	1.64	1.38		2.81	2.81	1.17		1.40	1.87	1.41	
Project Stage-II	1.71	2.06				0.69	0.69		2.07	2.06		2.06	
Attainment	2.66	2.61	2.45	2.55	2.62	2.44	2.39	2.52	2.38	2.32	2.33	2.37	

PSO Attainment:

Class	Code	Course	PSO1	PSO2
FY- SEMI	MATH101	Engineering Mathematics – I	2.94	2.93
	HS102	Communication Skills	2.93	2.92
	PHY103	Engineering Physics	2.94	2.94
	ME104	Engineering Graphics	2.95	
	CV105	Basic Civil Engineering	2.94	2.93
	CHE106	Energy and Environment Engineering	2.95	2.94
	HS102L	Communication Skills Lab	2.85	2.97
	PHY103L	Engineering Physics Lab	2.95	2.92
	ME104L	Engineering Graphics Lab	2.92	
	CV105L	Basic Civil Engineering Lab	2.92	2.93
FY- SEMII	WS100L	Workshop Practices	2.81	2.78
	MATH201	Engineering Mathematics- II	2.94	2.93
	ME202	Engineering Mechanics	2.94	2.94
	CHE203	Engineering Chemistry	2.94	
	EE204	Basic Electrical Engineering		
EXE205	Basic Electronics Engineering			

	ICT206	Basic Computer Programming		
	ME202L	Engineering Mechanics Laboratory	2.94	2.92
	CHM203L	Engineering Chemistry Laboratory	2.91	
	EE204L	Basic Electrical Engineering Laboratory		
	EXE205L	Basic Electronics Engineering Laboratory		
	ICT206L	Basic Computer Programming Laboratory		
SY- SEMIII	BTBSC301	Engineering Mathematics-III	2.85	
	BTMEC302	Materials Science and Metallurgy	2.82	2.87
	BTMEC303	Fluid Mechanics	2.75	0.92
	BTMEC304	Machine Drawing and CAD	2.73	2.49
	BTMEC305	Thermodynamics	2.75	0.92
	BTHM3401	Basic Human Rights	2.74	1.82
	BTMEL307	Materials Science and Metallurgy Lab	2.99	3.00
	BTMEL308	Fluid Mechanics Lab	2.25	2.25
	BTMEL309	Machine Drawing and CAD Lab	1.75	1.25
	BTMEF310	Field Training /Internship/Industrial Training I	2.84	2.93
SY- SEM IV	BTMEC401	Manufacturing Processes - I	3.00	1.00
	BTMEC402	Theory of Machines-I	2.64	2.64

	BTMEC403	Strength of Materials	2.87	2.88
	BTMEC404	Numerical Methods in Mechanical Engineering	2.80	2.89
	BTID405	Product Design Engineering – I	2.64	2.64
	BTHM3402	Interpersonal Communication Skill & Self Development	2.63	2.63
	BTMEL407	Manufacturing Processes Lab – I	2.68	2.68
	BTMEL408	Theory of Machines Lab- I	2.47	2.47
	BTMEL409	Strength of Materials Lab		2.78
	BTMEL410	Numerical Methods Lab	2.73	2.61
TY- SEM V	BTMEC501	Heat Transfer	2.99	2.97
	BTMEC502	Applied Thermodynamics – I	2.95	2.97
	BTMEC503	Machine Design – I	2.95	2.95
	BTMEC504	Theory of Machines- II	2.96	2.94
	BTMEC505	Metrology and Quality Control	1.44	1.44
	BTID506	Product Design Engineering - II	2.93	2.92
	BTMEC506A	Automobile Engineering	2.77	2.80
	BTMEL507	Heat Transfer Lab	2.70	2.70
	BTMEL508	Applied Thermodynamics Lab	2.96	2.95
	BTMEL509	Machine Design Practice- I	2.95	2.97

	BTMEL510	Theory of Machines Lab- II	2.93	2.92
	BTMEF511	Field Training /Internship/Industrial Training II	2.23	1.57
TY- SEM VI	BTMEC601	Manufacturing Processes- II	2.71	2.71
	BTMEC602	Machine Design-II	1.50	1.50
	BTMEC603	Applied Thermodynamics- II		
	BTMEC604B	IC Engines	2.47	0.82
	BTMEC605C	Renewable Energy Sources	2.79	2.79
	BTMEC606B	Solar Energy	2.95	2.97
	BTMEL607	Metrology and Quality Control Lab	2.41	2.41
	BTMEL608	Machine Design Practice-II	2.95	2.98
	BTMEL609	IC Engine Lab	2.73	1.35
	BTMEL610	Refrigeration and Air Conditioning Lab	2.49	0.87
	BTMEM611	Technical Project for Community Services	2.50	0.87
BTech- SEM VII	BTMEC701	Mechatronics	2.87	2.87
	BTMEC702	CAD/CAM	2.80	2.80
	BTMEC703	Manufacturing Processes - III	2.75	2.75
	BTMEC704B	Industrial Engineering and Management	2.99	2.97
	BTMEC705C	Wind Energy	2.86	1.67
	BTMEL706	Manufacturing Processes Lab - II	2.64	2.64

	BTMEL707	Mechatronics Lab	2.47	0.39
	BTMEL708	CAD/CAM Lab	2.50	0.44
	BTMES709	Seminar	2.86	1.67
	BTMEF710	Field Training /Internship/Industrial Training III	2.68	2.68
	BTMEP711	Project Stage-I		
BTech- SEM VIII	BTMEC801A	Fundamental of automotive systems	1.38	1.40
	BTMEC802F	Non-Conventional Energy Resources	2.35	1.39
	BTMEP803	Project Stage-II		
Average PSO			2.71	2.36

PO and PSO Attainment

Cours e	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO1 1	PO12	PSO 1	PSO 2
Attain ment	2.65	2.54	2.53	2.45	2.54	2.45	2.26	2.35	2.32	2.36	2.39	2.41	2.72	2.37
Direct Attain ment	2.66	2.61	2.45	2.55	2.62	2.44	2.39	2.52	2.38	2.32	2.33	2.37	2.71	2.36
Indire ct Attain ment	2.60	2.24	2.84	2.06	2.26	2.50	1.74	1.68	2.06	2.52	2.62	2.56	2.76	2.40

CRITERION 04	Students' Performance	150
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CRITERION4	Students' Performance	150
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4. STUDENTS' PERFORMANCE (150)

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY (2022-23)	CAYm1 (2021-22)	CAYm2 (2020-21)	CAYm3 (2019-20)	CAYm4 (2018-19)	CAYm5 (2017-18)	CAYm6 (2016-17)
Sanctioned intake of the program (N)	90	120	120	120	120	120	90
Total number of students admitted in first year minus number of students migrated to other programs/institutions plus no. of students migrated to this program (N1)	28	21	37	22	17	37	28
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	37	103	110	107	102	69
Separate division students, if applicable (N3)	0	0	0	0	0	0	0
Total number of students admitted in the Program (N1 + N2 + N3)	28	58	140	132	124	139	97

TableB.4a

CAY– Current Academic Year

CAYm1-Current Academic Year minus1 = Current Assessment Year

CAYm2- Current Academic Year minus2 = Current Assessment Year minus1

LYG– Last Year Graduate minus 1

LYGm 1– Last Year Graduate minus 1

LYGm 2– Last Year Graduate minus

Table no 4.2

Year of entry	N1+N2+N3 (As defined above)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog+ without Backlog]			
		I Year	II Year	III Year	IV Year
CAY(2022-23)	28				
CAY(2021-22)	58	10			
CAYm1(2020- 21)	140	20	96		
CAYm2(2019- 2020)	132	17	115	100	65
CAYm3(2018- 2019)	124	17	120	105	101
CAYm4 (LYG) (2017-18)	139	34	104	102	95
CAYm5 (LYGm1) (2016-17)	97	13	53	49	49

Year of entry	N1+N2+N3 (As defined above)	Number of students who have successfully graduated without backlogs in any semester/year of study (Without Backlog means no compartment or failures in any semester/year of study)			
		I Year	II Year	III Year	IV Year
CAY(2022-23)	28	-			
CAYm1(2021-22)	58	03	-		
CAYm2(2020-21)	140	12	52	-	
CAYm3(2019-2020)	132	17	92	66	64
CAYm4(2018-2019)	124	17	99	79	79
CAYm5 (LYG)(2017-18)	139	08	36	35	35
CAYm6 (LYGm1)(2016-17)	97	03	17	13	13

Table no 4.3

TableB.4c

4.1. Enrolment Ratio (20) Enrolment Ratio=N1/N

	N from table B.4a	N1 from table B. 4a	Enrollment ratio
CAY(2022-23)	90	28	31.11
CAYm1(2021-22)	120	21	17.5
CAYm2(2020-21)	120	37	30.83
Average Enrollment=(ER1+ER2+ER3)/3=(31.11+17.5+30.38)/3=26.48			

Item	Marks
(StudentsenrolledattheFirstYearLevelonaveragebasisduringthepreviousthreeacademicyearsstartingfromcurrentacademicyear)	

>=90%studentsenrolled	20
>=80%studentsenrolled	18
>=70%studentsenrolled	16
>=60%studentsenrolled	14
>=50%studentsenrolled	12
Otherwise	0

TableB.4.1

4.2. Success Rate in the stipulated period of the program (40)

4.2.1. Success rate without backlogs in any semester/year of study (25)

$SI = (\text{Number of students who have graduated from the program without backlog}) / (\text{Number of students admitted in the first year of that batch and actually admitted in 2}^{\text{nd}} \text{ year via lateral entry and separate division, if applicable})$

Average SI = Mean of Success Index (SI) for past three batches

Success rate without backlogs in any year of study = $25 \times \text{Average SI} = 25 \times 0.45 = 11.25$

Item	Last Year of Graduate, LYG (2022-2023)	Last Year of Graduate, minus1,LYG1 (2021-22)	Last Year of Graduate, minus2,LYG2 (2020-21)	Last Year of Graduate minus3,LYGm3 (2019-20)
Number of students admitted in the corresponding First Year+ admitted in 2 nd year via lateral entry and separate division, if applicable (x)	132	124	139	97
Number of students who have graduated without backlogs in the stipulated period(y)	64	79	36	13
Success Index(SI)=(y/x)	0.48	0.63	0.25	0.13
Average SI (SI1+SI2+SI3)/3	0.45	11.25		

TableB.4.2.1

4.2.2 Success rate in stipulated period of study (15)

$SI = (\text{Number of students who graduated from the program in the stipulated period of course duration}) / (\text{Number of students admitted in the first year of that batch and actual admitted in 2}^{\text{nd}} \text{ year via lateral entry and separate division, if applicable})$

Average SI = mean of Success Index (SI) for past three batches

Success rate = $15 \times \text{Average SI} = 15 \times 0.66 = 9.5$

Item	Last Year of Graduate, LYG (2022-2023)	Last Year of Graduate, minus 1, LYGm1 (2021-2022)	Last Year of Graduate minus 2, LYGm2 (2020-21)	Last Year of Graduate minus 3, LYGm3 (2019-2020)
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separated division, if applicable X	132	124	139	97
Number of students who have graduated in the stipulated period Y	65	101	95	49
Success Index (SI) = (y/x)	0.49	0.81	0.68	0.50
Average Success Index (SI1+SI2+SI3)/3	0.66	9.9		

Table B.4.2.2

4.3. Academic Performance in Third Year (15)

*Academic Performance=1.5*Average API (Academic Performance Index) (11.30)*

API=((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale)or(Mean of the percentage of marks of all successful students in Third Year/10))x(number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the final year.

Academic Performance	CAYm1 (2021-22)	CAYm2 (2020-21)	CAYm3 (2019-20)
Mean of CGPA or Mean Percentage of all successful students(X)	8.54	8.66	7.81
Total no. of successful students (Y)	100	105	101
Total no. of students appeared in the examination(Z)	115	120	104
API=x*(Y/Z)=	7.46	7.57	7.58
Average API =(AP1+AP2+AP3)/3	7.53		

TableB.4.3

4.4 Academic Performance in Second Year (15)

*Academic Performance Level=1.5*Average API (Academic Performance Index) 10.60*

API= ((Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year/10))x(number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the Third year.

Academic Performance	CAY (2021- 22)	CAYm1 (2020- 21)	CAYm2 (2019-20)
Mean of CGPA or Mean Percentage of all successful students(X)	7.84	8.59	7.53
Total no. of successful students(Y)	120	115	96
Total no. of students appeared in the examination(Z)	124	127	123
API=X*(Y/Z)	7.58	7.77	5.87
Average API=(AP1+AP2+AP3)/3	7.07		

TableB.4.4

4.5 Placement, Higher Studies and Entrepreneurship (32.80/40) =32.80

Assessment Points =40×averageplacement

Item	CAY (2021-22)	CAY _{m1} (2020-21)	CAY _{m2} (2019-20)
Total No. of Final Year Students(N)	101	95	49
No. of students placed in companies or Government Sector(x)	83	73	38
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.)(y)	5	1	1
No. of students turned entrepreneur in engineering/technology(z)	2	1	0
x+y+z=	90	75	39
Placement Index:(x+y+z)/N	0.89	0.78	0.79
Average placement=(P1+P2+P3)/3	0.82		

TableB.4.5s

4.5 A Provide the placement data in the below mentioned form at with the name of the program and the assessment year:

SR. NO	STUDENT NAME	ENROLLMENT NO.	EMPLOYEE NAME	APPOINTMENT NO
1	1965451612003	MADHAVE ROHIT KAILAS	Maharashtra Scooters LTD.Satara	TPC/1612/2022/003
2	1965451612004	YADAV OMKAR JAYANT	Shambhu Industries	TPC/1612/2022/004
3	1965451612007	YADAV ANIKET ANIL	Asia Tech Center, Pune	TPC/1612/2022/007
4	1965451612012	JAGADALE ANIKET RAJU	Shree Ganesh Industries, Satara	TPC/1612/2022/012
5	1965451612013	SHELAKHE RUPESH SUNIL	Shree Mahalaxmi services, Pune	TPC/1612/2022/013
6	1965451612014	SHINDE SANKET HEMANT	Divide by zero	TPC/1612/2022/014
7	1965451612015	GODASE MANOJ PANDURANG	SATARA ENGINEERING , PVT. LTD. SATARA	TPC/1612/2022/015
8	1965451612017	PAWAR PRAMOD BHIKU	KPIT Technologies Limited	TPC/1612/2022/017
9	1965451612018	ANIT BALWANT MORE	Align Engineering	TPC/1612/2022/018
10	1965451612020	LAD PRITHVIRAJ MASU	Sarvgram	TPC/1612/2022/020
11	1965451612021	LEMBHE AKASH AVINASH	Test Yantra Software Solutions, pune	TPC/1612/2022/021
12	1965451612025	SURYAWANSHI JAYRAM DIPAK	Cooper Corporation Pvt. Ltd	TPC/1612/2022/025
13	1965451612027	MAYUR DILIP MONDE	Sutra Systems India PVT LTD, Pune	TPC/1612/2022/027
14	1965451612028	DESAI PAVAN VIJAYKUMAR	BVG India Ltd, Satara	TPC/1612/2022/028

15	1965451612030	BHOITE DEEPAK AVINASH	Cooper Corporation PVT.LTD.Satara	TPC/1612/2022/030
16	1965451612032	JADHAV SUSHANT SAMADHAN	Shri Ganesh industries	TPC/1612/2022/032
17	1965451612033	JADHAV ROHIT PRADIP	Align Engineering	TPC/1612/2022/033
18	1965451612036	PRATIK SUDHAKAR SHINDE	Gs Peb civil works pvt. ltd.	TPC/1612/2022/036
19	1965451612037	KADAM OMKAR PRAVIN	AVM ELECTRICALS INDIA PVT. LTD	TPC/1612/2022/037
20	1965451612038	DUBAL NANDKUMAR SANJAY	Toshniwal Hyvac Pvt Ltd , Mumbai	TPC/1612/2022/038
21	1965451612040	LANKESHWAR ABHISHEK HANMANT	JJEPL,Satara	TPC/1612/2022/040
22	1965451612041	SHINDE PRAJWAL SUNIL	Prajwal Enterprises	TPC/1612/2022/041
23	1965451612043	BHASKAR ASHUTOSH SUBHASH	Orgatma Organic Science Pvt Ltd Satara	TPC/1612/2022/043
24	1965451612046	ATTAR AMAN AKBAR	Prajwal Enterprises	TPC/1612/2022/046
25	1965451612049	SHINDE PRATHMESH NIRAJ	Wipro	TPC/1612/2022/049
26	1965451612050	KHUSPE MAYUR SHANKAR	Cummins	TPC/1612/2022/050
27	1965451612051	SAWANT SHUBHAM RAJENDRA	Kinemach	TPC/1612/2022/051
28	1965451612052	JAGTAP GAURAV PRADIP	York Transport Equipments Pvt Ltd	TPC/1612/2022/052
29	1965451612054	PAWAR VAIBHAV ANANDA	Align Engineering	TPC/1612/2022/054
30	1965451612056	KADAM SWAPNIL MOHAN	PR Engineering Satara	TPC/1612/2022/056
31	1965451612057	PAWAR ASHISH BHIKU	SKF India Limited,Pune	TPC/1612/2022/057

32	1965451612059	ADHISHRI SHIVAJI PAWAR	Shri Sai Civil And Techno Engg Pvt Ltd	TPC/1612/2022/059
33	1965451612060	PANDHARPATTE AJINKYA KALIDAS	Tri Tech Metals Pvt Ltd, Satara	TPC/1612/2022/060
34	1965451612061	MALI KISHOR KUMAR	Yashaswi	TPC/1612/2022/061
35	1965451612063	KADAM CHANDRASEN BHARAT	ACPL	TPC/1612/2022/063
36	1965451612066	ASAWALE ROHIT GHANASHAM	Forbes Marshal Pvt Ltd, Pune	TPC/1612/2022/066
37	1965451612071	SURYAWANSHI PRATIKSHA RAVINDRA	Mahekar Engineers	TPC/1612/2022/071
38	1965451612072	CHAVAN SHWETA HANMANTRAO	Faurecia Interiors	TPC/1612/2022/072
39	1965451612073	KAMTHE SHRIRAM SHASHIKANT	Nilsan Engineering solutions	TPC/1612/2022/073
40	1965451612074	PATIL ROHIT RAVINDRA	Pan Gulf Technologices	TPC/1612/2022/074
41	1965451612077	SHEWALE MAYURI BHIMRAO	Delfingen	TPC/1612/2022/077
42	1965451612081	MOHITE VAIBHAV VASANT	Prajwal Enterprises	TPC/1612/2022/081
43	1965451612091	PAWAR VAIBHAV RAJARAM	PR Engineering Satara	TPC/1612/2022/091
44	1965451612092	KANASE RAVIRAJ DADASAHEB	Shri Ganesh Industries	TPC/1612/2022/092
45	1965451612094	OMKAR ANIL DHOLE	Bharat Forge	TPC/1612/2022/094
46	1965451612099	DESHMUKH ROHAN PANDURANG	Ajinkyatara Automotives Pvt .Ltd	TPC/1612/2022/099
47	1965451612103	SHEWALE NIKHIL VILAS	Renuka Enterprises	TPC/1612/2022/103
48	1965451612109	BHILARE OMKAR LAXMAN	Prajwal Enterprises	TPC/1612/2022/109

49	1965451612110	PAWAR SAGAR DILIP	AVM ELECTRICALS INDIA PVT. LTD	TPC/1612/2022/110
50	1965451612111	JADHAV RUSHIKESH MAHADEV	Yashvantrao Technical And Training foundation	TPC/1612/2022/111
51	1965451612112	AHIRE AKSHAY ARUN	Auto choice	TPC/1612/2022/112
52	1965451612113	JAMBHALE AKSHAY MARUTI	Auto choice	TPC/1612/2022/113
53	1965451612114	DESAI RANJEET BHASKAR	Auto choice	TPC/1612/2022/114
54	1965451612116	SAWANT NIKITA NAMADEV	Universal Solution,Pune	TPC/1612/2022/116
55	1965451612118	THORAT VAIBHAV RAVINDRA	Profound Edutech, Pune	TPC/1612/2022/118
56	1965451612120	KITTUR KEDAR SAHADEV	Forbes Marshal Pvt Ltd, Pune	TPC/1612/2022/120
57	1965451612121	SALUNKHE NILESH SUNIL	Renuka Enterprises	TPC/1612/2022/212
58	PRN:51654520181161210096	KADAM ABHIJEET DEEPAK	AVM ENGINEERING	TPC/1612/2022/0096
59	PRN:51654520181161210098	DHANE NIKHIL SUNIL	Ajinkyatara Automotives Pvt .Ltd	TPC/1612/2022/0098
60	PRN:51654520181161210099	POWAR ASHUTOSH ANIL	Renuka Enterprises	TPC/1612/2022/0099
61	PRN:51654520181161210109	KUMBHAR GANESH SURESH	Shri Jagadamba Engineering Works,Satara	TPC/1612/2022/0109
62	PRN:51654520181161210110	BHOSALE PRATHAMESH PRAMOD	Shriann Plastiv Pvt. Ltd.	TPC/1612/2022/0110
63	PRN:51654520181161210111	PAWAR RAJESH RAMCHANDRA	Shambhu Industries	TPC/1612/2022/0111
64	1965451612005	JADHAV SURAJ BAJIRAO	Om Enterprises,Satara	TPC/1612/2022/005
65	1965451612011	SOURAV TIKADAR	ATHRAV ENGINEERING	TPC/1612/2022/011

66	1965451612023	PATIL SHUBHAM SANJAY	Zerg Corporation Satara	TPC/1612/2022/023
67	1965451612034	TAVARE SHAMBHURAJ KUBER	Zerg Corporation Satara	TPC/1612/2022/034
68	1965451612039	SUTAR JYOTI DATTATRAYA	ATHRAV ENGINEERING	TPC/1612/2022/039
69	1965451612042	KANASE AKASH RAJENDRA	Shambhu Industries	TPC/1612/2022/042
70	1965451612044	JADHAV OMKAR PRAKASH	Gholap Engineering Works	TPC/1612/2022/044
71	1965451612053	SHINDE KUNAL NARAYAN	Shambhu Industries	TPC/1612/2022/053
72	1965451612055	CHAVAN SHUBHAM SANJAY	Gholap Engineering Works	TPC/1612/2022/055
73	1965451612064	SURYAWANSHI HRUSHIKESH PRAKASH	Gholap Engineering Works	TPC/1612/2022/064
74	1965451612090	MUJAWAR NAYUM AJIM	Om Enterprises,Satara	TPC/1612/2022/090
75	1965451612093	SHINDE VEDANT VIKAS	Renuka Enterprises	TPC/1612/2022/093
76	1965451612098	PAWAR ABHIJIT PRADEEP	Zerg Corporation Satara	TPC/1612/2022/098
77	PRN:51654520181161210103	BHOSALE NIKHIL BHAUSO	Om Enterprises,Satara	TPC/1612/2022/0103
78	PRN:51654520181161210104	GHORPADE HARSHADA RAMDAS	Zerg Corporation Satara	TPC/1612/2022/0104
79	PRN:51654520181161210105	JAGTAP RUSHIKESH MADHUKAR	Gholap Engineering Works	TPC/1612/2022/0105
80	PRN:51654520181161210107	GAIKWAD ANIKET SACHIN	Om Enterprises,Satara	TPC/1612/2022/0107
81	PRN:51654520181161210108	PANASKAR PRATIK CHANDRAKANT	ATHRAV ENGINEERING	TPC/1612/2022/0108
82	PRN:51654520181161210112	DESAI MUSKAN NISAR	Renuka Enterprises	TPC/1612/2022/0112

83	PRN:51654520181161210113	CHAVAN RUSHIKESH DASHARATH	Gholap Engineering Works	TPC/1612/2022/0113
84	1965451612048	ASMITA ANANDA BHOSALE	International university of Applied Science, Berlin	Higher Studies
85	1965451612105	BHOSALE INDRAJEET LAXMAN	LLB	Higher Studies
86	1965451612106	JADHAV SWAPNIL SITARAM	Centre For Development Of Advanced Computing Admission To PG Diploma Course September 2022	Higher Studies
87	PRN:51654520181161210102	GHADAGE KISHOR LAXMAN	International university of Applied Science, Berlin	Higher Studies
88	PRN:51654520181161210106	PUSTAKE UTKARSH RAVINDRA	International University of Applied Sciences	Higher Studies
89	1965451612089	POL YOGESH SHIVAJI	Food Industries	ENTERPRENATURE
90	1965451612095	GHORPADE AKSHAY GULAB	Om Bhawanimata Motors and Car Care	ENTERPRENATURE

PLACEMENT 2020-2021

SR. NO	STUDENT NAME	ENROLLMENT NO.	EMPLOYEE NAME	APPOINTMENT NO
1	PRN:51654520171161210001	ABHISHEK SHANKARRAO KATKAR	Shambhu Industeies	TPC/1612/2021/001
2	PRN:51654520171161210002	ANIL SHIVAJI HASABE	DESCOSOLUTIONS PVT LTD	TPC/1612/2021/002
3	PRN:51654520171161210004	SHINDE INDRAJIT VILAS	CEE Engineering Pvt ltd Pune	TPC/1612/2021/004
4	PRN:51654520171161210005	SHRADDHA YASHWANT BHOSALE	Infosys	TPC/1612/2021/005
5	PRN:51654520171161210007	SURAJ ANIL SUTAR	OM EMTERPRISE, SATARA	TPC/1612/2021/007
6	PRN:51654520171161210010	NAGARGOJE KRISHANA POPAT	TBK India Private Limited	TPC/1612/2021/010
7	PRN:51654520171161210012	MULIK AKASH DIPAK	Zerg Corporation Satara	TPC/1612/2021/012
8	PRN:51654520171161210013	SHIRKE MAYUR NAMDEV	Auto Choice	TPC/1612/2021/013
9	PRN:51654520171161210014	SIDDHANT SANJAY WAJE	Ajinkyatara Automotives Pvt.Ltd.	TPC/1612/2021/014
10	PRN:51654520171161210015	KUMBHAR SIDDHESH DATTATRAYA	OM EMTERPRISE, SATARA	TPC/1612/2021/015
11	PRN:51654520171161210016	SUTAR SACHIN BASAVRAJ	Datametica Solutions Pvt Ltd	TPC/1612/2021/016
12	PRN:51654520171161210017	S MOHAMEDRAFEEQ M SADAKKATHULLA	Shriann Plastic Pvt.Ltd.	TPC/1612/2021/017
13	PRN:51654520171161210018	PATIL DHIRAJ SHAMRAO	OM EMTERPRISE, SATARA	TPC/1612/2021/018
14	PRN:51654520171161210020	BHOSALE ROHIT MOHAN	Precise Systems Satara	TPC/1612/2021/020
15	PRN:51654520171161210021	PADWAL SHUBHAM SHIVAJI	Atharva Engineering, Satara	TPC/1612/2021/021
16	PRN:51654520171161210022	AVINASH RAMESH MATRE	Pando Software Consultants, Noida	TPC/1612/2021/022

17	PRN:51654520171161210023	KADAM VAIBHAV SUBHASH	OM JAI ASSOCIATE	TPC/1612/2021/023
18	PRN:51654520171161210024	PATIL DIGVIJAY RAVINDRAKUMAR	TCS	TPC/1612/2021/024
19	PRN:51654520171161210027	ASAWALE SURAJ DNYANDEV	Ajinkyatara Automotives Pvt.Ltd.	TPC/1612/2021/027
20	PRN:51654520171161210030	AKSHATA BABANRAO SHEDGE	Precision Group, Pune	TPC/1612/2021/030
21	PRN:51654520171161210031	DAREKAR ANIKET AVINASH	PR Engineering Satara	TPC/1612/2021/031
22	PRN:51654520171161210035	RAJESH MANSING MORE	Shri Ganesh Industries	TPC/1612/2021/035
23	PRN:51654520171161210036	LONDHE RANJIT DEVANAND	Shriann Plastic Pvt.Ltd.	TPC/1612/2021/036
24	PRN:51654520181161210001	NIKAM AKASH SUNIL	Seinumero Nirman Pvt Ltd, Pune	TPC/1612/2021/0001
25	PRN:51654520181161210002	PATIL JEEVAN JAYWANT	Renuka Enterpriese	TPC/1612/2021/0002
26	PRN:51654520181161210004	JADHAV SHUBHAM KISAN	SLE TECHNOLOGY CONSULTING INDIA PRIVATE LIMITED	TPC/1612/2021/0004
27	PRN:51654520181161210007	GOGAWALE DHANRAJ LAXMAN	AVM Engineeering	TPC/1612/2021/0007
28	PRN:51654520181161210008	KANKEKAR YOGESH ASHOK	HNB	TPC/1612/2021/0008
29	PRN:51654520181161210010	KODAG SHUBHAM BABAN	Wipro	TPC/1612/2021/0010
30	PRN:51654520181161210014	CHAVAN AKASHAY MAHADEO	Shriann Plastic Pvt.Ltd.	TPC/1612/2021/0014
31	PRN:51654520181161210015	JADHAV GANESH MADHUKAR	Satara Engineering Works	TPC/1612/2021/0015
32	PRN:51654520181161210017	ASAWALE SHARAD PRAKASH	TCS	TPC/1612/2021/0017

33	PRN:51654520181161210018	CHAVAN PRATIK PRADIP	Shri Ganesh Industries	TPC/1612/2021/0018
34	PRN:51654520181161210020	MANDHARE ALPESH SHIVAJI	EveryIndia Pvt Ltd, Bangalore, 8067387000	TPC/1612/2021/0020
35	PRN:51654520181161210021	SHINDE AKSHAY ARVIND	Ajinkyatara Automotives Pvt.Ltd.	TPC/1612/2021/0021
36	PRN:51654520181161210022	SHINDE ANIKET CHANDRASHEKHAR	Cognizant	TPC/1612/2021/0022
37	PRN:51654520181161210023	CHAVAN AKASH SANJAY	GHO	TPC/1612/2021/0023
38	PRN:51654520181161210026	SHINDE PUJA PRAKASH	Infosys	TPC/1612/2021/0026
39	PRN:51654520181161210027	PAWLE HRITUJA RAMAKANT	TCS	TPC/1612/2021/0027
40	PRN:51654520181161210028	HERKAL SHRIKANT KRISHNA	JCB India Ltd, Pune	TPC/1612/2021/0028
41	PRN:51654520181161210029	SURYAWANSHI APARNA VASANT	Tata AutoComp Gotion Green Energy Solutions Private Limited	TPC/1612/2021/0029
42	PRN:51654520181161210030	PATIL SNEHAL JAGANNATH	TCS	TPC/1612/2021/0030
43	PRN:51654520181161210031	LAD KAVITA RAJESH	SIEMENS	TPC/1612/2021/0031
44	PRN:51654520181161210032	DESHMUKH AISHWARYA SANTOSH	TCS	TPC/1612/2021/0032
45	PRN:51654520181161210034	GAIKWAD VISHAL RAJU	Gurukrupa Industries, Pune 0206521004	TPC/1612/2021/0034
46	PRN:51654520181161210035	HARANE DIGAMBAR ASHOK	Teknovance Solutions Pvt. Ltd., Pune	TPC/1612/2021/0035
47	PRN:51654520181161210038	DHOTRE SHUBHAM CHANDRAKANT	BigLeap Technologies & Solutions Pvt ltd, Pune	TPC/1612/2021/0038
48	PRN:51654520181161210039	BAGANE VIVEK VIJAYKUMAR	Shree SVS System Pune	TPC/1612/2021/0039
49	PRN:51654520181161210040	KAKADE AJAY SANJAY	AVM Engineeering	TPC/1612/2021/0040

50	PRN:51654520181161210041	PANDHARPURE RUGVEDA RAMESH	AVM Engineering	TPC/1612/2021/0041
51	PRN:51654520181161210043	PAWAR AJIT SANJAYKUMAR	Satara Engineering Works	TPC/1612/2021/0043
52	PRN:51654520181161210044	SAPKAL AMIT KISAN	HEF SHINE , PUNE	TPC/1612/2021/0044
53	PRN:51654520181161210048	SHINDE YOGESH RAOSAHEB	Shambbu Industries	TPC/1612/2021/0048
54	PRN:51654520181161210049	SALUNKHE AKASH LAHU	Zerg Corporation Satara	TPC/1612/2021/0049
55	PRN:51654520181161210050	SUTAR ABHISHEK BALIRAM	AVM ELECTRICALS	TPC/1612/2021/0050
56	PRN:51654520181161210051	SURYAWANSHI AASHUTOSH AVINASH	Atharva Engineering, Satara	TPC/1612/2021/0051
57	PRN:51654520181161210053	NAWAJ ASLAM PATEL	Auto Choice	TPC/1612/2021/0053
58	PRN:51654520181161210054	SANKPAL ADITYA PRAVIN	PR Engineering Satara	TPC/1612/2021/0054
59	PRN:51654520181161210055	SAWANT SHUBHAM DATTATRAY	Infosys	TPC/1612/2021/0055
60	PRN:51654520181161210058	ROHILE NIHAL ANJUMANALLI	Infosys	TPC/1612/2021/0058
61	PRN:51654520181161210062	PAWAR SUSHANT VASANT	TATA	TPC/1612/2021/0062
62	PRN:51654520181161210065	GURAV AKSHAY SHIRISH	Atharva Engineering, Satara	TPC/1612/2021/0065
63	PRN:51654520181161210072	PAWAR SUSHANT DAYANAND	Sindhuraj Solar, Sangli	TPC/1612/2021/0072
64	PRN:51654520181161210073	KADAM UMESH BHIMARAO	PR ENGINEERING , SATARA	TPC/1612/2021/0073
65	PRN:51654520181161210074	PAWAR JAYADEEP JAGADEV	Sindhuraj Solar, Sangli	TPC/1612/2021/0074
66	PRN:51654520181161210077	HIRUGADE VIKAS SHIVAJI	YTTF	TPC/1612/2021/0077

67	PRN:51654520181161210079	KADAM PUSHPAL NAYAKU	Teamlease Services Ltd	TPC/1612/2021/0079
68	PRN:51654520181161210083	CHAVAN KIRAN VITTHAL	Pajanjape Autocast Pvt Ltd, Satara	TPC/1612/2021/0083
69	PRN:51654520181161210085	NAWADKAR RUPESH BHASKAR	Zerg Corporation Satara	TPC/1612/2021/0085
70	PRN:51654520181161210086	CHAVAN ROHIT SHANKAR	Auto Choice	TPC/1612/2021/0086
71	PRN:51654520181161210088	BHOSALE PRATIK NARENDRA	Sindhuraj Solar, Sangli	TPC/1612/2021/0088
72	PRN:51654520181161210092	NADAF WASEEM HARUN	Three D Magic Info Solution Pvt Ltd	TPC/1612/2021/0092
73	PRN:51654520181161210129	PATEL ARBAAJ JIYAUDIN	Cognizant	TPC/1612/2021/0129
74	PRN:51654520171161210033	CHAVAN PRATHMESH PRAVIN	HIGHER STUDY	HIGHER STUDY
75	PRN:51654520181161210067	AGRAWAL RATIK KAPIL	Entrepreneur	Entrepreneur

PLACEMENT 2019-2020

SR. NO	STUDENT NAME	ENROLLMENT NO.	EMPLOYEE NAME	APPOINTMENT NO
1	PATIL ANIKET	2016102802	TECHTREE IT SYSTEMS PVT LTD, MUMBAI	TPC/1612/2020/802
2	PISAL SONALI	2016102805	INFOSYS	TPC/1612/2020/805
3	BARGE AJINKYA	2016102808	ULTRA ENGINEERS, PUNE	TPC/1612/2020/808
4	SABALE AKSHAY	2016102814	SINDHURAJ SOLAR, SANGLI	TPC/1612/2020/814
5	PATIL SHUBHAM	2016102817	Ajinkyatara Automotive Pvt.Ltd	TPC/1612/2020/817
6	MANE KETAN	2016102818	ZERG CORPORATION, SATARA	TPC/1612/2020/818
7	KALE HARIDAS	2016102822	SINDHURAJ SOLAR, SANGLI	TPC/1612/2020/822
8	MANE SUSHANT	2016102824	TVH INDIA	TPC/1612/2020/824
9	NIKAM SOURABH	2016102825		TPC/1612/2020/825
10	PATIL RAVINA	2017106584	ZERG CORPORATION, SATARA	TPC/1612/2020/584
11	SURWASE SHUBHAM	2017106585	TCSL	TPC/1612/2020/585
12	DALAVI KIRAN	2017106586	INDIAN ARMY	TPC/1612/2020/586
13	MANE ONKAR	2017106588	INFOSYS, PUNE	TPC/1612/2020/588
14	SHINDE MEGHA	2017106591	WIPRO PARI INDUSTRIES, SHIRVAL	TPC/1612/2020/591
15	PATIL PRAGATI	2017106594	UTKARSH TRASMISSION PVT LTD	TPC/1612/2020/594
16	SAWANT PRAVIN	2017106598	BYJU'S	TPC/1612/2020/598

17	PAWAR SANKET	2017106601	Ajinkyatara Automotive Pvt.Ltd	TPC/1612/2020/601
18	MANE MAYUR	2017106606	INDIAN POST	TPC/1612/2020/606
19	MANE SARIKA	2017106609	OGNIBENE	TPC/1612/2020/609
20	WAGHMARE SHUBHAM	2017106610	Align Engineering	TPC/1612/2020/610
21	SABALE SOMNATH	2017106611	LOGICON TECHNOSOLUTIONS PVT LTD, PUNE	TPC/1612/2020/611
22	SATRE AKSHAY	2017106613	GHADAGE PATIL INDUSTRIES LTD KOLHAPUR	TPC/1612/2020/613
23	WAINGADE RAMDAS	2017106616	Shri Ganesh Industries	TPC/1612/2020/616
24	YEJARE SANGRAMSINGH	2017106617	TARA TOOLS, PUNE	TPC/1612/2020/617
25	MALUSARE VISHAL	2017106618	SATARA ENGINEERING, SATARA	TPC/1612/2020/618
26	PATIL PRATIKSHA	2017106619	INFOSYS	TPC/1612/2020/619
27	NAIK SANGRAM	2017106623	Align Engineering	TPC/1612/2020/623
28	JADHAV ANIKET	2017106624	OM ENTERPRISE, SATARA	TPC/1612/2020/624
29	JADHAV AMOL	2017106625	ATHARV ENGINEERING, SATARA	TPC/1612/2020/625
30	JADHAV ROHAN	2017106626	SINDHURAJ SOLAR, SANGLI	TPC/1612/2020/626
31	YEWALE VIKRAM	2017106629	GHO	TPC/1612/2020/629
32	PARAMANE AKSHAY	2017106636	VARROC ENGINEERING LTD	TPC/1612/2020/636
33	SHETE OMKAR	2017106638	SPACO TECHNOLOGIES INDIA PVT LTD, PUNE	TPC/1612/2020/638
34	MANE SURAJ	2017106640	OM ENTERPRISE, SATARA	TPC/1612/2020/640

35	JADHAV PRANIL	2017106646	ATHARV ENGINEERING, SATARA	TPC/1612/2020/646
36	CHAVAN SANKET	2017106647	NIPRO INDIA CORPORATION, SHIRWAL	TPC/1612/2020/647
37	JADHAV RAHUL	2017106652	Tagloy Media Pvt.Ltd	TPC/1612/2020/652
38	BHABAN RUSHIKESH	2017106656	INFOSYS, PUNE	TPC/1612/2020/656
39	SHIVANI KAKADE	2017106643	M.TECH	AGCE, SATARA

Table B.4.5a

4.6. Professional Activities (/20)

4.6.1 Professional societies/chapters and organizing engineering events (5)

YEAR 2022-23

SR.No	Name Of Activity	Date	Resorce Person	Type of activity (Guest Lecture/Quiz/Project Competition/workshop)
1	AVISHKAR 2022-2023	18-11-2022	Dr. S.V. Khobharagade	Research Convention Project Computation
2	Guest lecture on Management Studies	14-12-2022	Dr. Pranjali Ankule	Guest Lecture
3	Skill based Training Program	06-01-2023	Symboisis Skills and Professional University (SSPU)	Guest Lecture
4	IT Career in digital marketing (AJDM)	10-03-2023	Mr. Ajinkya Pawar (AJDM, India)	Guest Lecture
5	Opportunities in IT Industry & Japan	03-05-2023	Mr.Bipin Kadam	Guest Lecture
6	Recent Trends and opportunities in IT	19-05-2023	Mr. Shivraj Gaikwad (Rapportsoft Consulting Pune)	Guest Lecture
7	ICIRTES-2023 , INTERNATIONAL CONFERENCE ON INNOVATIONS AND RECENT TRENDS IN ENGINEERING AND SCIENCE	10-06-2023	Dr. Vilas Pharande	INTERNATIONAL CONFERENCE
8	Project competition	24-12-2023	Dr. Salmanwarimani	Project competition
9	Solid Work	07/12/2022 to 15/02/2023	Mahesh Sathe Design solution	Workshop

10	"Mechatronics and Automation	16/12/2022 to 17/12/2022	"Mechatronics and Automation	Guest lecture
11	Corporate Grooming	21-02-2023 to 23-02-2023	Mr George	Guest Lecture
12	Guest lecture on Software Testing	05-05-2023	Mr Suraj Sawant	Guest Lecture
13	C, C++ on Turbo C and HTML	01/08/2023 to 14/08/2023	Mr. Swapnil Mapari Disha Computers, Satara	Workshop
15	C, C++ and Advance Java	07/08/2023 to 11/08/2023	Mr. Nilesh Sonawane Design Solution, Karad	Workshop
16	AutoCAD	10/08/2023 To 18/08/2023	Mr. Mahesh Sathe Design Solution, Karad	Workshop
17	PCB Design and Manufacturing	07/08/2023 To 18/08/2023	Mr. Pravin Mohite Apron Tech Pvt. Ltd. Satara	Workshop
18	C, C++ and Python	07/08/2023 To 18/08/2023	Mrs. Pranali Nalawade Squirrel's Infotech, Satara	Workshop
19	Automation in IOT	01/08/2023 To 31/08/2023	Mr. Tushar Inamdar Squarewave Automation Pvt. Ltd. Satara	Workshop

Professional Chapter 2022-2023

Sr.No	NAME OF CHAPTER	MEMBERSHIP NAME	NO./YEAR	MEMBERSHIP DURATION
1	THE INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE)	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	MH-313/2023	LIFE TIME

Professional Activities 2021-2022

SR.No	Name Of Activity	Date	Resource person	Type of activity(Guest Lecture/Quiz/Project Competition/workshop)
1	Guest lecture on competitive examination	06-04-2022	Mr. Akshay Jadhav	Guest Lecture
2	Workshop on CATIA	26/11/21 to 21/1/2022	Mahesh Sathe	Workshop
3	Workshop on Creo 3.0	26/1/22 to 27/2/2022	Mahesh Sathe	Workshop
4	Quality circle lecture in Electrical Vehical	03-03-2022	Mr. Suraj Ghadage	Guest lecture
5	Quality circle lecture in Verious Teaching Metod	17-04-2022	Mr. Patil Suhas P.	Guest lecture
6	Quality circle lecture on 3D printing	19-05-2022	Mrs. Alatkhar M.N.	Guest lecture
7	Quality circle lecture on FFT analyzer	05-10-2021	Mr. Arjun Kadam	Guest lecture
8	Expert Lecture on Industrial Engineering	01-02-2022	Dr A.B.Gholap, Asst Prof MMCOE Pune	Online Lecture
9	Expert Lecture on Heat Transfer	01-02-2022	Dr Choudhari C.S. AISSMS Pune	Online Lecture
10	Expert Lecture on Metrology and Quality control	05-02-2022	Mr Vikram Pawar	Online Lecture
11	Expert Lecture on Material science and Metallurgy	28-01-2022	Dr Shirguppikar Shailesh RIT Islampur	Online Lecture
12	Expert Lecture on Applied Thermodynamics	28-01-2022	Mr Pujari A.S. Resarch Scholar IIT Bombay	Online Lecture
13	Expert Lecture on Manufacturing processes-III	28-01-2022	Ms Dhende Geetanjali GCE,Karad	Online Lecture
14	Expert Lecture on Theory of Machines-II	29-01-2022	Mr Manik Patil DYPIT Pimpri	Online Lecture

15	Expert Lecture on Fluid mechanics &Hydraulics-I	01-02-2022	Dr. Mahesh Bhong Indira College of Engg and Mgmt	Online Lecture
16	Expert Lecture on CAD/CAM	02-01-2022	Mr Mahesh Sathe Design Solution Pvt Ltd.Pune	Online Lecture
17	Expert Lecture on Thermodynamics	29-01-2022	Mr Tapase V.N BSCOER,Pune NKOCET,Solapur	Online Lecture
18	Expert Lecture on Engineering Maths-III	27-01-2022	Amol Kalange	Online Lecture
19	Internal Hackthon of Smart India Hackthon 2022	28-04-2022 to	Dr Mirajkar Gayatri	Project Competition
20	English Speaking Session	1-05-2022 to 30-06-2022	Mr. Kale Abhay .A. (A.G.C.E., Satara)	Regular session
21	Campus To Corporate	1-05-2022 to 30-06-2022	Ms. Bhilare Nikita.S.	Regular session
22	German Language Training Program for promoting Students for M.S. opportunities in Germany.	1-03-2022 to 30-06-2022	Mrs. Sunita Shaligram (Trainer Chinmay Educational Consultancy, Pune	Regular session
23	Brand Yourself	17-05-2022 to 19-05-2022	Mr. George	Workshop
24	Yuva 360 degree Internship	14-06-2022	Mrs Patil Rachana Sarange	Workshop

Professional Societies 2021-2022

Sr.No	Name of Students	Date of membership	Name of membership	MEMBERSHIP NO
1	ANIRUDHA SANJAY KADAM	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311150

2	ARTI SANJAY GAIKWAD	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311151
3	PANVELKAR AISHWARYA SHARAD	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311153
4	AMRUTA ANKUSH DESHMUKH	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311154
5	HASAN ALLUDHIN SHAIKH	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311155
6	SANJANA SAMBAJI JADHAV	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311156
7	DESHMUKH SHUBHANGI SADASHIV	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311157
8	SURYAWANSHI SHIVANI BABASO	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311158
9	SURYAWANSHI SHAILAJA SATYANAYARAYAN	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311159
10	KANDGAL VILAS DODAPPA	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311160
11	MATKAR AKANSHA DATTATRAY	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311161
12	KAMBLE VAISHNAVI SATISH	04-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	311165
13	PRAVIN ANKUSH JADHAV	25-05-2022	IAENG , INTERNATIONAL ASSOCIATION OF ENGINEERS	312394

Professional Activities 2020-2021

SR.No	Name Of Activity	Date	Type of activity(Guest Lecture/Quiz/Project Competition/workshop)
1	Prepare yourself for Abroad opportunities (M.S./ M.B.A) by	26-11-2020	Online Guest Lecture
2	How to Crack Gate Examination	05-12-2020	Online Guest Lecture

3	Online webinar on Intellectual property right	28-05-2021	Online Guest Lecture
4	Conducted guest lecture on Civil Services as a Career choice	05-11-2020	Online Guest Lecture
5	Conducted guest lecture on Career Opportunities in Banking Sectors	11-11-2020	Online Guest Lecture
6	Conducted guest lecture on Career Opportunities after B. Tech	05-11-2022	Online Guest Lecture
7	Conducted guest lecture on Attitude building for professional Excellence	23rd Nov 2020	Online Guest Lecture
8	Conducted guest lecture on Career in Software Testing, Prerequisites	9th May 2021	Online Guest Lecture
9	Conducted guest lecture on development of communication skills	24th Nov 2020	Online Guest Lecture
10	Conducted guest lecture on Expectations from the Young Professionals	16th April 2021	Online Guest Lecture
11	Conducted guest lecture on Yoga for Physical and Mental Health	1st December 2020	Online Guest Lecture
12	Conducted guest lecture on Industrial Talk on Carrier start-up funding	17th April 2021	Online Guest Lecture
13	Conducted Expert lecture on Career Options and opportunities for Electronics Graduates	26th April 2021	Online Guest Lecture
14	Conducted Guidance session on Entrepreneurship	25th April 2021	Online Guest Lecture
15	Conducted guest lecture on Industrial Skill requirements and Job opportunities	02-Mar-21	Online Guest Lecture
16	Conducted guest lecture on Women's day and Self defense session	9th March 2021	Online Guest Lecture
17	Conducted Alumni guest lecture on Industrial Automation	6th November 2020	Online Alumni Guest Lecture
18	Conducted Online guest lecture on Career scope for Industrial Automation	2nd March 2021	Online Alumni Guest Lecture

4.6.2 Publication of technical magazines, newsletters, etc. (5)

(The Department shall list the publications mentioned earlier along with the names of the editors, publishers, etc.)

Sr No	Name of News letter	Year	Name of Editor	Publisher	Type
1	GEARING	2019-2020	Mr. Ravi Raju Kamble	Arvind Gavali College of Engineering Satara	YEARLY
2	GEARING	2020-21	Mr. Ravi Raju Kamble	Arvind Gavali College of Engineering Satara	YEARLY
3	GEARING	2021-22	Mr. Ravi Raju Kamble	Arvind Gavali College of Engineering Satara	YEARLY
4	GEARING	2022-23	Mr. Arjun Kadam	Arvind Gavali College of Engineering Satara	YEARLY

Following students are collecting the data & make it ready for the newsletter under the supervision of upper mention faculty

Sr No	Name of News letter	Year	Name of Editor	Publisher	Type
1	GEARING	2020-2021	Patil Snehal Jagannath	Arvind Gavali College of Engineering Satara	YEARLY
2	GEARING	2021-2022	Pustake Utkarsh Ravindra	Arvind Gavali College of Engineering Satara	YEARLY
3	GEARING	2022-2023	Kadam Anirudha Sanjay	Arvind Gavali College of Engineering Satara	YEARLY
4	GEARING	2022-2023	Aditya Vaibhav Sutar	Arvind Gavali College of Engineering Satara	YEARLY

4.6.3 Participation in inter-institute events by students of the program of study (10)**YEAR 2022-23**

SR.NO	NAME OF STUDENTS	RANK	NAME OF EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1	MR. ANIRUDDHA SANJAY KADAM	WINNER	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
2	MISS. ARTI SANJAY GAIKWAD	WINNER	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
3	MR. AKANKSHYA MATKAR	Runner	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
4	KUTALE HARISH S.	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
5	MS.GALVE KAJAL SANJAY	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
6	HASAN SHAIKH	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
7	DESHMUKH SHUBHANGI S.	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
8	KANDGAL VILAS D.	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
9	SURYAWANSHI SHAILAJA S.	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
10	SURYAWANSHI SHIVANI S.	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
11	AISHWARYA PANVELKAR	PARTICIPANT	AVISHKAR 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18-11-2022
12	MR. ANIRUDDHA SANJAY KADAM	PARTICIPANT	AVISHKAR 2022	ZONAL	SHRAD INSTITUTE OF TECHANOLGY, YADRAV	10-12-2022
13	MISS. ARTI SANJAY GAIKWAD	PARTICIPANT	AVISHKAR 2022	ZONAL	SHRAD INSTITUTE OF TECHANOLGY, YADRAV	10-12-2022

14	MR. AKANKSHYA MATKAR	PARTICIPANT	AVISHKAR 2022	ZONAL	SHRAD INSTITUTE OF TECHANOLOGY, YADRAV	10-12-2022
15	HASAN SHAIKH	PARTICIPANT	CAD WAR 3D	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
16	MR. ANIRUDDHA SANJAY KADAM	RUNNER	CAD WAR 3D	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
17	HASAN SHAIKH	PARTICIPANT	ASSEMBLY MAKING	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
18	KUTALE HARISH S.	PARTICIPANT	ASSEMBLY MAKING	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
19	PRAVIN JADHAV	PARTICIPANT	ASSEMBLY MAKING	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
20	MS.GALVE KAJAL SANJAY	PARTICIPANT	PROJECT COMPETITION	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
21	MISS. ARTI SANJAY GAIKWAD	PARTICIPANT	PROJECT COMPETITION	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
22	MR. ANIRUDDHA SANJAY KADAM	PARTICIPANT	PROJECT COMPETITION	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
23	HASAN SHAIKH	PARTICIPANT	PROJECT COMPETITION	STATE LEVEL	PHALTAN EDUCATION SOCIETYS COLLEGE OF ENGINEERING, PHALTAN	24-02-2023
24	MR. ANIRUDDHA SANJAY KADAM	WINNER	TECHNO VISION 2023	NATIONAL LEVEL	JSPM,NAHRE PUNE	01-03-2023
25	HASAN SHAIKH	PARTICIPANT	SPECTRUM 2K23	ZONAL	DR. DAULATRAO AHER COLLEGE OF ENGINEERING,KARAD	21-03-2023
26	KUTALE HARISH S.	PARTICIPANT	SPECTRUM 2K23	ZONAL	DR. DAULATRAO AHER COLLEGE OF ENGINEERING,KARAD	21-03-2023
27	KUTALE HARISH S.	PARTICIPANT	SPECTRUM 2K23	NATIONAL LEVEL	DR. DAULATRAO AHER COLLEGE OF ENGINEERING,KARAD	21-03-2023
28	MR. ANIRUDDHA SANJAY KADAM	PARTICIPANT	SPECTRUM 2K24	NATIONAL LEVEL	DR. DAULATRAO AHER COLLEGE OF ENGINEERING,KARAD	22-03-2023
29	KUTALE HARISH S.	PARTICIPANT	EUREKA AND JIDNYASA 2K23	NATIONAL LEVEL	TKIT, WARANANAGER	13-04-2023

30	KUTALE HARISH S.	RUNNER	EUREKA AND JIDNYASA 2K23	NATIONAL LEVEL	TKIT, WARANANAGER	13-04-2023
31	MR. ANIRUDDHA SANJAY KADAM	RUNNER	EUREKA AND JIDNYASA 2K24	NATIONAL LEVEL	TKIT, WARANANAGER	13-04-2023
32	MR. ANIRUDDHA SANJAY KADAM	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
33	KUTALE HARISH S.	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
34	DESHMUKH SHUBHANGI S.	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
35	KANDGAL VILAS D.	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
36	SURYAWANSHI SHAILAJA S.	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
37	SURYAWANSHI SHIVANI S.	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
38	SANJANA SAMBHAJI JADHAV	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
39	SAURABH PILOBA ZANJURNE	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
40	VAISHNAVI SATISH KAMBLE	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
41	ABHIJEET SUNIL BHOSALE	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
42	ABHIJIT SARJERAO SHINDE	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
43	ADITYA RAVINDRA PATIL	PARTICIPANT	PROJECT COMPETITION	NATIONAL LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	16-04-2023
44	MR. ANIRUDDHA SANJAY KADAM	PARTICIPANT	PIONEER 2023	NATIONAL LEVEL	KIT , KOLHAPUR	23-04-2023
45	HASAN SHAIKH	PARTICIPANT	PIONEER 2023	NATIONAL LEVEL	KIT , KOLHAPUR	24-04-2023

46	MR. ANIRUDDHA SANJAY KADAM	RUNNER	TECHNO-SCI 2K23	NATIONAL LEVEL	MMIT , PUNE	26-04-2023
47	MS.GALVE KAJAL SANJAY	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
48	MR. ANIRUDDHA SANJAY KADAM	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
49	KUTALE HARISH S.	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
50	DESHMUKH SHUBHANGI S.	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
51	KANDGAL VILAS D.	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
52	SURYAWANSHI SHAILAJA S.	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
53	SURYAWANSHI SHIVANI S.	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
54	MS.GALVE KAJAL SANJAY	PARTICIPANT	ROTAREX 2023	STATE LEVEL	ROTARY CLUB OF SATARA	17 &18TH APRIL 2023
55	MS.GALVE KAJAL SANJAY	PARTICIPANT	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
56	KUTALE HARISH S.	PARTICIPANT	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
57	ADITYA PATIL	PARTICIPANT	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
58	DIGVIJAY PATIL	PARTICIPANT	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
59	AISHWARYA PANVELKAR	WINNER	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
60	AYUSH JADHAV	WINNER	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
61	PRAVIN JADHAV	WINNER	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023

62	AKANSHA MATKAR	WINNER	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
63	HASAN SHAIKH	WINNER	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	21ST &21TH APRIL 2023
64	MR. ANIRUDDHA SANJAY KADAM	RUNNER	CRETECHNOVA 2K23	NATIONAL LEVEL	SVPMS COLLEGE OF ENGINEERING,MALEGAON	21ST &21TH APRIL 2023
65	PAWAR SNEHAL SANTOSH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
66	BHAPKAR ROHIT SUNIL	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
67	NIKAM VAIBHAV DILIP	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
68	JADHAV KARAN UDDHAV	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
69	KONDHALKAR BANAJI BAPU	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
70	BARGE ATUL RAVINDRA	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
71	BHINTADE MRUNAL RAJAN	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
72	MARATHE VIKRANT VASANT	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
73	JADHAV SHRIYASH SHASHIKANT	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
74	NIKITA SHIVDAS KOSHTI	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
75	RAUT PRATHAMESH BRAMHADEV	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
76	KHARAT CHAITANYA LAXMAN	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
77	SHINDE SUYOG MASKUDEV	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

78	MORBALE ABHISHEK SANGRAM	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
79	PRALHAD SOMAJI DALAVI	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
80	LOHAR AJINKYA SURESH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
81	ATHAVE ANIKET ASHOK	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
82	BHOSALE VAIBHAV DATTATRAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
83	KALE TUSHAR VIKAS	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
84	DIPRAJ SUDHIR SHELAR	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
85	CHALKE AKASH ANAND	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
86	THOMBARE SOURABH SANJAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
87	DOMBE SAURABH SHIVAJI	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
88	MASAL DADASAHEB ASHOK	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
89	GHORPADE RUSHIKESH VASANT	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
90	JADHAV HARSHADA BALKRUSHANA	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
91	LALGE PRAJAKTA TULSHIDAS	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
92	KSHIRSAGAR ROHAN SHAHAJI	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
93	SAWANT PRAJWAL PRADEEP	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

94	BHOSALE SHUBHAM BALASAHEB	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
95	GURAV SUDHANSHU VIJAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
96	JADHAV GAURAV VIJAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
97	PATIL SHREYASH PRAVIN	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
98	KATKAR MANGESH SUNIL	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
99	ROKADE SHUBHAM SURESH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
100	GHORPADE AKSHAY DATTATRAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
101	CHAVAN PRANAV ANIL	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
102	CHAVAN PRASANNA ANANDRAO	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
103	SAWANT SHUBHAM UMESH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
104	GHADGE PRANIT PRAMOD	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
105	RAJOPADHYE SAMEER RAJENDRA	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
106	NIKAM PRATHAMESH SANJAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
107	NIMBALKAR KARAN SITARAM	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
108	JADHAV MANUJA NAMDEV	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
109	PAWAR ROHAN SAHEBRAO	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

110	PHADATARE PRATIKSHA YUVRAJ	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
111	SALUNKHE PRAJYOT VILAS	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
112	BHINTADE SAGAR SHANKAR	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
113	JAGTAP PRAJWAL BALWANT	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
114	GIRAME RUSHIKESH SHANTARAM	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
115	ATTAR DANISH HUSEN	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
116	JADHAV VISHAL RAMCHANDRA	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
117	PISAL PRASAD TATYASAO	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
118	SHAIKH FARDIN ARIF	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
119	SALUNKHE AMAR PRAKASH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
120	SUTAR JEEVAN KALIDAS	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
121	RASKAR PRATIK HINDURAO	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
122	SALUNKHE NIRANJAN UMESH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
123	BAHIR VAIBHAV SHESHRAO	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
124	DANGE ABRAR JAHANGEER	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
125	DAREKAR PRASHANT LAXMAN	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

126	YADAV SUJIT RAMESH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
127	PAWAR SHUBHAM SHANKAR	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
128	CHAVAN ABHISHEK SANJAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
129	SALUNKHE KUNAL SUNIL	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
130	DESAI AKSHAY SHANKAR	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
131	DESAI SURAJ SUNIL	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
132	YADAV SURAJ DHANAJI	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
133	NIKAM SAURABH VIJAY	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
134	LAMBE SIDDHARTH UMESH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
135	KAMBLE SHUBHAM BHAGWAN	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
136	JADHAV AKSHAY VILAS	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
137	GAIKWAD VAIBHAV JAGANNATH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
138	JAMDAR SOHAM RAMESH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
139	BHISE SAGAR MOHAN	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
140	PAWAR VIJAY BHIMARAO	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
141	DHAYGUDE KOMAL RAGHUNATH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

142	JADHAV AMIT ANKUSH	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
143	YADAV ANISH PRABHAKAR	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
144	MAHADIK PRASAD MUKUND	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
145	MAHADIK SAINATH MUKUND	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
146	DESAI SACHIN DEVAVNAND	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
147	SAWALKAR VARAD VASUDEV	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
148	KAMBLE DIPALI ANANDA	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
149	MALUSARE MAYUR DILIPRAO	PARTICIPANT	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2024

NPTEL Certification

Sr.no	Name of Students	Course ID	Course Name	Final Score	Certificate Type
1	ANIRUDHA SANJAY KADAM	NPTEL23ME55S64600226	IC ENGINE AND GAS TURBINE	50	SUCCESSFULLY COMPLETED
2	HASAN ALLAUDDIN SHAIKH	NPTEL23ME55S64600274	IC ENGINE AND GAS TURBINE	52	SUCCESSFULLY COMPLETED

CO CARRICULAR COURSES

Sr.no	Name of Students	Course Duration	Course Name	Final Score	Certificate Type
1	ANIRUDHA SANJAY KADAM	2 MONTH	SOLID WORKS	A	SUCCESSFULLY COMPLETED

2	HASAN ALLAUDDIN SHAIKH	2 MONTH	SOLID WORKS	A	SUCCESSFULLY COMPLETED
3	AISHWARYA SHARAD PANVELKAR	2 MONTH	SOLID WORKS	A	SUCCESSFULLY COMPLETED
4	SANJANA SAJAY JADHAV	2 MONTH	SOLID WORKS	A	SUCCESSFULLY COMPLETED
5	AYUSH DATTATRAYA JADHAV	2 MONTH	SOLID WORKS	A	SUCCESSFULLY COMPLETED
6	RUSHIKESH DIPAK GAIKWAD	2 MONTH	SOLID WORKS	A	SUCCESSFULLY COMPLETED
7	VAISHNAVI SATISH KAMBLE	2 MONTH	SOLID WORKS	A	SUCCESSFULLY COMPLETED

Sr.no	Name of Students	Rank	Name of Event	Level	Event Organized Institute	Date of Event
1	AYUSH JADHAV	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
2	MUSTAN ATTAR	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
3	RUSHIKESH GAIKWAD	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
4	ATHRVE DHANE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
5	OMKAR MAHADIK	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
6	MATKAR AKANKSHA	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
7	KAJAL GALAVE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022

8	PRAVIN ANKUSH JADHAV	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
9	SANJANA SAMBHAJI JADHAV	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
10	SAURABH PILOBA ZANJURNE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
11	VAISHNAVI SATISH KAMBLE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
12	ABHIJEET SUNIL BHOSALE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
13	ABHIJIT SARJERAO SHINDE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	18-09-2022
14	ADITYA RAVINDRA PATIL	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
15	AISHWARYA SHARAD PANVELKAR	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
16	AMAN MAHADEV MAHADIK	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
17	DIGVIJAY DIPAK DESAI	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
18	BHOSALE VAIBHAV DATTATRAY	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
19	KALE TUSHAR VIKAS	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
20	DIPRAJ SUDHIR SHELAR	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
21	CHALKE AKASH ANAND	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
22	THOMBARE SOURABH SANJAY	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
23	DOMBE SAURABH SHIVAJI	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022

24	KADAM SWAPNIL SURESH	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
25	MASAL DADASAHEB ASHOK	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
26	GHORPADE RUSHIKESH VASANT	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
27	PHADATARE SHUBHAM RAJENDRA	VOLUNTEER	MAS MARATHON	STATE LEVEL	MANUFACTURING ASSOCIATION , SATARA	02-10-2022
28	SURYAWANSHI SHIVANI BABASO	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
29	AYUSH DEEPAK PATIL	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
30	SINHASANE SOURABH SANTOSH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
31	GHODKE VEDANTI KISHOR	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
32	GAWARI YOGESH BALU	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
33	KAKADE OMKAR VITTHAL	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
34	DHANE SHUBHAM VIJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
35	MAHADIK RAJ RAMESH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
36	GANDHALE ARJUN LAXMAN	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
37	JADHAV AYUSH DATTATRAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023

38	MUSTAN NISAR ATTAR	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
39	MORE ROHIT NIVRUTTI	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
40	KATE SWAPNIL DATTATRAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
41	KHUTE ANIL TUSHIRAM	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
42	GAIKWAD RUPESH VIJAYSINH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
43	SAYYAD SHAHID RIYAJ	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
44	DESHMUKH SOURABH SANJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
45	RUSHIKESH DILIP GAIKWAD	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
46	AKASH DNYANDEV MANE	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
47	YASHRAJ UMESH KAKADE	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
48	DESHMUKH PRATHAMESH PRABHAKAR	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
49	KESHAV BHANUDAS PAWAR	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
50	AWADE KUNAL ANANDA	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
51	BANDAL SAUMITRA RAHUL	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF	19-02-2023

					ENGINEERING, SATARA	
52	BHOPALE PRATHAMESH SANJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
53	BORSE RAJ GOKUL	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
54	CHAVAN AJAY CHANGDEV	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
55	DESAI ROHIT SATISH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
56	DHANE ATHARAVA RAJENEDRA	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
57	GAIKWAD SHUBHAM SANJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
58	GAIKWAD SHUBHAM SURESH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
59	GHADGE AKASH UTTAM	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
60	GHORPADE AMIT LAHU	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
61	GHORPADE SANKET DILIP	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
62	BARGE ATUL RAVINDRA	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
63	BHINTADE MRUNAL RAJAN	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
64	MARATHE VIKRANT VASANT	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023

65	SHINGATE SHUBHAM HANMANT	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
66	ABHISHEK CHANDRAKANT SALUNKHE	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
67	RAIKAR SHUBHAM ANANDRAO	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
68	PAWAR SIDDHANT SUNIL	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
69	ZANJURNE AKSHAY DHANANJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
70	ANIRUDHA SANJAY KADAM	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
71	AVISHKAR KADAM	PARTICIPANT	SHIVJAYANTI 2023	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
72	AYUSH DATTATRAY JADGHAV	PARTICIPANT	SHIVJAYANTI 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2023
73	AMAN MAHADEV MAHADIK	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
74	AMRUTA ANKUSH DESHMUKH	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
75	ANIRUDHA SANJAY KADAM	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
76	ARATI SANJAY GAIKWAD	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
77	AVINASH POPAT CHAVAN	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
78	DIGVIJAY KIRAN GHORPADE	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF	05-04-2023

					ENGINEERING, SATARA	
79	DIGVIJAY DIPAK DESAI	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
80	HARISH SUNIL KHUTALE	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
81	MATKAR AKANSHA DATTATRAY	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
82	KAJAL SANJAY GALVE	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
83	DHANE PRATHAMESH SANJAY	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
84	NIKAM RUSHIKESH SHIVAJI	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
85	DESHMUKH SHUBHANGI SADASHIV	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
86	DABADE DINESH VASANT	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
87	GADE ROHIT VINOD	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
88	KANDGAL VILAS DODAPPA	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
89	SURYAWANSHI SHIVANI BABASO	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
90	AYUSH DEEPAK PATIL	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
91	SINHASANE SOURABH SANTOSH	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023

92	GHODKE VEDANTI KISHOR	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
93	KAKADE OMKAR VITTHAL	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
94	DHANE SHUBHAM VIJAY	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
95	MAHADIK RAJ RAMESH	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
96	GANDHALE ARJUN LAXMAN	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
97	JADHAV AYUSH DATTATRAY	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
98	MUSTAN NISAR ATTAR	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
99	MORE ROHIT NIVRUTTI	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
100	KATE SWAPNIL DATTATRAY	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
101	KHUTE ANIL TUSHIRAM	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
102	GAIKWAD RUPESH VIJAYSINH	PARTICIPANT	TARUNAI 2023	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
103	AYUSH JADHAV AND GROUP	WINNER	WASTERN AND MISSMATCH DAY	STATE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
104	TARDE RUTAVIK	WINNER	KABBADI	STATE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
105	SALUNKHE GAURAV	WINNER	KABBADI	STATE LEVEL	ARVIND GAVALI COLLEGE OF	05-04-2023

					ENGINEERING, SATARA	
106	JADHAV ROHAN	WINNER	KABBADI	STATE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
107	GAIKWAD SUSHNT	WINNER	KABBADI	STATE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
108	MANE AKASH	WINNER	KABBADI	STATE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
109	SHAIKH HASAN	WINNER	KABBADI	STATE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
110	DHANWADE ROHAN	WINNER	KABBADI	STATE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	05-04-2023
111	AVISHKAR ANIL ATTAR	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
112	AYUSH JADHAV	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
113	AKANSHA MATKAR	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
114	ATTAR MUSTAN NISAR	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
115	RUSHIKESH DIPAK GAIKWAD	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
116	ATHARV RAJENDRA DHANE	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
117	OMKAR RAJENDRA MIRAJE	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
118	AISHWARYA SHARAD PANVELKAR	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023

119	ARTI SANJAY GAIKWAD	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
120	OMKAR SHIVAJI BANDGAR	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
121	SANJANA SAMBHAJI JADHAV	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
122	KABMALE VASHNAVI SATISH	PARTICIPANT	NSS CAMP	DISTRICT	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	09-03-2023
123	MUSTAN ATTAR	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
124	AYUSH JADHAV	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
125	AKASH DNYANDEV MANE	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
126	KARAN JADHAV	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
127	KUTALE HARISH	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
128	MATKAR AKANSHA DATTATRAY	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
129	GAIKWAD ARTI	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
130	PANVWLKAR AISHWARYA SHRAD	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
131	KAMBLE VAISHANAVI	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
132	JADHAV SANJANA	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023
133	DESHMUKH AMRUTA	PARTICIPANT	KABBADI	DBATU, ZONEL	PVPIT, Budhgaon	16-11-2023

4.6.3 Participation in inter Institute Events by students of the program of Study (01/10)

YEAR 2021-2022

Co-curricular Activities

Sr.no	Name of Students	Rank	Name of Event	Level	Event Organized Institute	Date of Event
1	DADASAHEB ASHOK MASAL	PARTICIPANT	SMART INDIA HACKATHON 2022	NATIONAL	BHILAI INSTITUTE OF TECHNOLOGY, DURG	2022
2	ROHIT BHAPKAR	PARTICIPANT	SMART INDIA HACKATHON 2022	NATIONAL	BHILAI INSTITUTE OF TECHNOLOGY, DURG	2022
3	SIURABH DOMBE	PARTICIPANT	SMART INDIA HACKATHON 2022	NATIONAL	BHILAI INSTITUTE OF TECHNOLOGY, DURG	2022
4	SNEHAL PAWAR	PARTICIPANT	SMART INDIA HACKATHON 2022	NATIONAL	BHILAI INSTITUTE OF TECHNOLOGY, DURG	2022
5	SUDHANSHIV GURAV	PARTICIPANT	SMART INDIA HACKATHON 2022	NATIONAL	BHILAI INSTITUTE OF TECHNOLOGY, DURG	2022
6	SHRAYAS JADHAV	PARTICIPANT	SMART INDIA HACKATHON 2022	NATIONAL	BHILAI INSTITUTE OF TECHNOLOGY, DURG	2022
7	HASAN SHAIKH	PARTICIPANT	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
8	ANIRUDDHA SANJAY KADAM	PARTICIPANT	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
9	ARTI GAIKWAD	PARTICIPANT	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
10	AISHWARYS PANVELKAR	PARTICIPANT	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
11	GALAVE KAJAL SANJAY	PARTICIPANT	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
12	JADHAV PRAVIN	PARTICIPANT	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
13	DADASAHEB ASHOK MASAL	WINNER	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
14	ROHIT BHAPKAR	WINNER	SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022

15	SIURABH DOMBE	WINNER	SMART INDIA HACKATHON 2022	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
16	SNEHAL PAWAR	WINNER	SMART INDIA HACKATHON 2022	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
17	SUDHANSHIV GURAV	WINNER	SMART INDIA HACKATHON 2022	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
18	SHRAYAS JADHAV	WINNER	SMART INDIA HACKATHON 2022	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	2022
19	AJINKY KALIDAS PANDHARPATE	PARTICIPANT	IDEATHON 2021	STATE	A.G. PATIL INSTITUTE OF TECHNOLOGY, SOLA PUR	2022

NPTEL Certification

Sr.no	Name of Students	Course ID	Course Name	Final Score	Certificate Type
1	ASHUTOSH BHASKAR	NPTEL21ME119S34310043	APPLIED THERMODYNAMICS	60	Elite
2	OMKAR SURESH INAMDAR	NPTEL21ME81S44310085	FUNDAMENTAL OF MANUFACTURING PROCESSES	55	Successfully Completed
3	OMKAR SURESH INAMDAR	NPTEL22GE14S44170487	NON CONVENTIONAL ENERGY RESOURCES	54	Successfully Completed

CERTIFICATION COURSRs

Sr.no	Name of Students	Course ID	Course Name	Final Score	Certificate Type
1	ABHISHEL HANMANT LANKESHWAR	GRATE LERNING	PRINCIPALES OF MANAGEMENT	—	Successfully Completed
2	AJINKY KALIDAS PANDHARPATE	GRATE LERNING	SOTWARE TESTING TUTORIAL	—	Successfully Completed
3	AJINKY KALIDAS PANDHARPATE	GRATE LERNING	EXCEL FOR BIGNER	—	Successfully Completed
4	AJINKY KALIDAS PANDHARPATE	GRATE LERNING	INTRODUCTION OF MACHINE LEARNING IN AWS	—	Successfully Completed
5	AJINKY KALIDAS PANDHARPATE	XEV SHIKSHA	SELF CHARGED HYBRID ELECTRIC VEHICAL	—	Successfully Completed
6	AJINKY KALIDAS PANDHARPATE	IBM	SQL AND RELATIONAL DATABASES 101	—	Successfully Completed

Student Courses

Sr.no	Name of Students	Course Duration	Course Name	Final Grade	Certificate Type
1	ANIRUDHA SANJAY KADAM	2 MONTH	CATIA	A	SUCCESSFULLY COMPLETED
2	HASAN ALLAUDDIN SHAIKH	2 MONTH	CATIA	A	SUCCESSFULLY COMPLETED
3	AISHWARYA SHARAD PANVELKAR	2 MONTH	CATIA	A	SUCCESSFULLY COMPLETED
4	SANJANA SAJAY JADHAV	2 MONTH	CATIA	A	SUCCESSFULLY COMPLETED
5	AYUSH DATTATRAYA JADHAV	2 MONTH	CATIA	A	SUCCESSFULLY COMPLETED
6	RUSHIKESH DIPAK GAIKWAD	2 MONTH	CATIA	A	SUCCESSFULLY COMPLETED
7	VAISHNAVI SATISH KAMBLE	2 MONTH	CATIA	A	SUCCESSFULLY COMPLETED
8	ANIRUDHA SANJAY KADAM	2 MONTH	CREO 3.0	A	SUCCESSFULLY COMPLETED
9	HASAN ALLAUDDIN SHAIKH	2 MONTH	CREO 3.0	A	SUCCESSFULLY COMPLETED
10	AISHWARYA SHARAD PANVELKAR	2 MONTH	CREO 3.0	A	SUCCESSFULLY COMPLETED
11	SANJANA SAJAY JADHAV	2 MONTH	CREO 3.0	A	SUCCESSFULLY COMPLETED
12	AYUSH DATTATRAYA JADHAV	2 MONTH	CREO 3.0	A	SUCCESSFULLY COMPLETED
13	RUSHIKESH DIPAK GAIKWAD	2 MONTH	CREO 3.0	A	SUCCESSFULLY COMPLETED
14	VAISHNAVI SATISH KAMBLE	2 MONTH	CREO 3.0	A	SUCCESSFULLY COMPLETED

Extra Co-curricular Activities

Sr.no	Name of Students	Rank	Name of Event	Level	Event Organized Institute	Date of Event
1	AYUSH DATTATRAYA JADHAV	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021
2	RUSHIKESH DIPAK GAIKWAD	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021
3	VAISHNAVI SATISH KAMBLE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021

4	VAISHNAVI SATISH KAMBLE	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021
5	ANIRUDHA SANJAY KADAM	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021
6	HASAN ALLAUDDIN SHAIKH	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021
7	AISHWARYA SHARAD PANVELKAR	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021
8	PATIL SHREYASH PRAVIN	VOLUNTEER	SATARA HILL MARATHON	NATIONAL	SATARA RUNNERS FOUNDATION	12-12-2021
9	KATKAR MANGESH SUNIL	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
10	SHINDE KARAN ARVIND	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
11	ROKADE SHUBHAM SURESH	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
12	attar mustan nisar	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
13	rushikesh dipak gaikwad	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
14	atharv rajendra dhane	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
15	omkar rajendra miraje	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
16	aishwarya sharad panvelkar	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
17	arti sanjay gaikwad	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
18	omkar shivaji bandgar	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
19	sanjana sambhaji jadhav	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
20	kabmale vashnavi satish	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
21	ANIRUDDHA SANJAY KADAM	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
22	GALAVE KAJAL SANJAY	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
23	KADAM SWAPNIL SURESH	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022
24	MASAL DADASAHEB ASHOK	PATRICIPANT	SHIVSWARAIJYA DIN	STATE	STATE GOVERNMENT & DTE, MUMBAI	06-06-2022

25	BARGE ATUL RAVINDRA	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
26	BHINTADE MRUNAL RAJAN	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
27	MARATHE VIKRANT VASANT	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
28	JADHAV SHRIYASH SHASHIKANT	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
29	NIKITA SHIVDAS KOSHTI	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
30	RAUT PRATHAMESH BRAMHADEV	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
31	KHARAT CHAITANYA LAXMAN	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
32	SHINDE SUYOG MASKUDEV	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
33	MORBALE ABHISHEK SANGRAM	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
34	PRALHAD SOMAJI DALAVI	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
35	LOHAR AJINKYA SURESH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
36	TARADE SHRIKANT DIPAK	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
37	ATHAVE ANIKET ASHOK	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
38	TARADE SHRIDHAR DIPAK	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
39	BHOSALE VAIBHAV DATTATRAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
40	KALE TUSHAR VIKAS	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
41	DIPRAJ SUDHIR SHELAR	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022

42	CHALKE AKASH ANAND	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
43	THOMBARE SOURABH SANJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
44	DOMBE SAURABH SHIVAJI	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
45	KADAM SWAPNIL SURESH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
46	MASAL DADASAHEB ASHOK	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
47	GHORPADE RUSHIKESH VASANT	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
48	PHADATARE SHUBHAM RAJENDRA	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
49	JADHAV HARSHADA BALKRUSHANA	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
50	LALGE PRAJAKTA TULSHIDAS	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
51	KSHIRSAGAR ROHAN SHAHAJI	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
52	SAWANT PRAJWAL PRADEEP	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
53	BHOSALE SHUBHAM BALASAHEB	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
54	GURAV SUDHANSHU VIJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
55	TILWE AADESH UTTAM	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
56	JADHAV GAURAV VIJAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
57	PATIL SHREYASH PRAVIN	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022
58	KATKAR MANGESH SUNIL	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2022

59	SHINDE KARAN ARVIND	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
60	ROKADE SHUBHAM SURESH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
61	GHORPADE AKSHAY DATTATRAY	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
62	CHAVAN PRANAV ANIL	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
63	CHAVAN PRASANNA ANANDRAO	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
64	SAWANT SHUBHAM UMESH	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
65	GHADGE PRANIT PRAMOD	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
66	RAJOPADHYE SAMEER RAJENDRA	PARTICIPANT	SHIVJAYANTI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19- 02- 2022
67	NIKAM PRATHAMESH SANJAY	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
68	NIMBALKAR KARAN SITARAM	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
69	SAWANT AKSHATA ANIL	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
70	JADHAV MANUJA NAMDEV	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
71	PAWAR ROHAN SAHEBRAO	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
72	PHADATARE PRATIKA YUVRAJ	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
73	SALUNKHE PRAJYOT VILAS	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
74	SHELAR KIRAN MARUTI	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
75	BHINTADE SAGAR SHANKAR	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022

76	JAGTAP PRAJWAL BALWANT	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
77	GIRAME RUSHIKESH SHANTARAM	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
78	ATTAR DANISH HUSEN	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
79	JADHAV VISHAL RAMCHANDRA	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
80	PISAL PRASAD TATYASAO	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
81	SHAIKH FARDIN ARIF	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
82	PAWAR UMESH VILAS	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
83	BHISE NEELKANTH RAVINDRA	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
84	SALUNKHE AMAR PRAKASH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
85	SUTAR JEEVAN KALIDAS	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
86	RASKAR PRATIK HINDURAO	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
87	SUTAR RUSHIKESH PRALHAD	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
88	SALUNKHE NIRANJAN UMESH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
89	BAHIR VAIBHAV SHESHRAO	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
90	DANGE ABRAR JAHANGEER	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
91	DAREKAR PRASHANT LAXMAN	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
92	JADHAV RAMESH DNYANDEO	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022

93	CHAVAN TUSHAR SUBHASH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
94	YADAV SUJIT RAMESH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
95	PAWAR SHUBHAM SHANKAR	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
96	CHAVAN ABHISHEK SANJAY	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
97	SALUNKHE KUNAL SUNIL	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
98	DESAI AKSHAY SHANKAR	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
99	DESAI SURAJ SUNIL	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
100	YADAV SURAJ DHANAJI	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
101	SONAWANE VIRAJ SURESH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
102	NIKAM SAURABH VIJAY	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
103	LAMBE SIDDHARTH UMESH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
104	KAMBLE SHUBHAM BHAGWAN	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
105	JADHAV AKSHAY VILAS	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
106	GAIKWAD VAIBHAV JAGANNATH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
107	FARAS SEHARAJ RAFIQMAHMUD	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
108	JAMDAD SOHAM RAMESH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022
109	TAMBOLI MUIN ALIM	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02- 05- 2022

110	SABALE SHUBHAM DADASO	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
111	BHISE SAGAR MOHAN	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
112	PAWAR VIJAY BHIMARAO	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
113	DHAYGUDE KOMAL RAGHUNATH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
114	JADHAV AMIT ANKUSH	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
115	YADAV ANISH PRABHAKAR	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
116	MAHADIK PRASAD MUKUND	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
117	DHEKALE YOGESH VISHNU	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
118	AGAWANE JAYSING ANIL	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
119	MAHADIK SAINATH MUKUND	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022
120	PATIL AMIT TUKARAM	PARTICIPANT	TARUNAI 2022	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	02-05-2022

YEAR 2020-2021

Co-curricular Activities

Sr.no	Name of Students	Rank	Name of Event	Level	Event Organized Institute	Date of Event
1	OMKAR ANIL DHOLE.	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	29/6/2020 TO 21/07/2020
2	BHOITE RUPESH POPATRAO	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	29/6/2020 TO 21/07/2020
3	PRATIKSHA SURYAWANS HI	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	29/6/2020 TO 21/07/2020

4	DIXIT SURAJ BALCHANDR A	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
5	DUBAL NANDKUMAR SANJAY	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
6	SHUBHAM PATIL	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
7	OMKAR YADAV	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
8	ANIKET YADAV	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
9	MAYUR KHUSPE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
10	ASMITA BHOSALE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
11	SANKET SHINDE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
12	CHANDRASEN KADAM	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
13	VAIBHAV VASANT MOHITE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
14	SAKSHI ANIL BHOSALE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
15	AKSHAY CHAVAN	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
16	DHANRAJ GOGAWALE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
17	GANESH KADAM	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
18	JEEVAN PATIL	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
19	ONKAR PIMPLE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
20	PRATIK RAMESH DHANAVE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020

21	RAJJIN BAGWAN	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
22	SHARAD PATIL	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
23	SHUBHAM SATISH SATHE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
24	VRUSHABH VASANT SAPKAL	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
25	WAJE SIDDHANT SANJAY	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
26	YOGESH KANKEKAR	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
27	SATYAM PRAKASH KUMBHAR	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
28	SUSHANT RAVINDRA BHOSALE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
29	NIKHIL VISHNU SAWANT	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
30	VAIBHAV ANANDA PAWAR	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
31	ANIT BALWANT MORE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
32	VIKAS SHIVAJI HIRUGADE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
33	SURAJ BAJIRAO JADHAV	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
34	AKSHATA BABANRAO SHEDGE.	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
35	NIKAM AKASH SUNIL	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
36	AKASH CHAVAN	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020
37	VISHVAJEET VIJAY VIBHUTE	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	29/6/2020 TO 21/07/2020

38	NIKAM AKASH BABURAO	PARTICIPATION	CNC PROGRAMMING	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	29/6/2020 TO 21/07/2020
39	BARGE ATUL RAVINDRA	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
40	BHINTADE MRUNAL RAJAN	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
41	MARATHE VIKRANT VASANT	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
42	ATHAVE ANIKET ASHOK	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
43	MATKAR AKANSHA DATTATRAY	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
44	KAJAL SANJAY GALVE	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
45	GHORPADE RUSHIKESH VASANT	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
46	POL YOGESH SHIVAJI	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
47	MUJAWAR NAYUM AJIM	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
48	PAWAR VAIBHAV RAJARAM	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
49	KANASE RAVIRAJ DADASAHEB	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021
50	KAMTHE SHRIRAM SHASHIKANT	PARTICIPATION	PRAYAG 2021	INSTITUT E	ARVIND GAVALI COLLEGE OF ENGINEERING,SATA RA	09-04-2021

NPTEL Examination 2020-2021

Sr.no	Name of Students	Course ID	Course Name	Final Score	Certificate Type
1	VISHAL DATTATRAY BALLAL	NPTEL21ME30S14300 145	MANUFACTURING PROCESS TECHNOLOGY- I&II	64	ELITE
2	MASAL DADASAHEB ASHOK	NPTEL21ME30S24020 653	MANUFACTURING PROCESS TECHNOLOGY- I&II	59	SUCCESSFULLY COMPLETED

3	CHAITANYA LAXMAN KHARAT	NPTEL21ME30S24300 377	MANUFACTURING PROCESS TECHNOLOGY- I&II	52	SUCCESSFULLY COMPLETED
4	TUSHAR VIKAS KALE	NPTEL21ME30S24300 446	MANUFACTURING PROCESS TECHNOLOGY- I&II	48	SUCCESSFULLY COMPLETED
5	RUSHIKESH VASANT GHORPADE	NPTEL21ME30S24300 452	MANUFACTURING PROCESS TECHNOLOGY- I&II	59	SUCCESSFULLY COMPLETED
6	THOMBARE SOURABH SANJAY	NPTEL21ME30S24300 389	MANUFACTURING PROCESS TECHNOLOGY- I&II	58	SUCCESSFULLY COMPLETED
7	RAMESH DAYANAND JADHAV	NPTEL21ME30S14190 081	MANUFACTURING PROCESS TECHNOLOGY- I&II	55	SUCCESSFULLY COMPLETED
8	PRATHMESH SANJAY NIKAM	NPTEL21ME30S24300 419	MANUFACTURING PROCESS TECHNOLOGY- I&II	49	SUCCESSFULLY COMPLETED
9	MANGESH SUNIL KATKAR	NPTEL21ME30S24300 443	MANUFACTURING PROCESS TECHNOLOGY- I&II	48	SUCCESSFULLY COMPLETED
10	JAGTAP RUSHIKESH MADHUKAR	NPTEL21ME69S24300 495	IC ENGINES AND GAS TURBINES	53	SUCCESSFULLY COMPLETED
11	GAIKWAD ANIKET SACHIN	NPTEL21ME69S24300 498	IC ENGINES AND GAS TURBINES	53	SUCCESSFULLY COMPLETED
12	PANASKAR PRATIK CHANDRAKA NT	NPTEL21ME69S14300 288	IC ENGINES AND GAS TURBINES	46	SUCCESSFULLY COMPLETED
13	PARAMANE ARTI DEVIDAS	NPTEL21ME16S24300 487	INSPECTION AND QUALITY CANTROL IN MANUFACTURING	50	SUCCESSFULLY COMPLETED
14	AISHWARYA CHANDRAKA NT SALUNKHE	NPTEL21ME16S24300 490	INSPECTION AND QUALITY CANTROL IN MANUFACTURING	58	SUCCESSFULLY COMPLETED
15	ADHISHRI SHIVAJI PAWAR	NPTEL21ME16S24300 493	INSPECTION AND QUALITY CANTROL IN MANUFACTURING	58	SUCCESSFULLY COMPLETED
16	SHRAD PRAKASH ASWALE	NPTEL21DE02S24190 627	FUNDAMENTAL OF AUTOMOTIVE SYSTEM	56	SUCCESSFULLY COMPLETED
17	SHRAD PRAKASH ASWALE	NPTEL21GE04S14190 298	NONCONVATION AL ENERGY RESOURCES	57	SUCCESSFULLY COMPLETED
18	AKASH NARENDRA BORATE	NPTEL21GE04S24300 474	NONCONVATION AL ENERGY RESOURCES	51	SUCCESSFULLY COMPLETED
19	VAIBHAV DATTATRAY BHOSALE	NPTEL21ME04S14300 188	METAL CUTTING AND MACHINE TOOLS	42	SUCCESSFULLY COMPLETED

Extra Co-curricular Activities 2020-2021

Sr.no	Name of Students	Rank	Name of Event	Level	Event Organized Institute	Date of Event
1	ABHIJEET SUNIL BHOSALE	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
2	ABHIJIT SARJERAO SHINDE	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
3	ADITYA RAVINDRA PATIL	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
4	AISHWARYA SHARAD PANVELKAR	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
5	AMAN MAHADEV MAHADIK	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
6	AMRUTA ANKUSH DESHMUKH	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
7	ANIRUDHA SANJAY KADAM	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
8	ARATI SANJAY GAIKWAD	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
9	AVINASH POPAT CHAVAN	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
10	DIGVIJAY KIRAN GHORPADE	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
11	POWAR ASHUTOSH ANIL	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
12	KALKUNDRIK AR RAHUL MARUTI	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
13	JAGTAP ADITYA SUNIL	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
14	GHADAGE KISHOR LAXMAN	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
15	BHOSALE NIKHIL BHAUSO	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021

16	GHORPADE HARSHADA RAMDAS	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
17	JAGTAP RUSHIKESH MADHUKAR	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
18	PUSTAKE UTKARSH RAVINDRA	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
19	GAIKWAD ANIKET SACHIN	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
20	PANASKAR PRATIK CHANDRAKA NT	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
21	KUMBHAR GANESH SURESH	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
22	BHOSALE PRATHAMESH PRAMOD	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
23	PAWAR RAJESH RAMCHANDR A	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
24	DESAI MUSKAN NISAR	PARTICIPANT	SHIVJAYANTI 2021	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	19-02-2021
25	MASAL DADASAHEB ASHOK	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
26	OMKAR SHIVAJI BANDGAR	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
27	AMAN MAHADEV MAHADIK	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
28	KADAM ANIRUDHA SANJAY	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
29	PANVELKAR AISHWARYA SHARAD	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
30	GHORPADE RUSHIKESH VASANT	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
31	SANJANA SAMBAJI JADHAV	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
32	AKSHATA ANIL SAWANT	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021

33	PRATIK SANJAY MANE	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
34	KUTALE HARISH SUNIL	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
35	KOLE LAKHAN JAYWANT	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
36	JADHAV PRAVIN ANKUSH	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
37	CHAVAN AVINASH POPAT	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
38	PANDERPATT E AJINKYA KALIDAS	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
39	JADHAV RUSHIKESH MAHADEV	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
40	OMKAR ANIL DHOLE	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
41	NIKAM PRATHMESH SANJAY	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
42	AJINKYA JEVAN PAWAR	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
43	AYUSH DATTATRAY JADHAV	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
44	SHINDE OMKAR SHANTARAM	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
45	CHAVAN ADITYA SUDHAKAR	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
46	BOHITE DHIRAJ DADASO	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
47	YADAV YEASH SUHAS	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
48	UTKARSH RAVINDRA PUSTAKE	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
49	KHADNAKE RUSHABH SANDEEP	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021

50	JAGTAP ADITYA SUNIL	PARTICIPANT	BLOOD DONATION CAMP	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	22-02-2021
51	PARAMANE ARTI DEVIDAS	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
52	AISHWARYA CHANDRAKA NT SALUNKHE	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
53	ADHISHRI SHIVAJI PAWAR	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
54	SHRAD PRAKASH ASWALE	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
55	UTKARSH RAVINDRA PUSTAKE	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
56	PANDERPATT E AJINKYA KALIDAS	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
57	SHINDE OMKAR SHANTARAM	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
58	PANVELKAR AISHWARYA SHARAD	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
59	SANJANA SAMBAJI JADHAV	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
60	AKSHATA ANIL SAWANT	PARTICIPANT	MATATHI RAJBHASHA DIVAS	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	27-02-2022
61	PARAMANE ARTI DEVIDAS	PARTICIPANT	World Menstrual Hygine Day Programm	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-05-2022
62	AISHWARYA CHANDRAKA NT SALUNKHE	PARTICIPANT	World Menstrual Hygine Day Programm	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-05-2022
63	ADHISHRI SHIVAJI PAWAR	PARTICIPANT	World Menstrual Hygine Day Programm	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-05-2022
64	PANVELKAR AISHWARYA SHARAD	PARTICIPANT	World Menstrual Hygine Day Programm	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-05-2022
65	SANJANA SAMBAJI JADHAV	PARTICIPANT	World Menstrual Hygine Day Programm	INSTITUT E LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-05-2022

CRITERION 05	FACULTY INFORMATION AND CONTRIBUTIONS	200
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5.1 Student Faculty Ratio (SFR)

(20)

A. Y. 2023-24

Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date on which Designated as Professor/ Associate Professor	Date of Joining the Institution	Department	Specialization	Academic Research			Currently Associated (Y/N) Date of Leaving (In case Currently Associated is (" No")	Nature of Association (Regular/Contract)
	Degree (highest degree)	University	Year of attaining higher qualification							Research Paper Publications	Ph. D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Vilas A. Pharande	PHD	Pune University	2011	Y	Profesor		02-05-2019	MECH	Heat Power	29	05		Y	Regular
Avinash Namdev Khadtare	Ph.D.	DBATU	05/05/2022	Y	Associate Professor		20/04/2023	MECH	Manufacturing	5	NA		Y	Regular
Mr.Mahammad Salman Warimani	Ph.D.	IIUM-Malaysia (Malaysian Govt. Uni) QS Rank less than 500 for mech dept	06/01/2023	Y	Associate Professor	01/07/2022	01.07.2022	MECH	Thermal, CFD and Aerospace	5	NA		Y	Regular
M Sonachalam	Ph.D.	Annamalai University	11/05/2022	Y	Associate Professor		19/04/2023	MECH	I.C. Engine	11	NA		Y	Regular
Prasanth Narayan	Ph.D.	Annamalai University	Sept 2023	Y	Associate Professor		01/08/2023	MECH	Env. Engg	03	NA		Y	Regular
Sadanand Sarapure	Ph.D.	VTU	18/03/2019	Y	Associate Professor		02/05/2023	MECH	Materials Engineering	10	NA		Y	Regular
Suraj Sajjan Ghadage	M.Tech	Veltech University	28/07/2014	Y	Asst.Prof		15-06-2015	MECH	IC Engine	7	NA		Y	Regular
Suyog Sambhaji Patil	M.E	Shivaji University	24/02/2015	Y	Asst.Prof		1/6/2019	MECH	Heat Power	5	NA		Y	Regular
Tushar Vilas Shende	ME	Shivaji University	02/08/2017	Y	Asst.Prof		09/10/2023	MECH	Prod		NA		Y	Regular
Ravi Raju Kambale	M.Tech	VJTI University	25/08/2011	Y	Asst.Prof		29-12-2011	MECH	Prod	1	NA		Y	Regular
Suhas Prakashrao Patil	M.Tech	Shivaji University	22/07/2014	Y	Asst.Prof		29-06-2015	MECH	CAD/CAM	3	NA	-	Y	Regular
Arjun Arun Kadam	M.Tech	Shivaji University	14/07/2016	Y	Asst.Prof		15-06-2016	MECH	Design	7	NA		Y	Regular
Ankur Vilas Kambale	M.Tech	Shivaji University	27/07/2017	Y	Asst.Prof		12/06/2017	MECH	Design	4	NA		Y	Regular
Manisha Nilkanth	ME	Shivaji University	26/08/2015	Y	Asst.Prof		1/1/2021	MECH	Prod	3	NA		Y	Regular

Alatkar														
Mayuresh Ejaram Vankhande	ME	Shivaji University	05/08/2015	Y	Asst.Prof		1/12/2018	MECH	Design	2	NA		Y	Regular
Ganesh Kishor Babar	M.Tech	DBATU	16/09/2019	Y	Asst.Prof		1/1/2020	MECH	Heat Power	2	NA		Y	Regular
Nikhil Vilas Ghadage	M.Tech	DBATU	16/09/2019	Y	Asst.Prof		24/08/2023	MECH	Heat Power	1	NA		Y	Regular
Miss. Priya Yashwant Kuthe	M.Tech	Shivaji University	01/08/2019	Y	Asst.Prof		12/10/2021	MECH	CHEMICAL	1	NA		Y	Regular
Abhijeet Tanajirao Bhosale	M.E/M.Tech	DBATU	11/11/2013	Y	Asst.Prof		11/04/2023	MECH	Design	1	NA		Y	Regular
Suraj Hanmant Jamdade	M.Tech	DBATU	MTech	Y	Asst.Prof		01/07/2023	Mech	Heat Power	2	NA		Y	Regular
Mahesh Vishnu Matkar	M.Tech	VJTI University	04/10/2010	Y	Asst.Prof		01/07/2013	MECH	Prod	1	NA		Y	Regular

No. of Faculty in the Department (F) =20

A.Y. 2022-23

Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date on which Designated as Professor/ Associate Professor	Date of Joining the Institution	Department	Specialization	Academic Research			Currently Associated (Y/N) Date of Leaving (In case Currently Associated is ("No")	Nature of Association (Regular/Contract)
	Degree (highest degree)	University	Year of attaining higher qualification							Research Paper Publications	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Vilas A. Pharande	PHD	Pune University	2011	Y	Professor		02-05-2019	MECH	Heat Power	29	05		Y	Regular
Dr. Ananda Bhimrao Gholap	Ph.D.	Pune University	29/01/2021	Y	Professor	01/07/2021	01.07.2021	MECH	Production	06	NA		NO (31/07/2023)	Regular
Dr. Sayed Ahmed Imran Bellary	Ph.D.	IIT Madras	12/05/2015	Y	Professor	01/08/2022	01.08.2022	MECH	Design and Thermal	23	NA		NO (31/01/2023)	Regular
Dr. Abhay Arjun Desai	Ph.D.	Pune University	02/12/2021	Y	Associate Professor	01/04/2022	01.04.2022	MECH	Heat Power	0	NA		NO (31/05/2023)	Regular
Mr. Mahammad Salman Warimani	Ph.D.	IUM-Malaysia (Malaysian Govt. Uni) QS Rank less than 500 for mech dept	06/01/2023	Y	Associate Professor	01/07/2022	01.07.2022	MECH	Thermal, CFD and Aerospace	5	NA	Y	Y	Regular
Ravi Raju Kambale	M.Tech	VJTI University	25/08/2011	Y	Asst.Prof		29-12-2011	MECH	Prod	1	NA		Y	Regular
Suhas Prakashrao Patil	M.Tech	Shivaji University	22/07/2014	Y	Asst.Prof		29-06-2015	MECH	CAD/CAM	3	NA	-	Y	Regular
Mahesh Vishnu Matkar	M.Tech	VJTI University	04/10/2010	Y	Asst.Prof		01/07/2013	MECH	Prod	1	NA		Y	Regular
Arjun Arun Kadam	M.Tech	Shivaji University	14/07/2016	Y	Asst.Prof		15-06-2016	MECH	Design	7	NA		Y	Regular

Ankur Vilas Kambale	M.Tech	Shivaji University	27/07/2017	Y	Asst.Prof		12/06/2017	MECH	Design	4	NA		Y	Regular
Pratik Manohar Tambe	ME	Shivaji University	31/07/2017	Y	Asst.Prof		1/7/2019	MECH	Prod	1	NA		No (02/05/2023)	Regular
Manisha Nilkanth Alatkhar	ME	Shivaji University	26/08/2015	Y	Asst.Prof		1/1/2021	MECH	Prod	3	NA		Y	Regular
Mayuresh Ejaram Vankhande	ME	Shivaji University	05/08/2015	Y	Asst.Prof		1/12/2018	MECH	Design	2	NA		Y	Regular
Ganesh Kishor Babar	M.Tech	DBATU	16/09/2019	Y	Asst.Prof		1/1/2020	MECH	Heat Power	2	NA		Y	Regular
Miss.Mrunalini Uttam Patil	M.Tech	Shivaji University	12/01/2022	Y	Asst.Prof		21/11/2022	MECH	CAD/CAM	2	NA		NO (31/05/2023)	Regular
Miss. Priya Yashwant Kuthe	M.Tech	Shivaji University	01/08/2019	Y	Asst.Prof		12/10/2021	MECH	CHEMICAL	1	NA		Y	Regular
Suraj Sajjan Ghadage	M.Tech	Veltech University	28/07/2014	Y	Asst.Prof		15-06-2015	MECH	IC Engine	7	NA		Y	Regular
Suyog Sambhaji Patil	M.E	Shivaji University	24/02/2015	Y	Asst.Prof		1/6/2019	MECH	Heat Power	5	NA		Y	Regular
Pradnyawant Krishna Parase	ME	Solapur University	06/04/2015	N	Asst.Prof		20-01-2020	MECH	Design	5	NA		NO (02/05/2023)	Regular
Amol Dnyaneshwar Ghorpade	ME	SPPU	10/10/2017	Y	Asst.Prof		1/10/2021	MECH	Heat Power	2	NA		NO (02/05/2023)	Regular
Abhijeet Tanajirao Bhosale	M.E/M.Tech	DBATU	11/11/2013	Y	Asst.Prof		11/04/2023	MECH	Design	1	NA		Y	Regular
Avinash Namdev Khadtare	Ph.D.	DBATU	05/05/2022	Y	Associate Professor		20/04/2023	MECH	Manufacturing	5	NA		Y	Regular
M Sonachalam	Ph.D.	Annamalai University	11/05/2022	Y	Associate Professor		19/04/2023	MECH	I.C. Engine	11	NA		Y	Regular
Sadanand Sarapure	Ph.D.	VTU	18/03/2019	Y	Associate Professor		02/05/2023	MECH	Materials Engineering	10	NA		Y	Regular
Mahesh Jivraj Shinde	M.Tech	VJTI University	30/07/2014	Y	Asst.Prof		30-06-2014	MECH	CAD/CAM	2	NA		No (30-04-2023)	Regular
Sandeep Rajaram Pawar	M.Tech	Shivaji University	22/08/2016	Y	Asst.Prof		1/9/2017	MECH	Automobile	2	NA		No (02/05/2023)	Regular

No. of Faculty in the Department (F) =20

A.Y. 2021-22

Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date on which Designated as Professor/ Associate Professor	Date of Joining the Institution	Department	Specialization	Academic Research			Currently Associated (Y/N) Date of Leaving Currently Associated is (“ No”)	Nature of Association (Regular/Contract)
	Degree (highest degree)	University	Year of attaining higher qualification							Research Paper Publications	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Vilas A. Pharande	PHD	Pune University	2011	Y	Professor		02-05-2019	MECH	Heat Power	29			Y	Regular

Dr. Ananda Bhimrao Gholap	Ph.D.	Pune University	29/01/2021	Y	Professor	01/07/2021	01.07.2021	MECH	Production	06	NA		Y	Regular
Dr. Abhay Arjun Desai	Ph.D.	Pune University	02/12/2021	Y	Associate Professor	01/04/2022	01.04.2022	MECH	Heat Power	0	NA		Y	Regular
Ravi Raju Kambale	M.Tech	VJTI University	25/08/2011	Y	Asst. Prof.		29-12-2011	MECH	Prod	1	NA		Y	Regular
Suhas Prakashrao Patil	M.Tech	Shivaji University	22/07/2014	Y	Asst. Prof.		29-06-2015	MECH	CAD/CAM	3	NA	-	Y	Regular
Mahesh Vishnu Matkar	M.Tech	VJTI University	04/10/2010	Y	Asst. Prof.		01/07/2013	MECH	Prod	1	NA		Y	Regular
Arjun Arun Kadam	M.Tech	Shivaji University	14/07/2016	Y	Asst. Prof.		15-06-2016	MECH	Design	7	NA		Y	Regular
Ankur Vilas Kambale	M.Tech	Shivaji University	27/07/2017	Y	Asst. Prof.		12/06/2017	MECH	Design	4	NA		Y	Regular
Pratik Manohar Tambe	ME	Shivaji University	31/07/2017	Y	Asst. Prof.		1/7/2019	MECH	Prod	1	NA		Y	Regular
Manisha Nilkanth Alatkar	ME	Shivaji University	26/08/2015	Y	Asst. Prof.		1/1/2021	MECH	Prod	3	NA		Y	Regular
Mayuresh Ejaram Vankhande	ME	Shivaji University	05/08/2015	Y	Asst. Prof.		1/9/2017	MECH	Design	2	NA		Y	Regular
Ganesh Kishor Babar	M.Tech	DBATU	16/09/2019	Y	Asst. Prof.		1/1/2020	MECH	Heat Power	2	NA		Y	Regular
Amey Patwardhan	M.Tech	Symbiosis International	01/01/2020	Y	Asst. Prof.		01/01/2020	MECH	CAD/CAM	1	NA		No (02/05/2022)	Regular
Miss. Priya Yashwant Kuthe	M.Tech	Shivaji University	01/08/2019	Y	Asst. Prof.		12/10/2021	MECH	CHEMICAL	1	NA		Y	Regular
Suraj Sajjan Ghadage	M.Tech	Veltech University	28/07/2014	Y	Asst. Prof.		15-06-2015	MECH	IC Engine	7	NA		Y	Regular
Sandeep Rajaram Pawar	M.Tech	Shivaji University	22/08/2016	Y	Asst. Prof.		1/9/2017	MECH	Automobile	2	NA		Y	Regular
Suyog Sambhaji Patil	M.E	Shivaji University	24/02/2015	Y	Asst. Prof.		1/6/2019	MECH	Heat Power	5	NA		Y	Regular
Pradnyawant Krishna Parase	ME	Solapur University	06/04/2015	N	Asst. Prof.		19-10-2020	MECH	CAD/CAM	5	NA		Y	Regular
Digvijay Babaso Patil	ME	Shivaji University	07/09/2019	N	Asst. Prof.		20/04/2020		Design	0	NA		N (30/07/2022)	Regular
Amol Dnyaneshwar Ghorpade	ME	SPPU	10/10/2017	Y	Asst. Prof.		1/10/2021	MECH	Heat Power	2	NA		Y	Regular
Satish Subrao Kadam	PhD	Pune University	10/03/2015	Y	Professor	01/10/2021	01/10/2021	MECH	Heat Power	0	NA		No (30/04/2022)	Regular
Pranesh Balaso Bamankar	M.Tech	Shivaji University	25/07/2013	N	Asst. Prof.		15-06-2015	MECH	Prod	12	NA		No (30-04-2022)	Regular
Amol Bindumadhav Kharge	ME	Pune University	26/11/2015	Y	Asst. Prof.		1/10/2021	MECH	Design	4	NA		No (30-04-2022)	Regular
Mahesh Jivraj Shinde	M.Tech	VJTI University	30/07/2014	Y	Asst. Prof.		30-06-2014	MECH	CAD/CAM	2	NA		Y	Regular
Amay Shashikant Kulkarni	M.Tech	Shivaji University	20/07/2015	Y	Asst. Prof.		21-09-2021	MECH	Prod	11	NA		N (30/07/2022)	Regular
Vikas Sarjerao Dhane	ME	Pune University	09/08/2016	N	Asst. Prof.		01-04-2020	MECH	Heat Power	2	NA		N 31-08-2021	Regular
Anand Sudhir Shivade	ME	Shivaji University	29/09/2014	N	Asst. Prof.		01-06-2019	MECH	Product D.	11	NA		N 31-07-2021	Regular

Table B.5

No. of Faculty in the Department (F)=23

A.Y. 2020-21

Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date on which Designated as Professor/ Associate Professor	Date of Joining the Institution	Department	Specialization	Academic Research			Currently Associated (Y/N) Date of Leaving (In case Currently Associated is ("No")	Nature of Association (Regular/Contract)
	Degree (highest degree)	University	Year of attaining higher qualification							Research Paper Publications	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Vilas A. Pharande	PHD	Pune University	2011	Y	Professor		02-05-2019	MECH	Heat Power	29	5		Y	Regular
Ravi Raju Kambale	M.Tech	VJTI University	25/08/2011	Y	Asst.Prof		29-12-2011	MECH	Prod	1	NA		Y	Regular
Suhas Prakashrao Patil	M.Tech	Shivaji University	22/07/2014	Y	Asst.Prof		29-06-2015	MECH	CAD/CAM	3	NA		Y	Regular
Mahesh Vishnu Matkar	M.Tech	VJTI University	04/10/2010	Y	Asst.Prof		01/07/2013	MECH	Prod	1	NA		Y	Regular
Arjun Arun Kadam	M.Tech	Shivaji University	14/07/2016	Y	Asst.Prof		15-06-2016	MECH	Design	7	NA		Y	Regular
Ankur Vilas Kamble	M.Tech	Shivaji University	27/07/2017	Y	Asst.Prof		12/06/2017	MECH	Design	4	NA		Y	Regular
Pratik Manohar Tambe	M.Tech	Shivaji University	31/07/2017	Y	Asst.Prof		1/7/2019	MECH	Prod	1	NA		Y	Regular
Manisha Nilkanth Alatkhar	ME	Shivaji University	26/08/2015	Y	Asst.Prof		1/1/2021	MECH	Prod	3	NA		Y	Regular
Mayuresh Ejaram Vankhade	ME	Shivaji University	05/08/2015	Y	Asst.Prof		1/9/2017	MECH	Design	2	NA		Y	Regular
Ganesh Kishor Babar	M.Tech	DBATU	16/09/2019	Y	Asst.Prof		1/1/2020	MECH	Heat Power	2	NA		Y	Regular
Amey Patwardhan	ME	Symbiosis International	01/01/2020	Y	Asst.Prof		01/01/2020	MECH	CAD/CAM	2	NA		Y	Regular
Suraj Sajjan Ghadage	M.Tech	Veltech University	28/07/2014	Y	Asst.Prof		15-06-2015	MECH	IC Engine	7	NA		Y	Regular
Sandeep Rajaram Pawar	M.Tech	Shivaji University	22/08/2016	Y	Asst.Prof		1/9/2017	MECH	Auto	2	NA		Y	Regular
Suyog Sambhaji Patil	M.E	Shivaji University	24/02/2015	Y	Asst.Prof		1/6/2019	MECH	Heat Power	5	NA		Y	Regular
Pradnyawant Krishna Parase	ME	Solapur University	06/04/2015	N	Asst.Prof		19-10-2020	MECH	CAD/CAM	5	NA		Y	Regular
Digvijay Babaso Patil	M.Tech	DBATU	07/09/2019	Y	Asst.Prof		20/01/2020		Design		NA		Y	Regular

Pranesh BalasoBamankar	M.Tech	Shivaji University	25/07/2013	N	Asst.Prof		15-06-2015	MECH	Prod	12	NA		Y	Regular
Mahesh Jivraj Shinde	M.Tech	VJTI University	30/07/2014	Y	Asst.Prof		30-06-2014	MECH	CAD/CAM	2	NA		Y	Regular
Pranod Raghunath Nikam	ME	SPPU University	31/03/2017	Y	Asst.Prof		01-07-2018	MECH	Heat Power	2	NA		N (31/08/2021)	Regular
Kaustubh Dattatray Agashe	M.Tech	Bharti University	14/05/2021	Y	Asst.Prof		01/02/2021		CAD/CAM	0	NA		N (31/03/2021)	
SwarniRamchandra Choudhari	ME	Shivaji University	03/07/1999	Y	Asst.Prof		01/06/2020		Automobile	0	NA		N (03/05/2021)	
Vikas SarjeraoDhane	ME	Pune University	09/08/2016	N	Asst.Prof		01-02-2021	MECH	Heat Power	2	NA		N (30/07/2021)	Regular
Anand Sudhir Shivade	ME	Shivaji University	29/09/2014	N	Asst.Prof		1/6/2019	MECH	Product D.	11	NA		N (30/07/2021)	Regular
Pradip Krishnaji Waghmode	M.Tech	Shivaji University	14/07/2016	N	Asst.Prof		23/01/2017	MECH	Automobile	4	NA		N (31/03/2021)	Regular
Sandeep RameshJadhav	ME	Shivaji University	26/02/2016	N	Asst.Prof		6/6/2016	MECH	Prod	1	NA		N (31/03/2021)	Regular
Kamlesh ArjunlalKumar	ME	SPPU	20 Oct 2016	N	Asst.Prof		20-06-2017	MECH	Design	2	NA		N (31/03/2021)	Regular
Sagar RajaramBalip	M.Tech	NIT Surat	27/06/2012	Y	Asst.Prof		4/1/2019	MECH	CAD CAM	00	NA		N (31/03/2021)	Regular

No. of Faculty in the Department (F) =20

Note: Please provide details for the faculty of the department, cumulative information for all the shifts for all academic years starting from current year in above format in Annexure - II.

5.1 Student-Faculty Ratio (SFR)

(20)

(To be calculated at Department Level)

No. of UG Programs in the Department (n): 1

No. of PG Programs in the Department (m): 1

No. of Students in UG 2nd Year=u1

No. of Students in UG 3rd Year=u2

No. of Students in UG 4th Year= u3

No. of Students in PG 1st Year= p1

No. of Students in PG 2nd Year=p2

No. of Students = Sanctioned Intake + Actual admitted lateral entry students

(The above data to be provided considering all the UG and PG programs of the department)

$S = \text{Number of Students in the Department} = UG1 + UG2 + \dots + UGn + PG1 + \dots + PGn$

$F = \text{Total Number of Faculty Members in the Department (excluding first year faculty)}$

Student Teacher Ratio (STR) = S / F

Year	2023-24	CAY (2022-23)	CAYm1	CAYm2
u1.1	90+6	120+3	120+10	120+9
u1.2	120+3	120+10	120+9	120+6
u1.3	120+10	120+9	120+6	120+14
UG1	u1.1+u1.2+u1.3	u1.1+u1.2+u1.3	u1.1+u1.2+u1.3	u1.1+u1.2+u1.3
...				
u _n .1				
u _n .2				
u _n .3				
UG _n	u _n .1+u _n .2+u _n .3	u _n .1+u _n .2+u _n .3	u _n .1+u _n .2+u _n .3	u _n .1+u _n .2+u _n .3
p1.1	18	18	18	18
p1.2	18	18	18	18
PG1	p1.1+p1.2	p1.1+p1.2	p1.1+p1.2	p1.1+p1.2
.....				
pm.1				
pm.2				
PG _m	pn.1+pn.2	pn.1+pn.2	pn.1+pn.2	pn.1+pn.2
Total No. of Students in the Department (S)	UG1 + UG2+.. +UG _n + PG1+ ...PG _n =385	UG1 + UG2+.. +UG _n + PG1+ ...PG _n =415	UG1 + UG2 + .. +UG _n + PG1+... + PG _n =421	UG1 + UG2 +.. +UG _n +PG1+... + PG _n =425
No. of Faculty in the Department (F)	F1=20	F1=20	F2=23	F3=20
Student Faculty Ratio (SFR)	SFR1=S1/F1= 19.25	SFR1=S1/F1= 20.75	SFR2= S2/F2=18.3	SFR3= S3/F3=21.25
Average SFR	SFR=(SFR1+SFR2+SFR3)/3=20.1			

Table 5.1.1 Student-Faculty Ratio

Note: Marks to be given proportionally from a maximum of 20 to a minimum of 10 for average SFR between 15:1 to 25:1, and zero for average SFR higher than

25:1. Marks distribution is given as below:

<=15	-	20Marks
<=17	-	18Marks
<=19	-	16Marks
<=21	-	14Marks
<=23	-	12Marks
<=25	-	10Marks
>25.0	-	0 Marks

All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY	20	00
CAYm1	23	00
CAYm2	20	00

Table 5.1.1 Total regular and contractual faculty

5.2 Faculty Cadre Proportion

(25)

The reference Faculty cadre proportion is 1(F1):2(F2):6(F3)

F1: Number of Professors required = $1/9 \times$ Number of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (N) as per 5.1

F2: Number of Associate Professors required = $2/9 \times$ Number of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (N) as per 5.1

F3: Number of Assistant Professors required = $6/9 \times$ Number of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (N) as per 5.1

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY (2022-23)	2.31	01	4.61	01	13.83	18
CAY _{m1} (2021-22)	2.33	01	4.67	01	14.03	21
CAY _{m2} (2020-21)	2.36	00	4.72	00	14.17	20
Average Numbers	RF1=2.33	AF1=0.67	RF2=4.66	AF2=0.67	RF3=14.01	AF3= 19.67

Table 5.2 Faculty Cadre Proportion

Cadre Ratio Marks: $[(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5$

$: [(0.28) + [(0.14*0.6)] + [(1.40*0.4)]]*12.5$

$= [0.28+0.08+0.56]*12.5$

$= 0.96*12.5$

$= 12.13$

5.3 Faculty Qualification**(25)**

$$FQ = 2.5 \times [(10X + 4Y)/F]$$

where

X is no. of regular faculty with Ph.D.,

Y is no. of regular faculty with M. Tech.

F is no. of regular faculty required to comply 20:1 Faculty Student ratio (no. of faculty and no. of students required are to be calculated as per 5.1)

Years	X	Y	F	$FQ = 2.5 \times [(10X + 4Y)/F]$
CAY (2022-23)	02	18	20.00	11.08
CAY _{m1} (2021-22)	02	21	21.00	12.35
CAY _{m2} (2020-21)	00	20	21.00	9.64
Average Assessment				11.02

Table .5.3 Faculty Qualification

5.4 Faculty Retention**(25)**

Description	2021-22	2022-23
No of Faculty Retained	15	13
Total No of Faculty	23	20
% of Faculty Retained	75	65

Table .5.4 Faculty Retention

Item (% of faculty retained during the period of assessment keeping CAYm2 as base year)	Marks
>=90% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	25
>=75% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	20
>=60% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	15
>=50% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	10
<50% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	0

Average: 70.00

Assessment Marks: 15.00

5.5 Innovations by the faculty in teaching and learning shall be summarized as per the following description. (20)

Contributions to teaching and learning are activities that contribute to the improvement of student learning. These activities may include innovations not limited to, the use of ICT, instruction delivery, instructional methods, and engaging instruction.

Any contribution to teaching and learning should satisfy the following criteria:

- The work must be made available on the Institutes website
- The work must be available for peer review and critique
- The work must be reproducible and developed further by other scholars

These may typically include a statement of clear goals, adequate preparation, use of appropriate methods, and significance of results, effective presentation, and reflective critique.

The faculty members of the Mechanical Engineering department follow innovative methodologies in the classroom in addition to the conventional methods. Conventional Methods Followed:

1. Blackboard
2. Sharing learning materials
3. Questioning in the class

1. MOODLE (Modular Object-Oriented Dynamic Learning Environment):

The institute has configured a learning platform that is available 24 × 7 to faculty and students. Using MOODLE, faculty can create courses in their respective program. The faculty members can upload assignment questions, for course purposes. Students can be automatically enrolled in the course with access rights given by the faculty as per their role in the course. Using MOODLE, faculty can maintain the attendance of students, and monitor their progress.

AGCE

Thermodynamics (BTMEC 305)

Dashboard / My courses / TH

Turn editing on

- Announcements
- Attendance
- CA 1 Discriptive
 - Restricted Not available unless: You belong to CA1 exam
 - Upload paper here only below 10 mb pdf file
- Assignment 1
 - Restricted Not available unless: You belong to CA1 exam
- Assignment 2
 - Restricted Not available unless: You belong to CA1 exam
- CA 1 objective remedial Examination 2021 TD 29/10/2021
 - Restricted Not available unless: You belong to CA1 exam
- Ca1 Remedial Exam
 - Restricted Not available unless: You belong to CA1 exam
- Mid Sem Objective Examination
- Mid Sem Exam Paper
- TD Mid Sem Paper
- CA-2 Objective Exam Thermodynamics (BTMEC 305)
 - Restricted Not available unless: You belong to CA-2 Exam
- CA-2 Objective Exam
 - Restricted Not available unless: You belong to CA-2 Exam
- CA1 -Objective -Remedial
- CA2 - Objective - Remedial
- Mid sem - Objective - Remedial
- CA1 - QP - Remedial

5.5.1 MOODLE Page of Thermodynamics (S.Y. B.Tech- Mech)

AGCE

Manufacturing Processes -III (BTMEC703)

Dashboard / My courses / MP-III

Turn editing on

- Announcements
- Attendance
- CA 1 Answer sheet submission
 - Restricted Not available unless: You belong to CA1 Exam
- CA-1 objective Examination 2021
 - Restricted Not available unless: You belong to CA1 Exam
- Mock test
- Assignment 1
 - Restricted Not available unless: You belong to CA1 Exam
- Assignment 2
 - Restricted Not available unless: You belong to CA1 Exam
- CA-1 Remedial Examination 2021
 - Hidden from students
- Syllabus
- Mid Semester Examination
- Mid sem answer sheet
- MP-III mid Sem paper
- Assignment No 3
- Assignment No 4
- Assignment No 5
- Assignment No 6
- Manufacturing Processes -III (BTMEC703) CA-2 Exam Objective
 - Restricted Not available unless: You belong to CA-2 Exam
- MP-III CA-2 Descriptive Answer sheet submission

Figure 5.5.2 MOODLE Page of Manufacturing Processes-III (B.Tech-Mech)

2. Time-Table:

The academic calendar of the Institute is according to Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra, India, and is made available on the institute website. Also, the same is made available to the students of the department via student Whatsapp groups.

The screenshot shows a web browser displaying the academic calendar for January 2023. The calendar is presented as a grid with columns for days of the week (MON to SUN) and rows for dates. The events listed are as follows:

MON	TUE	WED	TUH	FRI	SAT	SUN
26	27	28	29	30	31	1 End Semester & Supplementary Examination
2 End Semester & Supplementary Examination	3 End Semester & Supplementary Examination	4 End Semester & Supplementary Examination	5 End Semester & Supplementary Examination	6 End Semester & Supplementary Examination	7 End Semester & Supplementary Examination	8 End Semester & Supplementary Examination
9 End Semester & Supplementary Examination	10 End Semester & Supplementary Examination	11 End Semester & Supplementary Examination	12 End Semester & Supplementary Examination	13 End Semester & Supplementary Examination	14 End Semester & Supplementary Examination	15 End Semester & Supplementary Examination
16 End Semester & Supplementary Examination	17 End Semester & Supplementary Examination	18 End Semester & Supplementary Examination	19 End Semester & Supplementary Examination	20 End Semester & Supplementary Examination	21 End Semester & Supplementary Examination	22 Industrial Training
23	24	25	26	27	28	29

Figure 5.5.3 Academic calendar displayed on the college website

The timetable for the weekly lectures and practical's is made available to the students well in advance and displayed on the department notice boards. The course syllabus is available on student Whatsapp groups.

Smarth Education Trust's
Arvind Gavali College of Engineering
At: Panalwad, Post-Vare, Satara
DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year: 2021-22
TIMETABLE (OFFLINE MODE)

DAY	TIME CLASS	10:00 - 11:00		11:00 - 12:00	12:00 - 12:45	12:45 - 01:45	01:45 - 02:45	02:45 - 03:45	03:00 - 04:00	04:00 - 05:00	Even Sem		
		19-06-11:00	11:00-12:00	12:00-12:45	12:45-01:45	01:45-02:45	02:45-03:45	03:00-04:00	04:00-05:00	05:00-05:20	07:15-08:15	08:15-09:15	
MONDAY	SV (A) (SW301)	MP-I	TOM-I	BREAK	CJC (WW321)		BREAK	FTM	SOM	GFM	NCR	FAS	
	SV (B) (SW304)	TOM-I	FTM		SOM	MP-I		D4-0- MEI-4 Gr. A (Workshop)	M4-0- MEI-4 Gr. B (WW312)				S4-0- MEI-4 Gr. C (R10)
	TV (A) (SW302)	MD-II	KC		D4-0- ICE (009)	MD-0- MQC (WW311)		SD-0- RAC (WW307)	ATD-II				MP-II
	TV (B) (SW306)	SE	SE		APTITUDE (SW306)	TPQ (SW306)		KC	RES				
	B.Tech (A) (SW303)	PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP					
	B.Tech (B) (SW307)	PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP					
TUESDAY	SV (A) (SW301)	TOM-I	FTM	BREAK	SOM	MP-I	BREAK	D4-0- MEI-4 Gr. A (Workshop)		GFM	NCR	FAS	
	SV (B) (SW304)	BHH (WW321)	BHH (WW321)		D4-0- MEI-0 Gr. C (R10)	M4-0- MEI-0 Gr. A (Workshop)		S4-0- MEI-0 Gr. B (WW312)	SOM				TOM-I
	TV (A) (SW302)	SE	SE		APTITUDE (WW321)	TPQ (WW321)		KC	RES				
	TV (B) (SW306)	MD-II	ATD-II		CS (SW306)	RES		D4-0- MD-0 (040)	MD-0- RAC (WW307)				SD-0- MQC (WW311)
	B.Tech (A) (SW303)	PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP					
	B.Tech (B) (SW307)	PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP					
WEDNESDAY	SV (A) (SW301)	BHH (WW321)	BHH (WW321)	BREAK	D4-0- MEI-4 Gr. C (R10)		BREAK	SOM	TOM-I	GFM	NCR	FAS	
	SV (B) (SW304)	BHH (WW304)	SOM		M4-0- MEI-4 Gr. A (Workshop)	S4-0- MEI-4 Gr. B (WW312)		FTM	MP-I				
	TV (A) (SW302)	MD-II	ATD-II		APTITUDE (SW304)	TPQ (SW304)		D4-0- MD-0 (040)	MD-0- RAC (WW307)				SD-0- MQC (WW311)
	TV (B) (SW306)	SE	MD-II		CS (WW321)	RES		MD-0- MD-0 (040)	MD-0- RAC (WW307)				SD-0- MQC (WW311)
	B.Tech (A) (SW303)	PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP					
	B.Tech (B) (SW307)	PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP			PROJECT-0/INTERNSHIP					

Figure 5.5.4 Weekly TimeTable

3. Lesson Plan:

The lesson plan for the individual subject is prepared by the individual teacher, and approved by the HoD and the corresponding Academic Monitoring Committee member of that department. The lesson plan conveys the course structure. The innovative methods employed by the faculty members help the students to get actively involved in the classroom.

AGCE

Metrology and Quality Control (BTMEC505)

Dashboard / My courses / MQC505 / General / Teaching plan

Teaching plan

Unit No	Lecture No.	Planned Topics	Teaching Method	Teaching Aids	Planned date	Completion date	Faculty Sign	AMC/HOD Sign
1	1	Unit 1: Measurement Standard and Comparators	L	OHP	9/15/2021	17/9	[Signature]	[Signature]
	2	Line end, wavelength, Traceability of Standards	L	OHP	9/17/2021	17/9	[Signature]	
	3	Types and Sources of error, Alignment	L	OHP	9/20/2021	20/9	[Signature]	
	4	Temperature, Plastic deformation, Slip gauges and gauge block	L	OHP	9/22/2021	20/9	[Signature]	
	5	Linear and Angular Measurement (Sine bar, Sine center, Autocollimator Angle Décor and Dividing Calibration. Comparator: Mechanical, Pneumatic, Optical, Electronic (Inductive), Electrical (LVDT))	L	OHP	9/24/2021	23/9	[Signature]	
	6		L+C	OHP	9/27/2021	23/9	[Signature]	
	7	Unit 2: Interferometry and Limits, Fits,	L	OHP	9/29/2021	1/10	[Signature]	

Figure 5.5.5 Lesson plan uploaded on MOODLE Metrology and Quality Control subject (TY Mech)

4. Courses Offered by the Department:

The college organizes courses for skill development and technical proficiency. The three-week internship called “YUGAM” is conducted during the month of November which is also the vacation period of the odd semester. The course includes a hands-on workshop on UG-NX and CNC programming. Experts from the industry are invited to conduct the course and also give hands-on training to the students.

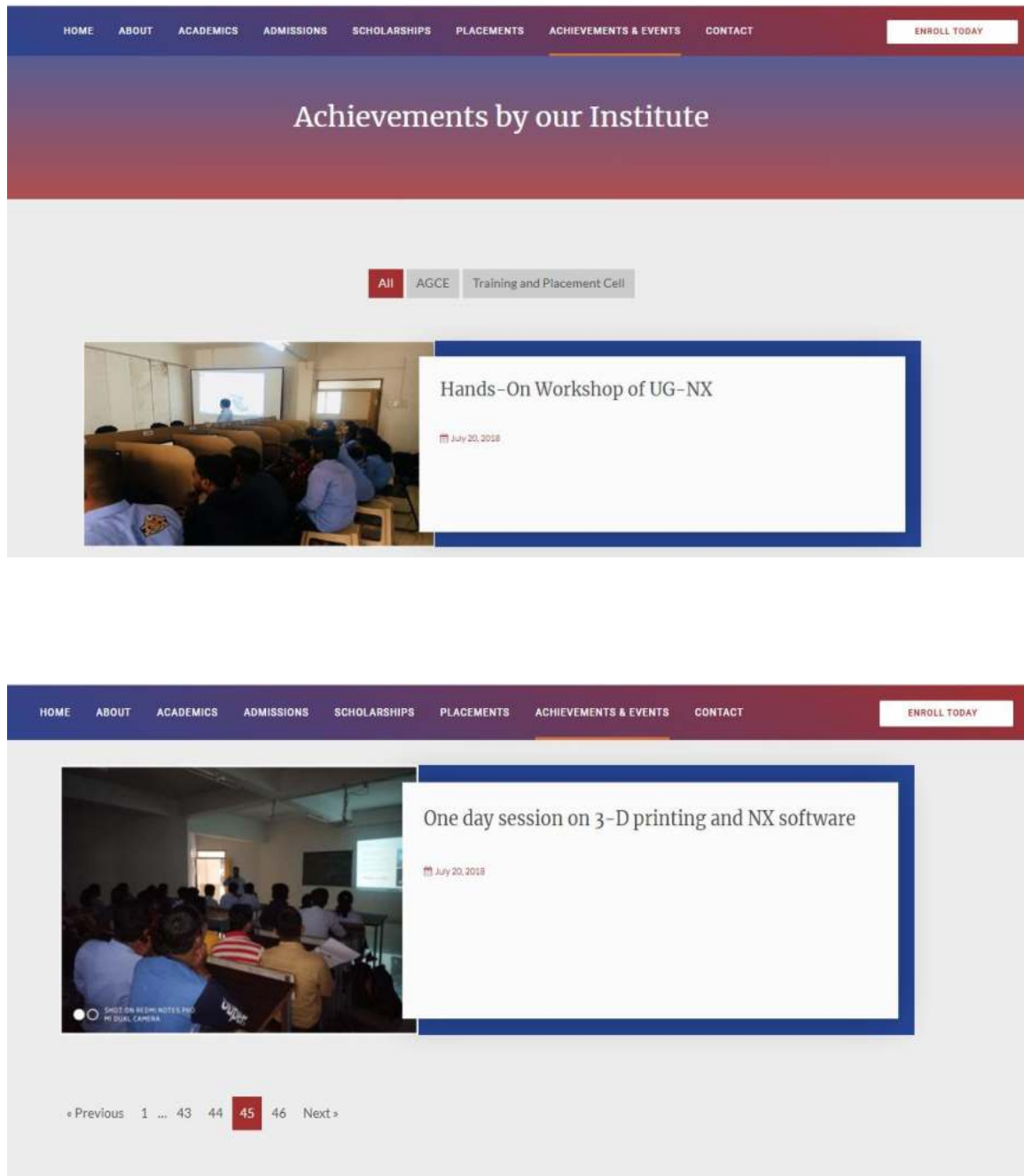


Figure 5.5.6 Screenshot YUGAM 2020 Hands-on workshop of UG-NX and CNC programming

5. Open Book Tests:

To improve the analytical skills of the students, open book tests are conducted by the individual faculty member.



Figure 5.5.7 Open Book Test of Machine Design II (TY B.Tech Mechanical Engineering)



Figure 5.5.8 Open Book Test of Manufacturing Process (TY B.Tech Mechanical Engineering)

6. Use of Interactive Panels:

The faculty members of the department are encouraged to conduct lectures using smart boards (interactive panels). This enables a more vivid representation of the concept by the incorporation of videos to simplify the concepts.



Figure 5.5.9 Faculty Using Interactive Panels for Conducting Lectures

7. Industrial Visits:

Industrial visits are carried out to bridge the gap between the Institute and industry. The students are able to know the current scenario in industries and the industry-oriented problems, skills required in industries, etc required for their development.



Figure 5.5.10 Industrial Visit to Maharashtra Scooters, Satara, for TYMECH



Figure 5.5.11 Industrial Visit to Oracle Presscomps & Engg. Pvt. Ltd. Satara for SYMech



Figure 5.5.12 Industrial Visit to Shivam Engineering, Satara

8. Quiz:

Faculty members conduct quizzes based on objective questions to assess the understanding of concepts by the students. The quiz is conducted using the MOODLE platform. Objective Multiple-Choice Questions (MCQs) for students are also uploaded on the MOODLE.

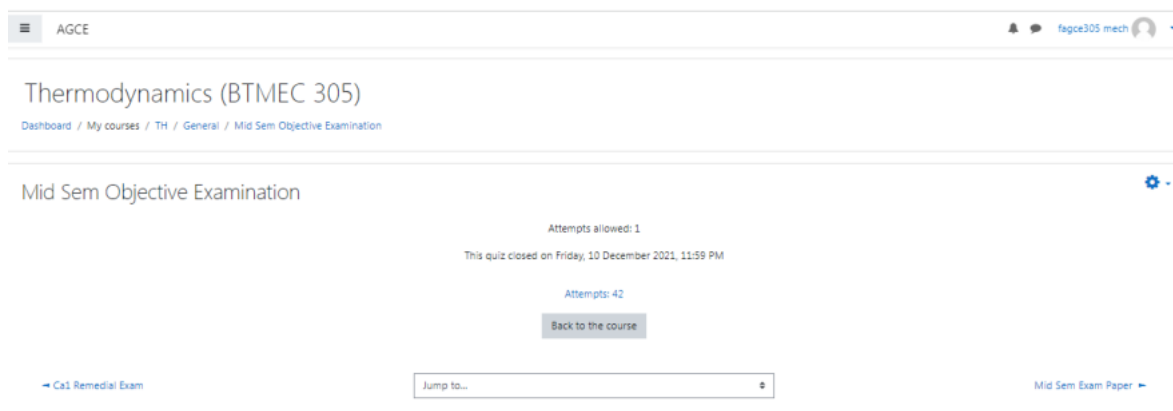


Figure 5.5.13 Quiz uploaded on MOODLE of subject Thermodynamics (SYMECH)

9. NPTEL Courses:

The students are encouraged to enroll in the National Programme on Technology Enhanced Learning (NPTEL) and Massive Open Online Course (MOOC) courses to enhance self-learning. The efforts of the SPOC for NPTEL courses have been appreciated by IIT Bombay.



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
ANIRUDHA SANJAY KADAM
 for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of **50** %

Online Assignments	19.53/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **461**

Jan-Apr 2023
 (12 week course)

Prof. T. V. Bharat
 Head, Centre for Educational Technology
 NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati



Roll No: NPTEL23ME55S64600226

To validate the certificate



No. of credits recommended: 3 or 4

Figure 5.5.14: Student NPTEL Certificate

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, <https://nptel.ac.in/noc/>

Roll No: NPTEL20GE11S1982614

To
 MANISHA NILKANTH ALATKAR
 13, PADMAVATI SAHAJEEVAN HOUSING SOCIETY
 GODOLI, SATARA
 SATARA
 MAHARASHTRA-415001
 PH. NO :9158476167



No. of credits recommended by NPTEL:3
 An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



NPTEL Online Certification
 (Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to
MANISHA NILKANTH ALATKAR

for passing the course
**NBA Accreditation and Teaching - Learning
 in Engineering (NATE)**

with Score* **85** %




 Prof. G. L. Sivakumar Babu
 Chairman, Centre for Continuing Education
 IISc Bangalore

Jan-Apr 2020
 (12 week course)


 Prof. L. Umanand
 NPTEL Coordinator
 IISc Bangalore



Indian Institute of Science Bangalore



***Continuous online assessment score** To validate and check scores: <https://nptel.ac.in/noc>

Figure 5.5.15 Certificate of Course to Mrs. Manisha Nilkanth Alatkhar for scoring the SWAYAM NPTEL Chapter



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to
SUHAS PRAKASHRAO PATIL
 for successfully completing the course

Production Technology: Theory and Practice

with a consolidated score of **76** %

Online Assignments	19.38/25	Proctored Exam	57/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **19**






Prof. B. V. Ratish Kumar
 Chairman, Centre for Continuing Education
 IIT Kanpur

Jul-Oct 2022
 (12 week course)



Prof. Satyaki Roy
 NPTEL Coordinator
 IIT Kanpur



Indian Institute of Technology Kanpur



FREE ONLINE EDUCATION
swayam
THE EDUCATION WE NEED, THE WAY WE NEED

Roll No: NPTEL22ME99553810052

To validate the certificate



No. of credits recommended: 3 or 4

Figure 5.5.16 Certificate of Course to Mr. Suhas Prakashrao Patil for scoring of the SWAYAM NPTEL Chapter



Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
SUHAS PRAKASHRAO PATIL
for successfully completing the course

Manufacturing Systems Technology I & II

with a consolidated score of **72** %

Online Assignments	23.75/25	Proctored Exam	48/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **43**


Prof. B. V. Ratish Kumar
 Chairman, Centre for Continuing Education
 IIT Kanpur

Jul-Oct 2022
 (12 week course)


Prof. Satyaki Roy
 NPTEL Coordinator
 IIT Kanpur

 Indian Institute of Technology Kanpur



Roll No: NPTEL22ME80S43810099 To validate the certificate  No. of credits recommended: 3 or 4

Figure 5.5.17 Certificate of Course to Mr. Suhas Prakashrao Patil for scoring the SWAYAM NPTEL Chapter

Table 5.1. Certificate of Course to the scoring of the SWAYAM NPTEL Chapter

Sr. No.	Name of the Faculty member	Certification	Course	Academic Year
01	Mrs.Manisha Nilkanth Alatkhar	NPTEL	NBA Accreditation and Teaching-Learning in Engineering (NATE)	2019-20
02	Mr. Suhas Prakashrao Patil	NPTEL	Production Technology: Theory and Practice	2022-23
03	Mr. Suhas Prakashrao Patil	NPTEL	Manufacturing Systems Technology	2022-23

10. Detailed Course Contents (Notes/PPTs, etc.):

Reference books, notes, PowerPoint presentations, and videos explaining concepts are uploaded by the faculty on the MOODLE platform and made available to the enrolled students. Along with these, links to NPTEL courses mapping to the course are also provided by the faculty members.

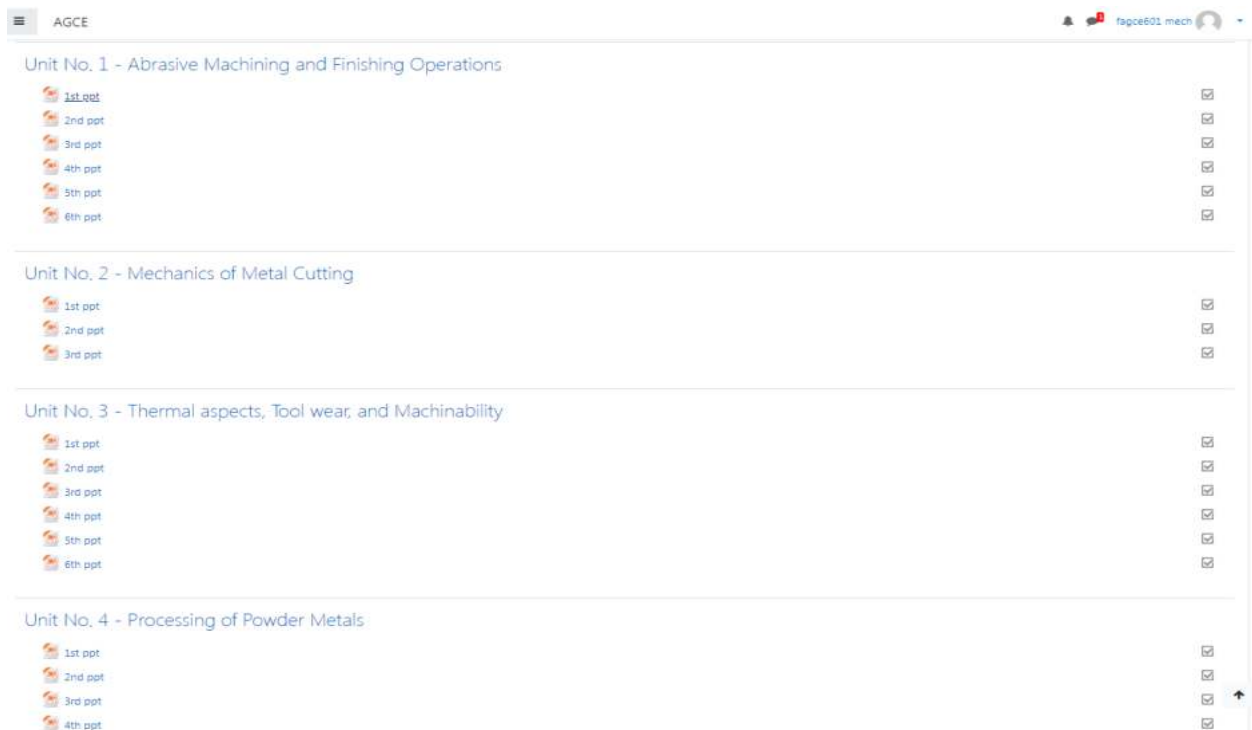


Figure 5.5.18 MOODLE containing course material of subject Manufacturing Processes-II

11. Attendance:

Attendance is maintained on MOODLE and in hard copy form by the respective faculty members of the department. The department has the unique Guardian Faculty Mentor Scheme (GFM), under which fifteen students are assigned to a faculty member who is their GFM. The GFM counsels the students who have poor attendance. The GFM is also responsible for collecting feedback from the students for a difficult subject.

AGCE

Manufacturing Processes -III (BTMEC703)

Dashboard / My courses / MP-III / General / Attendance / Attendance

Attendance for the course :: Manufacturing Processes -III (BTMEC703)

Sessions Add session Report Export Status set Temporary users

All All past Months Weeks Days

#	Date	Time	Type	Description	Actions
1	Fri 17 Sep 2021	10:15AM - 11:15AM	All students	Regular class session	
2	Sat 25 Sep 2021	9:30AM - 9:30AM	All students	Regular class session	
3	Sun 26 Sep 2021	1:30PM - 2:30PM	All students	Regular class session	
4	Fri 1 Oct 2021	10:15AM - 11:15AM	All students	Regular class session	
5	Sat 2 Oct 2021	12:15PM - 1:15PM	All students	Regular class session	
6	Sun 3 Oct 2021	1:30PM - 2:30PM	All students	Regular class session	
7	Fri 8 Oct 2021	10:15AM - 11:15AM	All students	Regular class session	
8	Sat 9 Oct 2021	12:15PM - 1:15PM	All students	Regular class session	
9	Sun 10 Oct 2021	1:30PM - 2:30PM	All students	Regular class session	
10	Sat 16 Oct 2021	12:15PM - 1:15PM	All students	Regular class session	
11	Sun 17 Oct 2021	1:30PM - 2:30PM	All students	Regular class session	
12	Fri 22 Oct 2021	10:15AM - 11:15AM	All students	Regular class session	
13	Sat 23 Oct 2021	12:15PM - 1:15PM	All students	Regular class session	

Figure 5.5.19 Attendance of subject Manufacturing Processes-III B.Tech Mech

12. Project-based Learning:

Students are encouraged to form groups in various domains such as Thermal, Manufacturing, Design, CAD-CAM, Additive manufacturing, etc., and work on projects, innovative ideas, and research-paper-based projects.



SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA
 Department of Mechanical Engineering

Final Year B.Tech Project List

A.Y. - 2019-20

Gr No.	Sr No.	Students Name	Project Name	Project Guide	domain
1	1	Mokashi Soheli S.	Fixture design for heavy water upgrading plant	Dr. Pharande VA	Manufacturing
	2	Gargate Hrishikesh R.			
	3	Pawar Prathmesh P.			
	4	Dhawale Nikhil P.			
2	5	Kakade Shivani	Complaints solving through design change note & 7 QC tools	Mr. Ghadage SS	Manufacturing
	6	Shinde Megha			
	7	Mane Mayur			
	8	Mane Onkar			
3	9	Pawar Vikrant D.	Compressed air engine	Mr. Waghmode PK	Manufacturing
	10	Salunkhe Pankaj L.			
	11	Surwase Shubham S.			
	12	Waingade Ramdas P.			
	13	Herle D. B. .			
4	14	Salunkhe Nayan S.	College Sponsored	Mr. Bamankar PB	
	15	Patil Amar S.			
	16	Waghmare Shubham			
	17	Malusare Vishal			
	18	Kadam Akash K.			
5	19	Bhilare Pranita M.	Design & Fabrication of agricultural crop reaper	Mr. Waghmode PK	Manufacturing
	20	Gaikwad Kanchan C.			
	21	Bhosale Prasad R.			
	22	Parmar Meet N.			
6	23	Paramane Akshay M.	Feeding System of centerless	Mr. Patil SP	Manufacturing
	24	Sabale Somanath			
	25	Salunkhe Chandrakant			

	26	Shete Omkar	grinding machine		
7	27	Ranaware Abhiman Rajkumar	Design & manufacturing of plastic molding machine	Mr. Nikam Pranod	Manufacturing
	28	Bamane Vinay Nagoji			
	29	Dhavan Sandeep Sudhakar			
	30	Yadav Mayur Panditrao			
	31	Kadam Sagar			
8	32	Dalavi Kiran T.	Advancement & time reduction standard assembly procedure of turbo20 + eco32 & eoc42	Mr. Patil S.S.	automobile
	33	Dhale Prasad D.			
	34	Mane Suraj P.			
	35	Yewale Vikram D.			
9	36	Murdhekar Roshan	Design & manufacturing of Jigs & Fixture	Mr. Kadam AA	Manufacturing
	37	Saste Ketan			
	38	Ghatge Pravin			
	39	Bharskar Saurabh			
	40	Malvekar PrakashX			
10	41	Pawale Hrishikesh	Tool life improvement	Mr. Kamble AV	design
	42	Satre Akshay			
	43	Patil Pragati			
	44	Patil Pratiksha			
	45	Patil Raveena			
11	46	Pharande Shivani Prakash	Design & Development of boring fixture	Dr. Pharande VA	design
	47	Pharande Shraddha Baban			
	48	Pisal Sonali Anil			
	49	Dhekane Swapnita Satish			
	50	Kumbhar SupriyaX			
12	51	Sawant Pravin Madhukar	Experimental Analysis of bearing.	Mr. Kambale R.R	production
	52	Bhaban Rushikesh Mahaveer			
	53	Naik Sangram Santaram			
	54	Kadam Akash Jaywant			
13	55	Ghadge Rahul Arun	Bar Feeding Mechanism	Mr. Shivade AS	production
	56	Patil Shubham Ananda			
	57	Jadhav Amol Ankush			
	58	Jadhav Aniket Vinayak			
	59	Kadam MangeshX			
14	60	Ghanwat Tushar	Windmill	Mr. Bamankar PB	Renewable
	61	Mane Sushant S.			
	62	Barge Ajinkya			

	63	Nikam Saurabh			
15	64	Sabale Akshay M.	Design & Development of Rice Planting Machine	Mr. Nikam Pranod	design
	65	Pawar Amar			
	66	Bhosale Sayali P.			
	67	Shinde Sneha S.			
	68	Shinde Aviraj X			
16	69	Jadhav Rahul Ashok	College Sponsered	Mr. Matkar MV	
	70	Jadhav Rohan Ashok			
	71	Jadhav Pranil Ramesh			
	72	Pawar Sanket Anil			
	73	Mane Sarika X			
17	74	Gundewadi Jyoti A.	Engine Lifting Crain	Mr. Kadam AA	production
	75	Kadam Trupti L			
	76	Chavan Saket			
	77	Yejare sangramsingh			
	78	Renushe Vijay			
18	79	Shelke Akshay J.	Automatic Sealing Machine	Mr. Patil S.S.	production
	80	Shedge Ajay P.			
	81	Sandesh Pachangane			
	82	Bhosale Ajinkya R.			
19	83	Pimpale Suraj	Electric Bike...Not Final	Mr. Patil SM	automobile
	84	Patil Aniket			
	85	Chavan Omkar			
	86	Mane Ketan			
	87	Lawand Atul			
20	88	Kale Haridas	Automatic Drain wastage machine	Mr. Patil SM	production
	89	Sapkal Abhijit			
	90	Sathe Deepak			
	91	Mandave Akshay			
	92	Kadam Suraj			
21	93	Shinde Ganesh X	Solar Drip Erigation System	Mr. Matkar MV	Renewable
	94	Gaikwad SurajX			
	95	Pisal Rohit X			
	96	Pawar OmkarX			
22	97	Mokashi Soheli S.	Fixture design for heavy water upgrading plant	Dr. Pharande VA	design
	98	Gargate Hrishikesh R.			
	99	Pawar Prathmesh P.			
	100	Dhawale Nikhil P.			
23	101	Kakade Shivani	Complaints solving	Mr. Ghadage SS	design

	10 2	Shinde Megha	through design change note & 7 QC tools		
	10 3	Mane Mayur			
	10 4	Mane Onkar			
24	10 5	Pawar Vikrant D.	Compressed air engine	Mr. Waghmode PK	automobile
	10 6	Salunkhe Pankaj L.			
	10 7	Surwase Shubham S.			
	10 8	Waingade Ramdas P.			
	10 9	Herle D. B. .			
25	11 0	Salunkhe Nayan S.	College Sponsred	Mr. Bamankar PB	
	11 1	Patil Amar S.			
	11 2	Waghmare Shubham			
	11 3	Malusare Vishal			
	11 4	Kadam Akash K.			
26	11 5	Bhilare Pranita M.	Design & Fabrication of agricultural crop reaper	Mr. Waghmode PK	design
	11 6	Gaikwad Kanchan C.			
	11 7	Bhosale Prasad R.			
	11 8	Parmar Meet N.			
27	11 9	Paramane Akshay M.	Feeding System of centerless grinding machine	Mr. Patil SP	production
	12 0	Sabale Somanath			
	12 1	Salunkhe Chandrakant			
	12 2	Shete Omkar			
28	12 3	Ranaware Abhiman Rajkumar	Design & manufacturing of plastic	Mr. Nikam Pranod	design
	12 4	Bamane Vinay Nagoji			

	12 5	Dhavan Sandeep Sudhakar	molding machine		
	12 6	Yadav Mayur Panditrao			
	12 7	Kadam Sagar			
29	12 8	Dalavi Kiran T.	Advancement & time reduction standard assembly procedure of turbo20 + eco32 & eoc42	Mr. Patil S.S.	management
	12 9	Dhale Prasad D.			
	13 0	Mane Suraj P.			
	13 1	Yewale Vikram D.			
30	13 2	Murdhekar Roshan	Design & manufacturing of Jigs & Fixture	Mr. Kadam AA	production
	13 3	Saste Ketan			
	13 4	Ghatge Pravin			
	13 5	Bharskar Saurabh			
	13 6	Malvekar PrakashX			
31	13 7	Pawale Hrishikesh	Tool life improvement	Mr. Kamble AV	production
	13 8	Satre Akshay			
	13 9	Patil Pragati			
	14 0	Patil Pratiksha			
	14 1	Patil Raveena			

A.Y. - 2020-21

Gr · N o.	Sr. N o.	Name of the Project Group Members	Title of the Project	Name of the Guide	Domain
1	1	Akshay Shinde	Gyro Vehicle With Flexible Chassis	Prof. Ghadage S. S.	Automobile
	2	Akash Chavan			
	3	Rajin Bagwan			
	4	Aniket Shinde			
2	5	Snehal Patil			Automobile

	6	Hrituja Pawle	Walking BOT Theo Jansen Mechanis m	Prof. Ghadage S. S.	
	7	Yogesh Kankekar			
	8	Ganesh Kadam			
3	9	Digambar Harane	IoT-Based multi- direction conveyor robot	Prof. Ghadage S. S.	Automobile
	10	Shantanu Jadhav			
	11	Wasim Nadaf			
	12	Jaydeep Pawar			
4	13	Sharad Patil	Design and Fabricatio n of Automatic Milk Can Tilter Mechanis m	Prof. Ghadage S. S.	Automobile
	14	Vikey Hirugade			
	15	Umesh Kadam			
	16	Yogesh Raosaheb Shinde			
5	17	Ajit Pawar	Bicycle Without Chain Drive	Prof. Kadam A. A.	Design
	18	Akshay Rajguru			
	19	Shaikh Tanveer			
	20	Aditya Pandit			
6	21	Ranjit Londhe	Solar Based Robotic Farming Machine	Prof. Shivade A. S.	Production
	22	Mayur Shirke			
	23	Shraddha Bhosale			
	24	Akshata Shedage			
7	25	Akash Sunil Nikam	Low Cost Ventilator Machine	Prof. Patil S. P.	Design
	26	Dhanraj Gogawale			
	27	Vivek Bagane			
	28	Rugveda Pandharpure			
8	29	Abhishek Sutar	Rocker Bogiee Robot With Stabilized Platform	Prof. Pratik Mahajan	Robotics Automation
	30	Amit Sapkal			
	31	Priyank Tarade			
	32	Sweta More			
9	33	Nikhil Sawant	Rolling and Bending Machine	Prof. Shivade A S	Production
	34	Sushant Bhosale			
	35	Satyam Kumbhar			
	36	Vishvajeet Vibhute			
10	37	Aniket Darekar	Electric Vehicle	Dr. Pharande sir	Automobile
	38	Akash Borate			
	39	Abhishek Katkar			

	40	Akash Naikude			
11	41	Rupesh Bhaskar Nawadkar	Automatic Painting Machine	Prof. Shivade A S	Production
	42	Rohit Shankar Chavan			
	43	Yogesh Pandurang Sapkal			
	44	Partik Bhosale			
12	45	Sharad Asawale	Design and Manufactu ring of Air Calorimet er to Enhance Engine Efficiency	Prof. Patil S. P.	Design
	46	Ajay Kanase			
	47	Alpesh Mandhare			
	48	Pratik Chavan			
13	49	Kavita Lad	Pneumatic Operator Feeder	Prof. Nikam P. R.	Pneumatic Systems
	50	Aparna Suryawanshi			
	51	Suraj Phalake			
	52	Akash Salunkhe			
14	53	Nihal Rohile	UGC Vehicle With Gun Mechanis m	Prof. Patil S. P.	Design
	54	Ruturaj Pisal			
	55	Rushikesh Chavan			
	56	Rajdeep Jadhav			
15	57	Puja Shinde	Design of 6-Way Valve	Prof. Kadam A. A.	Design
	58	Vishal Gaikwad			
	59	Shubham Dhotre			
	60	Shrikant Herkar			
16	61	Onkar Pimpale	Design and Fabricatio n of Automatic Tyre Inflation System	Prof. Ghaddage Nikhil	Automobile
	62	Akash Nikam Baburao			
	63	Akshay Mahadeo Chavan			
	64	Shubham Kodag			
17	65	Shubham Sawant	Recycling of Plastic Using Compressi on Molding Machine	Prof. Kadam A. A.	Design
	66	Nawaj Patel			
	67	Aditya Sapkal			
	68	Sushant Dayanand Pawar			
18	69	Pratik Dhanave	Regular Elevated Creeper	Prof. Ghaddage Nikhil	Automobile
	70	Vrushabh Sapkal			
	71	Ramdas Kalokhe			

19	72	Shubham Sathe	Robotic Irrigation System With Water Pump Control	Prof.Pawar Sandeep	Production
	73	Rohit Bhosale			
	74	Vaibhav Kadam			
	75	Akash Jadhav			
	76	Mohammad Rafique			
20	77	Aishwarya Deshmukh	Sugarcane Sowing Machine	Dr. Pharande sir	Agricultural
	78	Kunal Bavalekar			
	79	Pruthviraj Chavan			
	80	Sourabh Chavare			
21	81	Shubham Jadhav	Snake BOT	Prof. Pratik Mahajan	Mechatronics
	82	Arbaz Patel			
	83	Rajashri Suryawanshi			
	84	Adishesh Pawar			
22	85	Ritik Agrawal	Advanced Spying and Bomb Disposal Robot	Prof. Pawar Sandeep	Production
	86	Ranjit Kharade			
	87	Sanket Dhanawade			
	88	Akshay Gurav			
23	89	Avinash Matre	Design and Fabrication of Automatic Load Carrying Vehicle	Prof. Ghaddage Nikhil	Automobile
	90	Digvijay Patil			
	91	Siddesh Kumbhar			
	92	Krishana Nagargoje			
24	93	Shubham Padwal	Design and Development of Automatic Feeding Mechanism Through Feed Center Less Grinding Machine	Prof.Pawar Sandeep	Production
	94	Suraj Sutar			
	95	Sachin Raskar			
	96	Jeevan Patil			
	97	Sutar Sachin			
25	98	Akash Mulik	Hydraulic Baling Machine	Prof. Nikam P. R.	Pneumatic Systems
	99	Ganesh Jadhav			

26	10 0	Mohatkar Mahesh	Polyster Let Off Machine	Prof. Tambe P. M.	Production
	10 1	Phalke Tushar siddharth			
	10 2	Gaikwad Shubham Vivek			
	10 3	Bhosale Snehal			
27	10 4	Indrajit Shinde	Design and Developm ent of Solar Powered Earth Auger and Fertilizer Machine	Dr. Pharande sir	Production
	10 5	Anil Hasbe			
	10 6	Vaibhav Mohite			
	10 7	Siddhant Waje			
28	10 8	Tushar Gade	Air Ballon Jack	Prof. Nikam P. R.	Pneumatic systems
	10 9	Pushpal Kadam			
	11 0	Sushant Vasant Pawar			
	11 1	Desai Ashish			
29	11 2	Ajay Kakade	Performan ce Study of Eletric Discharge Machine (EDM) Processes	Prof. Tambe P. M.	Production
	11 3	Suraj Aswale			
	11 4	Pankaj Mule			
	11 5	Aditya Sampat Chavan			
30	11 6	Kiran Vitthal Chavan	Ladle Lining by Readymad e Exothermi c Sleeve	Prof. Tambe P. M.	Production
	11 7	Omkar Kishor Mahadik			
	11 8	Asshutosh Avinash Suryawanshi			
	11 9	Siddhesh Ganesh Kadam			
31	12 0	Bhosale Vishal Rajan	Design & Developm ent of Jig For Drive End Machining Hummer	Prof. Patil S. P.	Design
	12 1	Deshpande Aditya Ajit			
	12 2	Gaikwad Prashant tukaram			
	12 3	Ubale Sager			

	12 4	Teli Nilesh Hiralal			
32	12 5	Omkar Jadhav	On-Grid 4KW Solar Lighting Power Plant Installatio n	Prof. Bichkar J. S.	Electrical Power Systems
	12 6	Shubham Pawar			
	12 7	Dhiraj Patil			
	12 8	Paramveer Jagtap			
33	12 9	Gadhawe Abhijeet Bhanudas	Design and Developm ent of Rapid Prototypin g Setup with Fixed Bed (Model 2)	Prof. Alatkar M. N. Prof. Agashe K.	Additive Manufacturin g
	13 0	Mardhekar parag Tanaji			
	13 1	Bhokare Krushna Rajendra			
	13 2	Kadam Saroj Shivajirao			
	13 3	Kharade Dattatary Sadashiv			
34	13 4	Swapnil Bhaleghare	Design and Developm ent of Rapid Prototypin g Setup with Moving Bed (Model 4)	Prof. Tambe P M Prof. Agashe K.	3D Printing
	13 5	Chinmay Shikarkhane			
	13 6	Aniket Dhanaji Salunnkhe			
	13 7	Omkar Rajendra Kadam			
35	13 8	Shedage Ajinkya Vijay	Design and Developm ent of Rapid Prototypin g Setup with Fixed Bed (Model 1)	Dr. Pharande sir Prof. Agashe K.	Additive Manufacturin g
	13 9	Adagale Vikram Bharat			
	14 0	Dorage Sagar Madhukar			
	14 1	Borate Lalesh Ankush			
	14 2	Sakunde Prashant Kisan			
36	14 3	Vishal Kholambe	Design and Developm ent of Rapid Prototypin g Setup	Dr. Pharande sir Prof. Agashe K.	3D Printing
	14 4	Prathmesh Chavan Pravin			
	14 5	More Rajesh			
	14 6	Mahesh Patil			

Gr	Sr	Names of the Project Group Members	Title of the Project	Name of the Guide	Domain
			with Fixed Bed (Model 3)		
A.Y. - 2021-22					
1	1	Shinde Prajwal Sunil	Fabrication of Battery Operated Mini Power Tiller	Prof. Patil S. P.	Manufacturing
	2	Akash Rajendra Kanase			
	3	Omkar Prakash Jadhav			
	4	Vaibhav Vasant Mohite			
2	5	Aditya Sunil Jagtap	Spyder Bot	Prof. Ghadage S. S.	Mechatronics (Interdisciplinary)
	6	Rushikesh Shekar Chikne			
	7	Rohit Ravindra Patil			
	8	Gaurav Rajendra Kadam			
3	9	Utkarsh Ravindra Pustake	Electric Vehicle	Dr. Pharande V. A.	Manufacturing
	10	Nandkumar Sanjay Dubal			
	11	Nikhil Bhauso Bhosale			
	12	Sanket Hemant Shinde			
6	13	Omkar Anil Dhole	Thermal Analysis of Rectangular & Parabolic Fins in Heat Exchanger	Prof. Patil S. P.	Thermal
	14	Kishor Laxman Ghadage			
	15	Ganesh Suresh kumbhar			
	16	Rupesh Popatrao Bhoite			
7	17	Omkar bhilare	Design and fabrication of triangular air compressor	Prof. Kamble R. R.	Manufacturing
	18	Rohan deshमुख			
	19	Vaibhav R. Pawar			
	20	Shewale Nikhil Vilas			
8	21	Ranjeet Bhaskar Desai	Intelligent	Prof. Ghadage S. S.	Automobile
	22	Vaibhav Ravindra Thorat			
	23	Akshay Maruti Jambhale			

	24	Vedant Vikas Shinde	Braking System		
9	25	Nadaf Sahil Shekhlal	Design and Manufacturing of pull back collet chuck	Prof. Patil S. P.	Design and Manufacturing
	26	Panaskar Pratik Chandrakant			
	27	Ghorpade Harshada Ramdas			
	28	Madane Akanksha Manik			
10	29	Dhane Nikhil Sunil	Process improvement using DMAIC methodology	Prof. Patil S. P.	Design and Manufacturing
	30	Jagtap Rushikesh Madhukar			
	31	Gaikwad Aniket Sachin			
	32	Bhosale Prathamesh Pramod			
12	33	Suraj bajirao jadhav	Design and development of RF controlled fire fighting robot	Prof Ghadage S.S.	AI
	34	Yogesh shivaji pol.			
	35	Nayum Ajim Mujawar			
	36	Pratik sudhakar shinde			
13	37	Rahul Maruti Kalkundrikar	Dual Axis Solar Tracking System with self cleaning	Prof. Patil S. P.	Mechatronics
	38	Ashutosh Anil Powar			
	39	Abhijeet Deepak Kadam			
	40	Rajesh Ramchandra Pawar			
14	41	Ghorpade Akshay	Self power generated electric bicycle	Prof. Ghadage S. S.	Automobile
	42	Bhosale Indrajit			
	43	Kadam Swapnil			
	44	Pawar Abhijit			
15	45	Shubham Chavan	Testing and analysis of mechanical properties of different 3D printing materials	Prof. Alatkar M. N.	Design and Development
	46	Ajinkya Pandharpatte			
	47	Ravi Kanase			
	48	Kunal Shinde			
16	49	Prithviraj Masu Lad	Design &	Prof. Kambale A.	Agricultural
	50	Mayur Dilip Monde			

	51	Shamburaj Kuber Tavare	Manufacturing Cattle Feed Pallets Machine		
	52	Rohit Pradip Jadhav			
17	53	Pawar Ashish Bhiku	Design and manufacturing of Oil skimmer	Prof. Kadam A.A.	Design and Manufacturing
	54	Pawar Pramod Bhiku			
	55	Sutar Jyoti Dattatraya			
	56	Bhosale Asmita Ananda			
18	57	Shewale Mayuri bhimrao	Exoskeleton on Arm using pneumatic cylinder	Prof.Kadam A.A.	Design and Manufacturing
	58	Shikalgar Aarju Majnu			
	59	Sawant Nikita Namadev			
	60	Bhosale Sakshi Anil			
19	61	Madhave Rohit kailas	Design and development of can crusher machine	Prof. Kamble A.V.	Manufacturing
	62	Pawan Vijay Desai			
	63	Bhandare Prasad Dilip			
	64	Shinde Prathmesh Niraj			
20	65	Bhoite Deepak Avinash	Design and development of welding fixture	Prof. Kambale A.	Design and Development
	66	Sawant Shubham Rajendra			
	67	Kamathe Shriram Shashikant			
	68	Pratik sanjay mane			
21	69	Shweta hanumantrao chavan	Vertical Axis Windmill Turbine	Prof. Kambale A.	Manufacturing
	70	Sushant Samadhan Jadhav			
	71	Patil shubham sanjay			
	72	swapnil sitaram jadhav			
22	73	pradip sitaram salunkhe	Solar Backup Installation	Prof. Kadam A. A.	Automobile
	74	Rushikesh Dasharath Chavan			
	75	Akash Avinash Lembhe			
	76	Sourav Tarakchandra Tikadar			
24	77	Hrushikesh prakash suryawanshi	Motorized Chain Mechanism Hacksaw	Prof. Kamble R. R.	Manufacturing
	78	Rupesh sunil shelake			
	79	Aniket Raju Jagadale			
	80	DESAI MUSKAN NISAR			
27	81	SURYAWANSHI PRATI KSHA RAVINDRA	Chiller for thermoforming process	Prof. Alatar M. N.	Automobile
	82	YADAV ANIKET ANIL			

	83	KHUSPE MAYUR SHANKAR			
28	84	HARE NIKITA SANDIP	Motorise Car Jack	Prof. Alatkar M. N.	Automobile
	85	HARISH SHAMRAO KOLEKAR			
	86	GHARGE PRASAD VILAS			
29	87	GODASE MANOJ PANDURANG	Design and fabrication of pipe inspection robot	Prof. Alatkar M. N.	Manufacturin g
	88	SURYAWANSHI JAYRAM DIPAK			
	89	SAHIL SHAIK			
	90	KADAM CHANDRASEN BHARAT			

13. Assignments with Assessments:

Assignments are given to the enrolled students by the faculty members. The students submit these assignments on MOODLE in an online form. These assignment marks are considered for internal term work calculations.

Akshay Sanjay Galve
 Assignment No - 2 Sem - IVth (2022-23)
 Sub - Sheet Metal
 PRN - 2115451012007

B) Press working terminology

A simple cutting die used for punching and blanking operation is shown in fig.

Bed - The bed is lower part of press frame that serves as a table to which a bolster plate is mounted.

Bolster plate - This is thick plate secured to the press bed, which is used for locating and supporting the die assembly. It is usually 5 to 12.5 cm thick.

die set - It is unit assembly which incorporates a lower and upper shoes, two or more guidposts bushings.

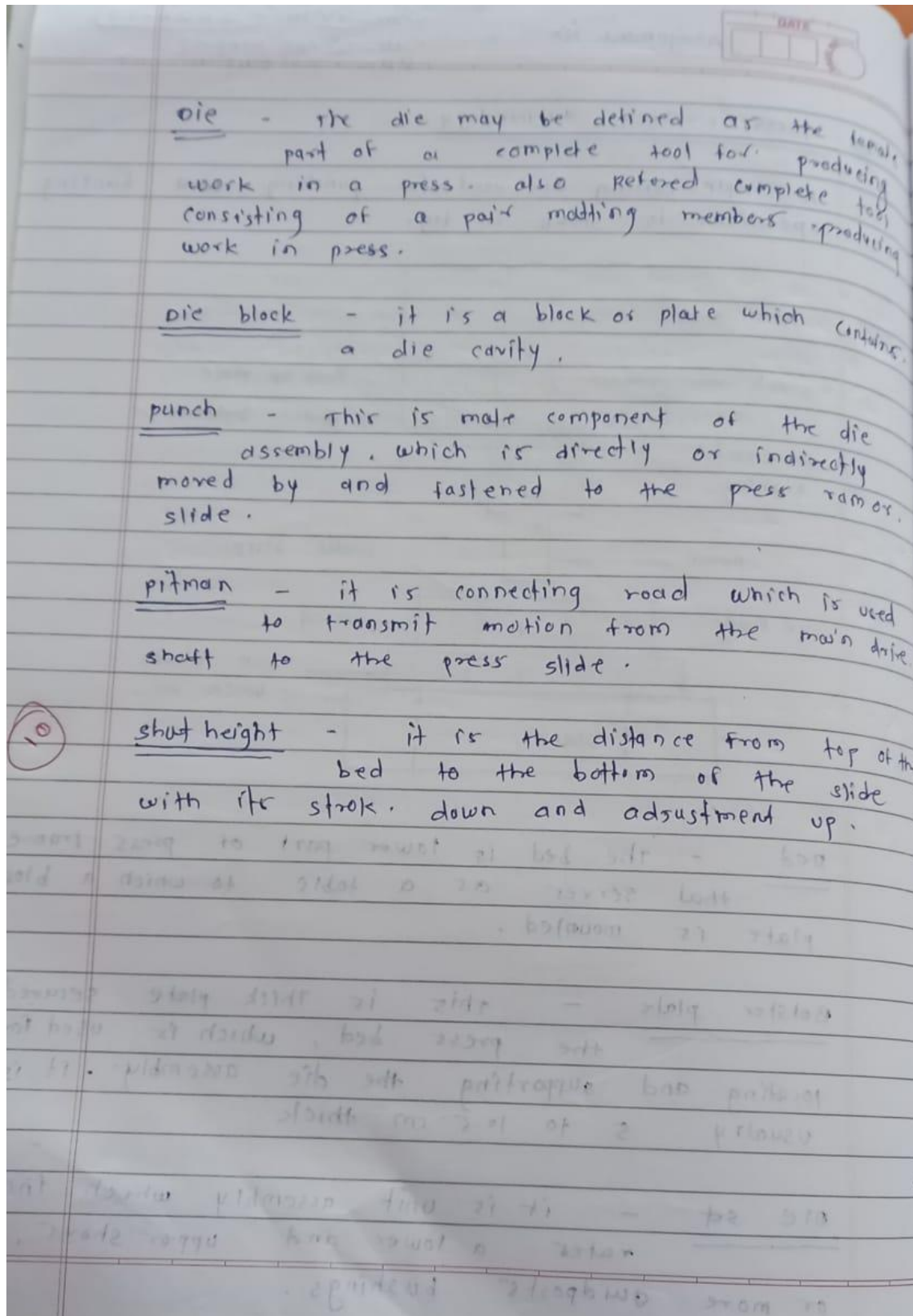


Figure 5.5.20 Screenshots of Assignments uploaded on MOODLE

14. Continuous Assessments:

The continuous assessment report is generated based on the student attendance and the assessment grades defined by the faculty members.

SAVARKAR INSTITUTES
SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING AGCE
 Panmalewadi, Vayve, Tal & Dist - Satara - 415 015
 Approved by AICTE, New Delhi, Recognised by Govt. of Maharashtra &
 Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere.
Continuous Assessment Sheet (CAS)

Name of Candidate: Shalaja Suryawanshi
 Roll No. 2070 Class & Department TP Mech (Mechanical)
 Subject MQC

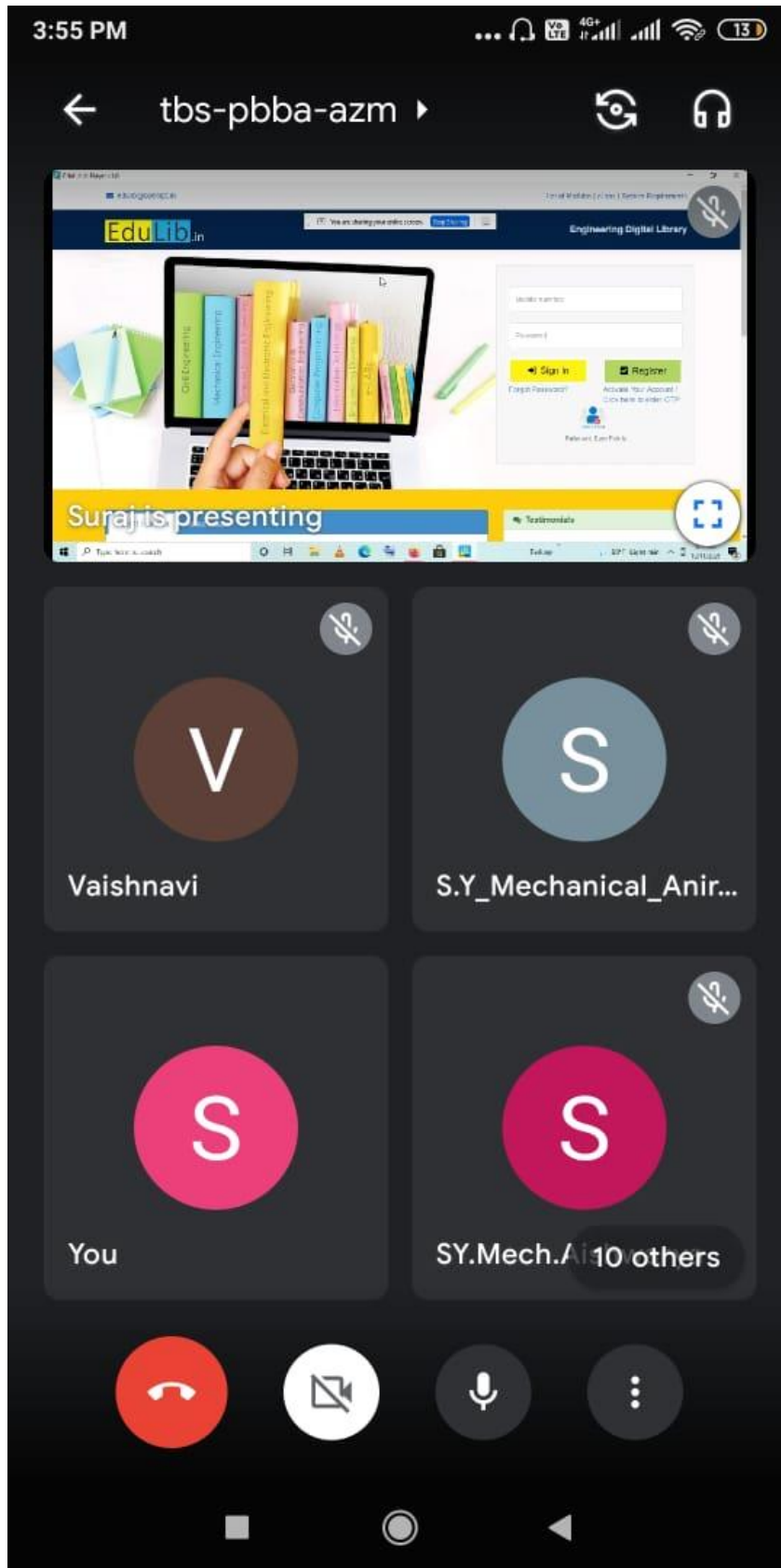
Exp No.	Exp Name	Date of Conduction	Laboratory Assessment				Faculty Sign with Date
			Timely submission (02)	Neatness (04)	Understanding (04)	Total (10)	
1	Experiment No.1		2	4	3	9	[Signature]
2	Experiment No.2	28/9/23	2	4	3	9	
3	Experiment No.3		2	4	3	9	
4	Experiment No.4		2	4	3	9	
CA1			Average marks of laboratory experiment (10)				
5	Experiment No.5		2	3	4	9	[Signature]
6	Experiment No.6	11/4/23	2	3	4	9	
7	Experiment No.7		2	3	4	9	
8	Experiment No.8	05/7/23	2	3	4	9	
9	Experiment No.9		2	3	4	9	
CA2			Average marks of laboratory experiment (10)				
Laboratory Assessment (10)		Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)		
CA1		8	5	8	5	26	
Laboratory Assessment (10)		Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)		
CA2		9	5	9	5	28	

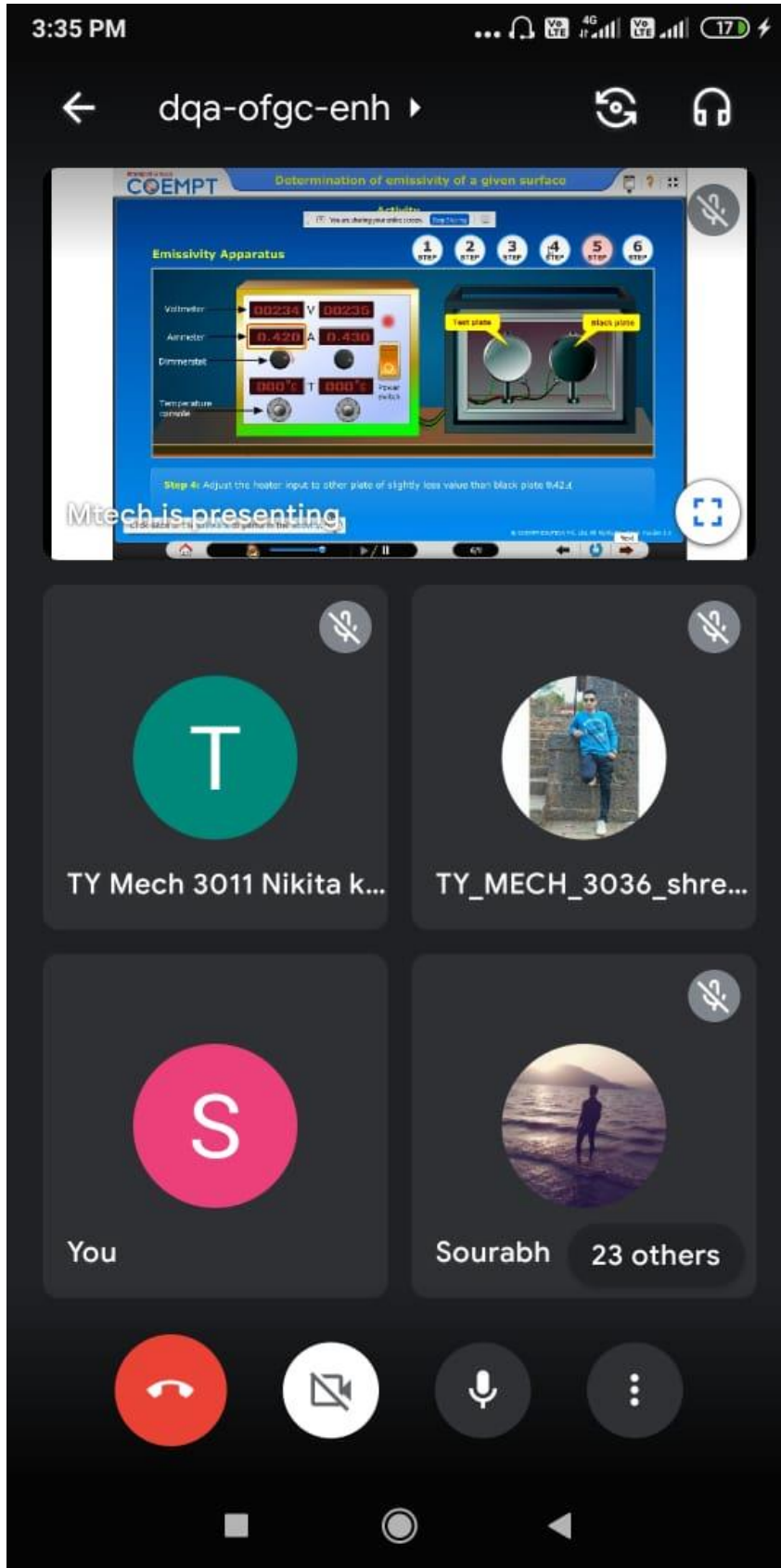
Student Sign: [Signature]
 Faculty Sign: [Signature]

Figure 5.5.21 Continuous Assessment Sheet Filled by Faculty Member

15. Virtual Labs:

Virtual Labs is a complete Learning Management System configured in accordance with COEP, Pune. Virtual Labs does not require any additional infrastructural setup for conducting experiments at user premises. The simulation experiments were conducted in an online mode using Virtual Labs during the COVID-19 period so as to minimize the loss of students.





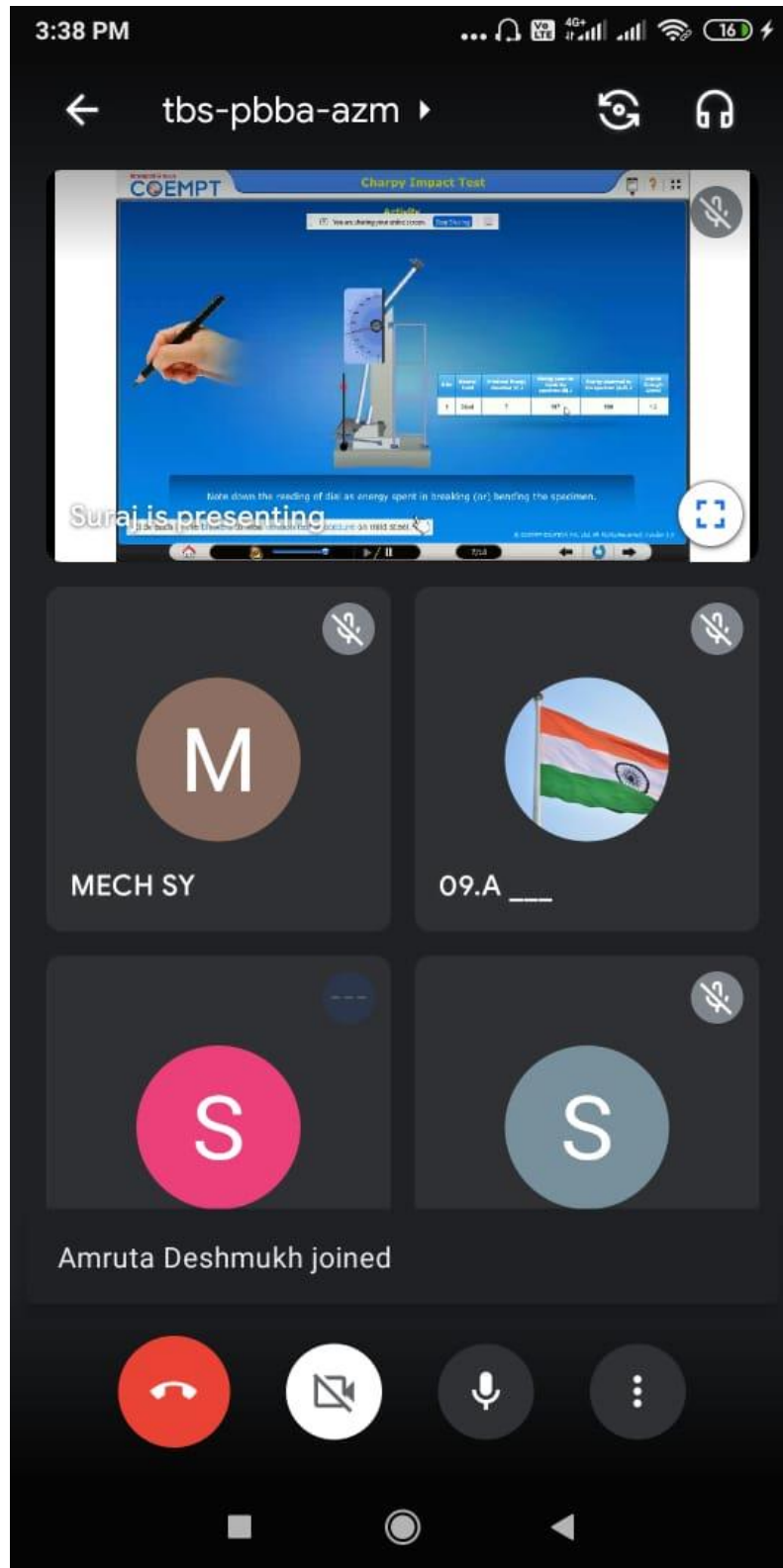


Figure 5.5.22 Screenshots of Experiment Conducted Using Virtual Lab

5.6 Faculty as participants in Faculty development/training activities / STTPs (15)

Name of the Faculty	Max. 5 per Faculty			
	CAY (2022-23)	CAYm1 (2021-22)	CAYm2 (2020-21)	CAYm3 (2019-20)
Dr. Vilas Arjun Pharande		00	01	01
Avinash Namdev Khadtare	01	02		
Dr.Mahammadsalman Warimani	01	00	07	11
M Sonachalam	01			
Prasanth Narayan	01			
Sadanand Sarapure	00			
Mr. Suraj Sajjan Ghadage	02	02	09	01
Suyog Sambhaji Patil	05			
Tushar Vilas Shende	00			
Mr. Ravi Raju Kambale	00	00	01	05
Mr. Suhas Prakashrao Patil	02	02	15	04
Mr. Arjun Arun Kadam	01	01	02	05
Mr. Ankur Vilas Kamble	02	02	03	05
Manisha Nilkanth Alatkhar	02	04	06	03
Mr. Mayuresh Wankhande	00	00	00	00
Mr. Ganesh Kishor Babar	00	00	00	00
Nikhil Vilas Ghadage	00			
Miss. Priya Yashwant Kuthe	00	01	00	00
Mr. Abhijeet Tanajirao Bhosale	01	00	00	00
Suraj Hanmant Jamdadede	00			
Mr. Mahesh Vishnu Matkar	00	00	00	00

Dr.Ananda Bhimrao Gholap	01	00	03	00
Dr.Sayed Ahmed Imran Bellary	00	00	00	00
Mr. Pratik Manohar Tambe	00	01	01	05
Miss.Mrunalini Uttam Patil	00	00	00	00
Dr.Abhay Arjun Desai	00	00	00	00
Amey Patwardhan	00	00	00	00
Mr,Suhas Arjun Pharande	00	01	01	00
Mr. Pranesh Bamankar	00	00	01	00
Mr. Sandip Pawar	00	00	01	00
Mr. Pranod Nikam	00	00	02	02
Mr. Anand Shivade	00	00	00	12
Sum	20	16	53	54
<i>RF</i> = Number of Faculty required to comply with 20:1 Student-Faculty ratio as per 5.1	20.75	21.05	21.25	21.25
Assessment = $3 \times (\text{Sum}/0.5RF)$ (Marks limited to 15)	5.78	4.56	14.96	15
Average assessment over three years (Marks limited to 15) =11.50				

5.7 Research and Development**(30)**

Academic research includes research paper publications, Ph.D. guidance, and faculty receiving Ph.D. during the assessment period.

- Number of quality publications in refereed/ SCI Journals, citations, Books/ Book Chapters etc.(6)
- Ph.D. guided / Ph.D. awarded during the assessment period while working in the institute(4)

All relevant details shall be mentioned.

5.7.1 Academic Research:**(10)**

Academic research includes research paper publications, Ph.D. guidance, and faculty receiving Ph.D. during the assessment period. All relevant details shall be mentioned.

5.7.1.1. Number of quality publications in refereed/SCI Journals, citations, Book/Book Chapters, etc.

Following is the list of research papers published by the faculty members in reputed journals and conferences:

List of research papers published by the faculty of the Mechanical Engineering department in the academic year 2022-23:

2022-23				
Sr. No.	Faculty Name	Title of paper	Name of the Journal/Conference	Journal Details
1	Dr. Vilas Pharande	A Performance Enhancement of Household Refrigerator Using Phase Change Materials (PCMs)	Gradiva Review Journal	ISSN No. 0363 – 8057 Vol. 9, No. 5, pp. 2185 – 2189 May 2023 DOI:10.37897.GRJ.2022.V9I5.23.513038
2	Dr. Vilas Pharande	Conversion of Waste Plastics into Fuel Using	Gradiva Review Journal	ISSN No. 0363 – 8057

		Pyrolysis Process		Vol. 9, No. 5, pp. 2173 – 2177 May 2023 DOI:10.37897.GRJ.2022.V9I5.23.513036
3	Dr. Avinash Khadtare	CuO Nanoparticle Size effect on Inconel-718 turning with nanofluid minimum quantity lubrication	International Journal of Machining and Machinability of Materials	DOI: 10.1504/IJMMM.2023.10055979
4	Mr. Suhas patil	Characterization and Machinability Studies of Aluminium-based Hybrid Metal Matrix Composites – A Critical Review	Journal of Advanced Research in Fluid Mechanics and Thermal Sciences	ISSN (Online): 2289 - 7879 Vol. 101, No. 2, pp. 137 – 163, January 2023 DOI: https://doi.org/10.37934/arfmts.101.2.137163
5	Mr. Suhas patil	Heat Transfer Enhancement in Tubular Heat Exchanger with Jet Impingement: A Review	Journal of Advanced Research in Fluid Mechanics and Thermal Sciences	ISSN (Online): 2289 - 7879 Vol. 101, No. 2, pp. 8 – 25, January 2023 DOI: https://doi.org/10.37934/arfmts.101.2.825
6	Dr.Sadanand Sarapure	Optimization of material removal rate and surface roughness during electric discharge machining of ultra-fine grained Al6082 using Taguchi technique	Material science and Engineering Technology (Materialwissenschaft und Werkstofftechnik)	ISSN: 0933-5137 (print). 1521-4052 (online) Vol. 54, No. 2, pp. 168 – 179, February 2023 https://doi.org/10.1002/ma-we.202200074
7	Dr.Sadanand Sarapure	Advanced tape cast multilayer thin ceramics and composites with inelastic failure behaviors for damage-resistant applications	In Advanced Flexible Ceramics, Design, Properties, Manufacturing, and Emerging Applications Elsevier Series in Advanced Ceramic Materials	ISBN 978-0-323-98824-7 Pages 391-410, March 2023 https://doi.org/10.1016/B978-0-323-98824-7.00019-1
8	Dr. Mahamadsal man	Metal non metal sorting using metal detection	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
9	Dr. Gholap A B	Radial and axial relief	Proceedings of the	ISBN: 978-81-961931-1-9

		Grinding Machine	International Conference on Innovations and Recent Trends in Engineering and Science – 2023	
10	Dr. Sadanand Sarapure	Semi autoconducting mulching machine	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
11	Dr. Mahamadsalman	ALTERNATIVE METHOD FOR WATER LIFTING TECHNOLOGY IN RURAL AREAS (Zero Energy Water lifting Technology In Rural India)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
12	Dr. M.Sonachalam	Generation Of Electricity From Ocean Waves by using spur gear	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
13	Dr. Avinash Khadtare	Industrial Robotic Arm	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
14	Mrs. Alatkhar Manisha	Robotic arm with vehicle	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
15	Mrs. Alatkhar Manisha	Accelerometer Based Gesture Controlled Robocar	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
16	Dr. M.Sonachalam	Road power generation	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
17	Mr. Suhas Patil	Design and development of 360 degree fire protection system	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9

18	Mr. Suhas patil	Design and fabrication of automatic ground clearance machine	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
19	Dr. Gholap A B	Section bending machine	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
20	Mr. arjun Kadam	Multipurpose agriculture machine	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
21	Mrs. Alatker Manisha	Vertical axis wind turbine	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
22	Mr. Abhijeet Bhosale	pneumatic jet machine	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
23	Dr. Avinash Khadtare	Design and manufacturing of hydraulic cutter	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science – 2023	ISBN: 978-81-961931-1-9
24	Dr. Avinash Khadtare	A Comparative study of Nano-MQL and MQL on Chip Morphology and Shear Angle under High Speed Turning of Inconel 718: For a Sustainable Machining.	4th Techno-societal 2022. International Conference	Presented
25	Mr. Suhas patil	Characterization and Machinability Studies of Aluminium-based Hybrid Metal Matrix Composites – Critical Review	International conference on recent advances in fluid mechanics ICRAFM 2022, 04 to 06 October 2022	Presented

List of research papers published by the faculty of the Mechanical Engineering department in the academic year 2021-22:

2021-22				
Sr. No.	Faculty Name	Title of paper	Name of the Journal/Conference	Journal Details
1	Dr. Vilas A. Pharande	Advantages of Digital Transformation in Indian Higher Education Sector	Anvesak	ISSN No. : 0378-4568
2	Dr. Vilas A. Pharande	Rechargeable Electrical Energy Storage System Development for an Electrical Vehicle Retro Fitment Kit	International Research Journal of Engineering and Technology	-ISSN: 2395 - 0056 p-ISSN: 2395 - 0072
3	Dr. Vilas A. Pharande	Total Quality Management (Book)	International Research Journal of Multidisciplinary Scope (IRJMS)	ISSN (Online): 2454 - 8499

List of research papers published by the faculty of the Mechanical Engineering department in the academic year 2020-21:

2020-21				
Sr. No.	Faculty Name	Title of paper	Name of the Journal/Conference	Journal Details
1	Dr. Vilas A. Pharande	Design of Tooling System to Reduce Cycle Time	Seybold Report	ISSN: 1533 – 9211 Vol. 25, No. 10, 2020
2	Mr. Shivade A. S.	Modified Direct Clustering Algorithm for Group Formation in Cellular Manufacturing	International Conference on Artificial Intelligence and Machine Learning (ICAIML - 2020)	DOI: 10.1088/issn.1757-899X Online ISSN: 1757-899X Print ISSN: 1757-8981
3	Dr. Vilas A. Pharande	Customer Relationship Management (Book)	International Research Journal of Multidisciplinary Scope (IRJMS)	ISSN: 2454 - 8499
4	Mr. Arjun A. Kadam	Design and manufacture of Engine lifting crane	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)
5	Dr. Vilas A. Pharande	Design & Development of Special Purpose Jig	International Conference on Innovations and Recent Trends in Engineering and	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)

			Science (ICIRTE - 2020)	
6	Mr. Arjun A. Kadam	Design And Development Of Drilling Jig	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)
7	Mr. Pranod R. Nikam	Design And Development Of Rice Transplanting Machine	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)
8	Mr. Suhas Patil	Automation Mechanisms for Centerless Grinding Machine: A Review	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)
9	Mr. Kamble Ravi R.	HHO Gas Generator Unit For Petrol engine	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)
10	Mr. Pranod R. Nikam	Plastic Injection Molding Machine	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)
11	Mr. Ankur V. Kamble	Review paper on design and manufacturing of fertilizer mixing machine	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)
12	Mr. Ghadage S. S.	Complaints Solving Using Design Change Note and Quality Control Tools	International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTE - 2020)

5.7.1.2. Ph. D. guided/Ph. D. awarded during the assessment period while working in the institute:

Ph.D. awarded during the assessment period while working in the institute:

Faculty Name	Title of the Ph. D. Thesis Phd guiding	University	Year of Completion	Country
Dr. Mahamadsalman Warimani	Performance and emission prediction of multi-cycle pulse detonation engine utilizing alternative fuels	International Islamic University Malaysia (IIUM)	06 January, 2023	Malaysia



Ph.D. Degree Certificate of Dr. Mahamadsalman Warimani

Ph.D. guided during the assessment period while working in the institute:

Sr. No.	Name of the Ph.D. Guide/Co-Guide	Name of the Research Scholar	Title of the Thesis	Guide / Co Guide	Degree Awarded	University
1	Dr. Vilas Arjun Pharande	Mr. Abhay A. Desai	Experimental Investigation on Effect of Temperature Gradient on Evaporating Water Droplet Particle	Co-Guide	2021	Shri. Jagdishprasad Jhabarmal Tibrewale University, Jhunjhunu
2	Dr. Vilas Arjun Pharande	Mr. Suhas Arjun Pharande	Determination of Effective Thermal Transport Properties of straw and Development of correlations for different climate zones for India	Co-Guide	Pursuing	Sun Rise University, Rajsthan
3	Dr. Vilas Arjun Pharande	Mr. Ajit Bansode	Introducing use of Ultra Capacitor in the energy storage section of the EV in Conjunction with a battery bank	Co-Guide	Pursuing	Sun Rise University, Rajsthan
4	Dr. Vilas Arjun Pharande	Mr. Shital Bhosale	Investigation of surface modification in powder mixed electrical discharge machining process	Co-Guide	Pursuing	Shri. Jagdishprasad Jhabarmal Tibrewale University, Jhunjhunu
5	Dr. Vilas Arjun Pharande	Mr. Arjun Arun Kadam	Analysis on Heat Transfer flow of fluid using Finite Element Method	Guide	Pursuing	Sun Rise University, Rajsthan

5.7.2 Sponsored Research

(5)

Sr. No.	Project Title	Duration	Funding Agency	Amount
2019-20				
1	Design & Development of boring fixture	1	Zerg Corporation, Satara	13000
2	Experimental Analysis of bearing.	1	Majesty Tyres Satara	9000
3	Automatic Drain wastage machine	1	Zerg Corporation, Satara	10000
4	Fixture design for heavy water upgrading plant	1	Zerg Corporation, Satara	15000
5	Design & manufacturing of Jigs & Fixture	1	Akashganga Constructional Machines Pvt. Ltd.	14000
6	Fixture design for heavy water upgrading plant	1	Akashganga Constructional Machines Pvt. Ltd.	10000
7	Feeding System of centerless grinding machine	1	Akashganga Constructional Machines Pvt. Ltd.	15000
8	Advancement & time reduction standard assembly procedure of turbo20 + eco32 & eoc42	1	Abhijat Equipments Pvt. Ltd., Satara	10000
2020-21				
1	Electric Vehicle	1	AGCE	14000
2	UGC Vehicle With Gun Mechanism	1	Majesty Tyres Satara	15000
3	Design and Fabrication of Automatic Tyre Inflation System	1	Majesty Tyres Satara	21000
4	Recycling of Plastic Using Compression Molding Machine	1	Abhijat Equipments Pvt. Ltd., Satara	20000
5	Regular Elevated Creeper	1	Abhijat Equipments Pvt. Ltd., Satara	22500
6	Design and Development of Automatic Feeding Mechanism Through Feed Center Less Grinding Machine	1	Design tech Systems Ltd Pune	26600
7	Design & Development of Jig For Drive End Machining Humme	1	Abhijat Equipments Pvt. Ltd., Satara	23500
2021-22				
1	Fabrication of Battery Operated Mini Power Tiller	1	Design tech Systems Ltd Pune	20000

2	Thermal Analysis of Rectangular & Parabolic Fins in Heat Exchanger	1	Design tech Systems Ltd Pune	19000
3	Design and fabrication of triangular air compressor	1	Zerg Corporation, Satara	21000
4	Intelligent Braking System	1	Design tech Systems Ltd Pune	15000
5	Testing and analysis of mechanical properties of different 3D printing materials	1	Design tech Systems Ltd Pune	15000
6	Vertical Axis Windmill Turbine	1	Om Enterprises, Satara	21000
7	Chiller for thermoforming process	1	Om Enterprises, Satara	25000
8	Motorise Car Jack	1	Design tech Systems Ltd Pune	28000
9	Design and fabrication of pipe inspection robot	1	Om Enterprises, Satara	19500

5.7.3 Development Activities

(10)

Provide details:

1. Product Development
2. Research laboratories
3. Instructional materials
4. Working models/charts/ monograms etc.

1. Product Development:

Title of the Invention: RETRO-FITMENT KIT FOR THREE-WHEELER AUTO RICKSHAW TO CONVERT IC ENGINE INTO ELECTRICAL DRIVE USING GEAR BOX

Patent Application No.: 202121024842

Date of Filing: 04 June 2021

Status: Published

inPASS Indian Patent Advanced Search System		INTELLECTUAL PROPERTY INDIA PATENTS DESIGNS TRADE MARKS GEOGRAPHICAL INDICATIONS	
Patent Search			
Patent Search		Patent E-register	Application Status
		Help	
Invention Title	RETRO-FITMENT KIT FOR THREE-WHEELER AUTO RICKSHAW TO CONVERT IC ENGINE INTO ELECTRICAL DRIVE USING GEAR BOX		
Publication Number	31/2021		
Publication Date	30/07/2021		
Publication Type	INA		
Application Number	202121024842		
Application Filing Date	04/06/2021		
Priority Number			
Priority Country			
Priority Date			
Field Of Invention	MECHANICAL ENGINEERING		
Classification (IPC)	F02M0025080000, B62K0013040000, B60L0050500000, B62K0005020000, F01N0013000000		
Inventor			
Name	Address	Country	Nationality
Dr. Vilas Arjun Pharande	Principal and Guide, Arvind Gavali College of Engineering, Satara, MH, India. E-mail: vilas.agcesatara@gmail.com	India	India
Mr. Aakash Sunil Naykude	Final Year B-Tech (Mechanical Engineering) Arvind Gavali College of Engineering, Satara E-mail: aakashnaykude3222@gmail.com	India	India
Mr. Aniket Avinash Darekar	Final Year B-Tech (Mechanical Engineering), Arvind Gavali College of Engineering, Satara, MH, India. E-mail: aniketdarekar99@gmail.com	India	India
Mr. Abhishek Shankarrao Katkar	Final Year B-Tech (Mechanical Engineering), Arvind Gavali College of Engineering, Satara, MH, India. E-mail: katkarabhi91@gmail.com	India	India
Mr. Akash Narendra Borate	Final Year B-Tech (Mechanical Engineering) Arvind Gavali College of Engineering, Satara, MH, India. E-mail: 27akashborate@gmail.com	India	India
Applicant			

Figure 5.7.3.1 Screenshot of Webpage of Indian Patent Office for Patent Application No. 202121024842

Application Details	
APPLICATION NUMBER	202221065599
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	16/11/2022
APPLICANT NAME	1 . DR.PHARANDE VILAS ARJUN 2 . MS.GAVALI MANISHA KRUSHNAT 3 . MS.GURAV KANCHAN DATTATRAY 4 . MS.WARAGADE MRUNALI DILIP 5 . MRS.NIKAM PRIYANKA CHANDRAKANT
TITLE OF INVENTION	DP TRANSFORMER THEFT PROTECTION AND MONITORING SYSTEM.
FIELD OF INVENTION	ELECTRONICS
E-MAIL (As Per Record)	
ADDITIONAL-EMAIL (As Per Record)	vilaspharande@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	16/11/2022
PUBLICATION DATE (U/S 11A)	09/12/2022

Figure 5.7.3.2 Screenshot of Webpage of Indian Patent Office for Patent Application No. 202221065599


2. Instructional Material:

MOODLE System:

MOODLE is a learning platform designed to provide educators, administrators, and learners with a single robust, secure, and integrated system to create personalized learning environments. A teacher can store instructional materials in every course like PowerPoint presentations, videos, animations, and lab manuals. The same is available to the enrolled students 24 × 7. Teachers can schedule quizzes and assignments for their subjects periodically. Quizzes are based on Multiple Choice Questions (MCQs) and assignments can be uploaded for assessment. The grades obtained by the students are visible immediately after the quiz is attempted.

Project Posters:

Students are encouraged to participate in Poster Presentation competitions. Posters prepared by the students and presented in innovative project competitions such as AVISHKAR and ANVESHAN are made available to the students for study and presentation purposes.



SAWRAR
INSTITUTES
SATARA
NAAC Accredited

SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

Problem Statement

Transfer the power from one shaft to another shaft by maximizing the clearance limit we get better power performance

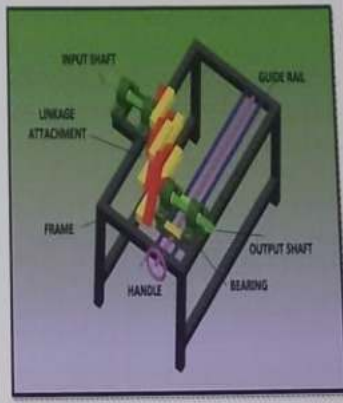
Engineering & Technology

Eccentric linkage coupling

Objective

A) To reduce the maintenance cost -- In conventional Oldham's coupling at higher torque transmission the intermediate piece and other part get wear out. The maintenance or repairing of this involves more cost.
B) To reduce the friction -- There is more rubbing surface area in case of conventional oldham's coupling. Due to this it has maximum friction which is unavoidable. Thus it causes the wear and tear.

Block Diagram



Contribution

Use the AUTO-CAD software or CATIA software for designing the machining component.
Individually used the cutting machine, welding machine, drilling machine and grinding machine. This machine are used in college.
Using the internet the most information is collected individual parts i.e. motor, bearing is buying in market.

Abstract

With the help of Eccentric linkage coupling we can adjust the clearance between two shafts during the power transmission. But in Oldham's coupling there are certain issues we cant maximize to tolerance. In this coupling using the linkage adjust the clearance limit for two shafts but in the Oldham's coupling there is no adjust the clearance limit in two parallel shafts. It is used to special purpose machine and fabricating industry and usable to fabrication industry.

Description / Explanation

A) Firstly assemble the part that is bearing, shaft, linkage attachment, guide rail.
B) Keep the input shaft and output shaft co-axial.
C) After that rotate the input shaft so that output shaft is also start to rotate that means at the coaxially or at zero eccentricity it is rotate.
D) After that by using handle of guiderail change the eccentricity in positive direction then output shaft is also rotate. In that way if we change the eccentricity up to the certain limit output shaft is continuously rotating.
E) If we change the direction that means if we change the eccentricity at that time also it works. That means if we change the eccentricity up to the certain limit in positive or negative direction that coupling is work.

Result and Discussion

After assembly of components of project, we try to run it with the help of DC supply of 12v to 40v but there were some problems occurred.
It cant run without loss of friction therefore it makes noise and friction is occurs therefore the welding is breaks.
Bearing problem is occurs. for easy running we used washer between two linkages. We use oil for lubricating so the frictional gets reduced.

Innovation / Research area

With the help of Eccentric linkage coupling we can adjust the clearance between two shafts during the power transmission. But in Oldham's coupling there are certain issue we cant maximize to tolerance.

Conclusion

Project work has provided us an excellent opportunity an experience to use our limited knowledge. We gained a lot practical knowledge regarding, planning purchase assembling and machining while doing this project work. We feel that the project work is a good solution to bridge gates between institution and industries.

Student Name : Lankeshwar Abhishek Class: S.E.Mech Academic Year : 201

Figure 5.7.3.3 AVISHKAR Poster Displayed in the Laboratory

Laboratory Manuals:

The laboratory manuals for the following subjects have been prepared by the faculty members of the department:

Table 1. List of Laboratories subject-wise for SY, TY, and Final Year B.Tech (Mechanical Engineering)

SEM III	
BTMEL307	Materials Science and Metallurgy Lab
BTMEL308	Fluid Mechanics Lab
BTMEL309	Machine Drawing and CAD Lab
SEM IV	
BTMEL407	Manufacturing Processes Lab – I
BTMEL408	Theory of Machines Lab- I
BTMEL409	Strength of Materials Lab
SEM V	
BTMEL507	Heat Transfer Lab
BTMEL508	Applied Thermodynamics Lab
BTMEL509	Machine Design Practice- I
BTMEL510	Theory of Machines Lab- II
SEM VI	
BTMEL607	Metrology and Quality Control Lab
BTMEL608	Machine Design Practice-II
BTMEL609	IC Engine Lab
BTMEL610	Refrigeration and Air Conditioning Lab
SEM VII	
BTMEL706	Manufacturing Processes Lab - II
BTMEL707	Mechatronics Lab
BTMEL708	CAD/CAM Lab

Lab Charts:

Charts providing information relevant to the experiments conducted in the laboratory are displayed in the laboratories.

Table 2 List of Charts in Laboratories

Sr. No.	Name of the Laboratory	Name of the Chart
1	Machine Drawing and CAD Laboratory	Intersection of solids
		Conventional representation of machine components
2	Theory of Machine Laboratory	Gyroscope

		Gear to Terminology
3	Mechatronics Laboratory	Pneumatic Symbols
4	Fluid Mechanics and material science Laboratory	Fluid Mechanics
5	Heat Transfer/ Metrology & Quality Control Laboratory	Turbine Technology
		Shell & Tube type boiler
		Micro meter
		Measuring instruments
		Dial Indicator
		Calerometry
6	I.C. Engine Laboratory	Components of engine

5.7.4 Consultancy (from Industry)

(5)

Sr. No.	Project Title	Duration	Funding Agency	Amount
2019-20				
1	AICTE Unnat Bharat Abhiyan	1	AICTE	50000
2	Design & Development of boring fixture	1	Zerg Corporation, Satara	13000
3	Experimental Analysis of bearing.	1	Majesty Tyres Satara	9000
4	Automatic Drain wastage machine	1	Zerg Corporation, Satara	10000
5	Fixture design for heavy water upgrading plant	1	Zerg Corporation, Satara	15000
6	Design & manufacturing of Jigs & Fixture	1	Akashganga Constructional Machines Pvt. Ltd.	14000
7	Fixture design for heavy water upgrading plant	1	Akashganga Constructional Machines Pvt. Ltd.	10000
8	Feeding System of centerless grinding machine	1	Akashganga Constructional Machines Pvt. Ltd.	15000
9	Advancement & time reduction standard assembly procedure of turbo20 + eco32 & eoc42	1	Abhijat Equipments Pvt. Ltd., Satara	10000
Total				96000
2020-21				
1	Electric Vehicle	1	AGCE	14000

2	UGC Vehicle With Gun Mechanism	1	Majesty Tyres Satara	15000
3	Design and Fabrication of Automatic Tyre Inflation System	1	Majesty Tyres Satara	21000
4	Recycling of Plastic Using Compression Molding Machine	1	Abhijat Equipments Pvt. Ltd., Satara	20000
5	Regular Elevated Creeper	1	Abhijat Equipments Pvt. Ltd., Satara	22500
6	Design and Development of Automatic Feeding Mechanism Through Feed Center Less Grinding Machine	1	Design tech Systems Ltd Pune	26600
7	Design & Development of Jig For Drive End Machining Humme	1	Abhijat Equipments Pvt. Ltd., Satara	23500
Total				142600
2021-22				
1	AICTE Margdarshan Mentor-Mentee Scheme	3	AICTE	500000
2	Fabrication of Battery Operated Mini Power Tiller	1	Design tech Systems Ltd Pune	20000
3	Thermal Analysis of Rectangular & Parabolic Fins in Heat Exchanger	1	Design tech Systems Ltd Pune	19000
4	Design and fabrication of triangular air compressor	1	Zerg Corporation, Satara	21000
5	Intelligent Braking System	1	Design tech Systems Ltd Pune	15000

6	Testing and analysis of mechanical properties of different 3D printing materials	1	Design tech Systems Ltd Pune	15000
7	Vertical Axis Windmill Turbine	1	Om Enterprises,Satara	21000
8	Chiller for thermoforming process	1	Om Enterprises,Satara	25000
9	Motorise Car Jack	1	Design tech Systems Ltd Pune	28000
10	Design and fabrication of pipe inspection robot	1	Om Enterprises,Satara	19500
Total				1160700

5.8 Faculty Performance Appraisal and Development System (FPADS):

Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for effective implementation of curricula. They are also expected to provide services to the industry and community for understanding and contributing to the solution of real-life problems in the industry. Another role relates to the shouldering of administrative responsibilities and cooperation with other Faculty, heads of departments, and the Head of the Institute. An effective performance appraisal system for Faculty is vital for optimizing the contribution of individual Faculty to institutional performance.

The assessment is based on:

A well-defined system for faculty appraisal for all the assessment years (10)

Its implementation and effectiveness (20)

Performance appraisal system of the faculty:

Annual self-assessment for the performance-based appraisal system is adopted as per the UGC notification on 30 June 2010, approved by the Govt. of Maharashtra state vide GR dated 15 February 2011. Hence it is ensured that information on multiple activities is appropriately captured.

Category I: Teaching, Learning, and Evaluation-Related Activities

Brief Explanation:

Based on the teacher's self-assessment, API scores are proposed for (a) teaching-related activities, (b) domain knowledge, (c) participation in examination and evaluation, (d) contribution to innovative teaching, new courses, etc. The minimum API score required by teachers from this category is 75. The self-assessment score should be based on objectively verifiable criteria wherever possible and will be finalized by the screening/selection committee.

Category II: Co-curricular, Extension and Professional Development Related Activities

Brief Explanation:

Based on the teacher's self-assessment, category II API scores are proposed for co-curricular and extension activities and Professional development-related contributions. The

minimum API required by teachers for eligibility for promotion is 15. A list of items and proposed scores is given below. It will be noticed that all teachers can earn scores from a number of items, whereas some activities will be carried out only by one or a few teachers. The list of activities is broad enough for the minimum API score required (15) in this category to accrue to all teachers. As before, the self-assessment score should be based on objectively verifiable criteria and will be finalized by the screening/selection committee.

Category III: Research and Academic Contributions

Brief Explanation:

Based on the teacher's self-assessment, API scores are proposed for research and academic contributions. The minimum API score required by teachers from this category is different for different levels of promotion and between universities and colleges. The self-assessment score will be based on verifiable criteria and will be finalized by the screening/selection committee. Review of Performance Appraisal: The Performance-based Appraisal System (PBAS) forms are submitted through the Head of Department to the Academic Monitoring Committee (AMC), R&D and IPR Committee, and IQAC Committee. The Head of Department along with the AMC, R&D and IPR Committee, and IQAC form the review committee. The advantage of PBAS is that each faculty becomes aware of self-weakness and tries to improve oneself in those areas so that he/she can score better in the next year. Faculty with good API scores is given letters of appreciation and the faculty members having low API scores are personally counseled by the Head of the Institute.

APPRAISAL AND 360° FEEDBACK FORM

Name
Date of Birth
Highest Qualification
Designation
Experience
Program
Mobile No.
Email
Permanent Address (with pin code)
Academic Year

Suhans Prakashrao Patil
23/06/1988
UG / PG / Ph.D.
Assistant Professor
Teaching: 10 Industrial: 2 Total: 12
Mechanical
9860928844
samsuhanspatil2@gmail.com
A/10 - Islampur, Tal. Watwa, Dist. Sangli
22-23

SCORES FOR ACADEMIC PERFORMANCE INDICATORS (APIs) IN RECRUITMENTS AND CAREER ADVANCEMENT SCHEME (CAS) PROMOTIONS OF UNIVERSITY / COLLEGE TEACHERS

CATEGORY I: TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES

Brief Explanation: Based on the teacher's self-assessment, API scores are proposed for (a) teaching related activities; (b) domain knowledge; (c) participation in examination and evaluation; (d) contribution to innovative teaching, new courses etc. The minimum API score required by teachers from this category is 75. The self assessment score should be based on objectively verifiable criteria wherever possible and will be finalized by the screening/selection committee.

- Lectures, seminars, tutorials, practical's, contact hours undertaken taken as percentage of lectures allocated.
- Lectures or other teaching duties in excess of the UGC norms.
- Preparation and Imparting of knowledge / instruction as per curriculum; syllabus enrichment by providing additional resources to students.
- Use of participatory and innovative teaching-learning methodologies; updating of subject content, course improvement etc.
- Examination duties (Invigilation; question paper setting, evaluation/assessment of answer scripts) as per allotment.

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1A	Excellent course file for the subject, teaching plan displayed	20	Course file prepared as per plan	20	20
1B	Conducting practical lab. / tutorials; work nicely with lab innovations	20	practical's conducted	15	15
1C	Student Feedback outcome	10	Feedback taken monthly	10	10
2A	Remedial Classes OR Extra lectures for DSE students	4	Remedial class taken as per timetable	4	4
2B	Content beyond syllabus	6	completed	3	3
3A	Preparation and Imparting of knowledge / instruction as per curriculum;	10	prepared a file as curriculum	7	7
3B	syllabus enrichment by providing additional resources to students	10	Yes provided	8	8
4A	Number of ICT Based Teaching material	5	As per curriculum	5	5
4B	Number of Interactive Courses	5	Yes,	5	5
4C	Effective use of MOODLE	10	Effective use of moodle uploading notes	10	10
5A	At Institute Level	15	organised waste	12	12
5B	At University Level	10	nicely done	5	5
Total Score		125		105	105
Minimum API Score Required		75			

CATEGORY II: CO-CURRICULAR, EXTENSION AND PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES.

Brief Explanation: Based on the teacher's self-assessment, category II API scores are proposed for co-curricular and extension activities; and Professional development related contributions. The minimum API required by teachers for eligibility for promotion is 15. A list of items and proposed scores is given below. It will be noticed that all teachers can earn scores from a number of items, whereas some activities will be carried out only by one or a few teachers. The list of activities is broad enough for the minimum API score required (15) in this category to accrue to all teachers. As before, the self-assessment score should be based on objectively verifiable criteria and will be finalized by the screening/selection committee.

1. Student related co-curricular, extension and field based activities (such as extension work through NSS/NCC and other channels, cultural activities, subject related events, advisement and counseling)
2. Contribution to Corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities.
3. Professional Development activities (such as participation in seminars, conferences, short term, training courses, talks, lectures, membership of associations, dissemination and general articles, not covered in Category III below)

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Guidance to a project in exhibition / competition won any prize. Industry Sponsored projects.	4		-	
1.B	Industry tour / visit, Visit to technical Exhibition	4	Yes planned conducted	4	4
1.C	Arranged the invited talks / Expert lecturers at Department / Institute level	4	Yes, arranged	4	4
1.D	VAP (Value addition training Program) conducted by a staff 40hrs / PBL/ New tech with projects. Conducted the lectures in GATE Forum OR Recourse persons for Skill Development Program.	4		-	
1.E	extension work through NSS/NCC and other channels, cultural activities	4			
2.A	Institute level Responsibilities (Deans/COE: 05, Heads:3, other:02)	5	Dean responsibility	5	5
2.B	Event Coordinators (Institute Level: 05, Department Level: 03, Participation:02)	5	Project exhibition	3	3
2.C	Department Level Responsibilities: 05, Participation:02	5	IQA, coordinator	2	2
3.A	Participation in short term training courses, curriculum development, training courses, talks, lectures	5	Attained	5	5
3.B	Membership of professional associations committees, Boards of Studies, editorial committees of journals / institutional publications.	5	IETE	5	5
3.C	Participation in subject associations, conferences, and seminars without paper presentation.	5	Yes, participated	2	2
Total Score		50			
Minimum API Score Required		20		30	30

CATEGORY-III: RESEARCH AND ACADEMIC CONTRIBUTIONS

Brief Explanation: Based on the teacher's self-assessment, API scores are proposed for research and academic contributions. The minimum API score required by teachers from this category is different for different levels of promotion and between university and colleges. The self-assessment score will be based on verifiable criteria and will be finalized by the screening/selection committee.

1. Research Papers published in:
2. Research Publications (books, chapters in books, other than refereed journal articles)
3. RESEARCH PROJECTS
4. RESEARCH GUIDANCE
5. TRAINING COURSES AND CONFERENCE /SEMINAR/WORKSHOP PAPERS
 - A. Refresher courses, Methodology workshops, Training, Teaching Learning Evaluation Technology Programs, Soft Skills development Program, Faculty Development Programs (Max: 30 points)
 - B. Papers in Conferences/ Seminars/ workshops etc.**
 - C. Invited lectures or presentations for conferences/ symposia

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Refereed Journals *	20/ 2 publication	paper published	30	30
1.B	Non-refereed but recognized and reputable journals and periodicals, having ISBN/ISSN numbers	10 / 2 Publication		-	
1.C	Conference proceedings as full papers, etc. (Abstracts not to be included)	5/2 publication	published	2.5	2.5
2.A	Text or Reference Books Published by International Publishers with an established peer review system	20 /sole author; 5 /chapter in an edited book		-	
2.B	Subjects Books by National level publishers/State and Central Govt. Publications with ISBN/ISSN numbers.	15/sole author, and 5/ chapter in edited books		-	
2.C	Subject Books by Other local publishers with ISBN/ISSN numbers.	10/ sole author, and 2 / chapter in edited books		-	
2.D	Chapters contributed to edited knowledge based volumes published by International Publishers	5 /chapter		-	
2.E	Chapters in knowledge based volumes by Indian/National level publishers with ISBN/ISSN numbers and with numbers of national and international directories	3 / Chapter		-	
	Sponsored Projects carried out/ ongoing				
3.A	a) Major Projects amount mobilized with grants in between Rs.10,000 to Rs.50,000/-	10 /2 major project	sponsored projects	10	10
	b) Minor Projects (Amount mobilized with grants upto Rs.10,000/-)	7 /2 minor Project		-	
3.B	Consultancy Projects carried out / ongoing: Amount mobilized with upto Rs.15,000/-	10 consultancy		-	
3.C	Completed projects Quality Evaluation: Completed project Report(Acceptance from funding agency)	7 /each major project and 5 /each minor project		-	
3.D	Projects Outcome / Outputs: Patent/Technology transfer/ Product/Process	7 / each state level output or patent /4 /each for national level		-	

4.A	M.Tech/M.Phil- Degree awarded only	2 /each	-	-
4.B	Ph.D.		-	-
	a) Degree awarded	4 /each	-	-
	b) Thesis submitted	3 /each	-	-
5.A	a) Not less than two weeks duration	7 /each	-	-
	b) One week duration	5 /each	20	20
5.B	Participation and Presentation of research papers (oral/poster) in			
	a) International conference	8 /each	8	8
	b) National conference	6 /each	-	-
	c) Regional/State level	4 /each	-	-
	d) Local - University/College	2 /each	-	-
5.C	a) National level	5 /each	-	-
	b) State level	2 /each	-	-
Total Score		175	-	-
Minimum API Score Required		70	70.2	70.2

*Wherever relevant to any specific discipline, the API score for paper in refereed journal would be augmented as follows: (i) Indexed Journals - by 5 points; (ii) papers with impact factor between 1 and 2 by 10 points; (iii) papers with impact factor between 2 and 5 by 15 points; (iv) papers with impact factor between 5 and 10 by 25 points.

** If a paper presented in Conference/Seminar is published in the form of Proceedings, the points would accrue for the publication (III (a)) and not under presentation (III (e)(ii)). Note: The API for joint publications will have to be calculated in the following manner: Of the total score for the relevant category of publication by the concerned teacher, the first/Principal author and the corresponding author/supervisor/mentor of the teacher would share equally 60% of the total points and the remaining 40% would be shared equally by all other authors.

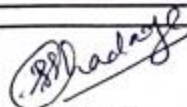
supporting documents, wherever required be attached.

	Category I	Category II	Category III	Total Score
Total Score	125	50	175	350
Minimum API Score Required	75	20	70	165
Total Self-Assessment Score	105	30	70.2	205.2
Score by Screening/ selection committee	105	30	70.2	205.2

Date: 25/08/23
Place: SATARA


Signature of Faculty

Recommendation by screening team (Academic Monitoring Committee):


Member AMC


Head of Department


Registrar


Principal
Dr. Vilas Pharande
Principal
Arvind Cavali College of Engineering
Panmale, adi, SATARA

5.9 Visiting/Adjunct/Emeritus Faculty etc.**(10)**

Adjunct faculty also includes Industry experts. Provide details of participation and contributions in teaching and learning and /or research by visiting/adjunct/Emeritus faculty etc. for all the assessment years:

- Provision of inviting/having visiting/adjunct/emergitus faculty(1)
- Minimum 50 hours per year interaction with adjunct faculty from industry/retired professors etc.

(Minimum 50 hours interaction in a year will result in 3 marks for that year; 3 marks x 3 years = 9 marks)

A.Y.	Name of Faculty	Class	Subject	Duration
2020-21	Adv. Dhanashri Ghorpade	SY-IV	Basic Human Rights	36
	Dr. Sanjay Lawand	TY-V	Training and Placement	28
		B. Tech-VII		30
	Mr. Sanjay Lawand	TY-VI	Training and Placement	32
		B. Tech-VIII		30
	Mr. Anup Hingmire	SY-III	Physical Director	34
T.Y.-IV		30		
Mr. Anup Hingmire	SY-IV	Physical Director	30	
	T.Y.-VI		30	
	Dr.Patil Priyanka Mahesh	SY, TY, Final Year B.Tech	Medical Councilor	12
	Adv. Arundhati Ayachit	SY-IV	Basic Human Rights	36

2021-22	Mr. Ajay Arora	TY-III T.Y.-IV	Campus to Corporate	28 30
	Mr. Ajay Arora	TY-IV T.Y.-VI	Campus to Corporate	32 30
	Mr. Anup Hingmire	SY-III T.Y.-IV	Physical Director	34 30
	Mr. Anup Hingmire	SY-IV T.Y.-VI	Physical Director	33 30
	Dr. Patil Priyanka Mahesh	SY, TY, Final Year B.Tech	Medical Councillors	12
2022-23	Adv. Devendra Dixit	SY-IV	Basic Human Rights	36
	Mr. G. George	SY-III T.Y.-IV	Campus to Corporate	30 30
	Mr. Santosh Nalawade Mr. Saurabh Bhosale	SY-IV T.Y.-VI	Campus to Corporate	28 30
	Mr. Anup Hingmire	SY-III T.Y.-IV	Physical Director	30 30
	Mr. Anup Hingmire	SY-IV T.Y.-VI	Physical Director	30 30
	Dr. Patil Priyanka Mahesh	SY, TY, Final Year B.Tech	Medical Councilor	14

CRITERION 06	FACILITIES AND TECHNICAL SUPPORT	80
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6.1 Adequate and well equipped laboratories, and technical manpower (30)**A. Adequate well-equipped laboratories to run all program-specific curriculum (20)**

Mechanical Engineering Department provides adequate & well equipped laboratories & technical manpower as per the norms. Some major equipment in each laboratories mentioned in table no. 6.1 & also mentioned technical staffs details

Table 6.1: Details of Laboratories, Equipment and Technical Manpower

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1	Machine Drawing and CAD Laboratory (311)	20	Creo element Pro Uplus Bundle with CAD/CAM/CAE tools from PTC	24	Mr. A. J. Shinde	Lab Assistant	Diploma Mechanical
2	Theory of Machine Laboratory (312)	20	Motorized gyroscope. Epicyclic Gear Train Model. Static and dynamic machine, Vibe-lab, Whirling of shafts, Generation of involute profile.	18	Mr. A. J. Shinde	Lab Assistant	Diploma Mechanical
3	Mechatronics Laboratory (319)	20	Hydraulic trainer kit, Pneumatic trainer kit, Hydraulic power pack, Filters and strainers, Different switches/sensors/valves	12	Mr. A. V. Jamadade	Lab Assistant	Diploma Mechanical
4	Fluid Mechanics and material science Laboratory (309)	20	Bernoulli's theorem apparatus, Venturi Meter and Orifice meter, Reynolds experiment, Minor and major losses in pipes,	12	Mr. A. J. Shinde	Lab Assistant	Diploma Mechanical

			Orifice meter, Metacentric height of ship, Optical microscope				
5	Heat Transfer/ Metrology & Quality Control Laboratory (308)	20	Set ups for measurement of thermal conductivity of insulating powder, thermal conductivity of composite wall., Thermal conductivity of metal rod., Natural convection apparatus., Forced convection apparatus., Emissivity measurement apparatus, Vertical profile projector, set of slip guage-83 (Mitutoyo make) =1 set., floating carriage micrometer with l.c.- 0.001mm electronic micrometre, thread plug 1nos measuring (2 wire) 1 pair and setting master 1 no. prism pair 1 no	18	Mr. A.V. Jamadade	Lab Assistant	Diploma Mechanical
6	I.C. Engine Laboratory (009)	20	Computerised VCR diesel engine set up, 3 Cylinder 4 Stroke petrol engine test ring with electrical dynamometer Delta 3D Printer, Dig iPro 3D Model XFAB200	06	Mr. A. J. Shinde	Lab Assistant	Diploma Mechanical

6.2 Additional facilities created for improving the quality of learning experience in laboratories (25)

Mechanical Engineering Department provides extra facility beyond syllabus in some laboratories. These facilities provide service to the students & also help to the project work. The details of facilities are mentioned in table no. 6.2.

Table 6.2: Details of Additional Facilities Created for improving Quality of Learning Experience in Laboratories

Sr. No.	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students' are expected to have enhanced learning	Relevance to POs/PSOs
1	Smart Class Room	<ul style="list-style-type: none"> E-board and projector facility with a seating capacity of 60. Fully equipped with furniture and teaching aids 	<ul style="list-style-type: none"> Smart classroom is used for animated visuals and video lectures. These visually attractive methods of teaching are sometimes more interesting as compared to teaching in a classroom. 	Throughout the Year	The graphs, designs, models, simulation, and simplification of difficult subjects can be easily analyzed and visualized	PO-1, PO-2, PO-3, PO-4, PO- 5, PSO-1
2	Seminar Hall	Fully equipped seminar hall with Computer, Projector, Student desk, White board, Air conditioner, Fan, microphone, and speaker	<ul style="list-style-type: none"> To present tech talks/project seminars/research papers/works hops/ industry interaction/ presentation 	Throughout the year	To improve students' personality according to industry standard	PO1,PO-2, PO3, PO5, PSO1, PSO2

		with the capacity of 500.				
3	Lab manuals along with instruction materials.	Manuals are provided to students for all practical subjects of the program.	<ul style="list-style-type: none"> •To create an understanding of the experiment and inform the need of conducting the same. • Students can understand the concept of the experiment in a better manner. • To maintain the practical lab record using the lab manual 	Throughout the year	<ul style="list-style-type: none"> • Testing, performance, and analysis of different electronics and communications lab • Better usage of hardware and software tools. 	PO1, PO-2, PO5, PSO2, PO3, PSO1,
4.	Departmental Library	The departmental library has a collection of textbooks, reference books, project/seminar reports	To provide academic support to students. • To provide advanced information on the seminars and projects.	Throughout the year	Gathering new information, getting to know different topics for the overall development of the students.	PO1, PO-2, PO-4, PSO-1, PSO-2
5	Training and placement classes	Training on reasoning, group discussion, and technical skills by experts	Job-oriented training to improve logical reasoning and technical skills.	Throughout the year	Employability and entrepreneurship	PO4, PO5, PO8 & PO12
6	Aptitude Classes	Training on aptitude	Improve logical reasoning and technical skills	Throughout the year	Employability and entrepreneurship	PO4, PO5, PO8 & PO12
7	Virtual Lab	Perform online experiments as an additional facility	Providing online practical exposure to the students	Throughout the year	Employability and entrepreneurship	PO1,PO2, PO3,PO5,PO 12

		through a virtual lab				
8	Internet Facility	Internet facility with bandwidth 300 Mbps and Wi-Fi of 3 Mbps/User is provided	Seminar/Mini projects/ Assignments/Self learning	Throughout the year	Courses specified in curriculum, to access Moodle	PO5, PO8, PO10, PO12
9	NPTEL Local Chapter	Institute having NPTEL Local Chapter and server of NPTEL Content	To keep student abreast with the latest technology	Throughout the year	To grasp important concept of various subjects and modern tools used in computer science and engineering	PO1, PO2, PO3, PO5, PSO2
10	Digital Library	Del Net	To keep student abreast with latest technology, To provide national level platform to the students	Throughout the year	Project Works	PO1, PO2, PO3, PO5, PO12, PSO1
11	Surveillance cameras for exam rooms	IP cameras	To enhance the security of the department	Throughout the year	Security purpose	PO5, PSO1
12	Moodle Learning Management System	Institute having separate Moodle learning management system to provide digital content	For online digital record maintenance like attendance, examination results, feedback For sharing digital study material	Throughout the year	Courses specified in Curriculum	PO5, PO8, PO10, PSO1
13	Refrigeration and Air conditioning and other thermal engineering equipment	Refrigeration test rig, Air conditioning test rig, Ice plant test rig, Vapour absorption test rig, Grease penetrometer., redwood viscometer., Cloud and	To enhance the knowledge and practical exposure and utility of the facility for low temperature applications	Throughout the year	Project Works	PO1, PO2, PO3, PO5, PO12, PSO1

		pour point., Aniline point apparatus., Flash and fire point., Carbon residue apparatus.				
14	3 D Printer	Construction of 3D objects from CAD od digital 3 D model	To demonstrate new additive manufacturing technologies	Throughout the year	Research work and project	PO1, PO2, PO3, PO4, PO5, PO 9, PO12, PSO1
15	Manufacturing process equipment	Sieve analysis apparatus, Muffle furnaces, Rammer	For fabrication of components	Throughout the year	Project Works	PO1, PO2, PO3, PO4, PO5, PO 9, PO12, PSO1

6.3 Laboratories: Maintenance and overall ambience

(10)

6.3.1 Maintenance and Records

Department has Full furnished State of Art laboratories with well-equipped equipment which shall cater to UG course as per curriculum requirements. The central policy at institute level is followed for maintenance of laboratories and overall ambience as mentioned below:

1) Maintenance in Laboratories:-

1. All the equipment in the Laboratory is maintained on a regular basis by the concerned laboratory technicians under the guidance and supervision of the laboratory in charge
2. Equipment is marked with indelible ink marking to identify.
3. General servicing is done during summer vacation before commencement of academic year. Servicing is also done whenever necessary. Calibration is being done to the equipment whenever needed.
4. Electrical fitting is checked in on regular basis by electrician.
5. As per the requirement, minor repairs are carried out by the lab assistant.
6. Any equipment which is found defective or out of calibration shall be immediately withdrawn from services.

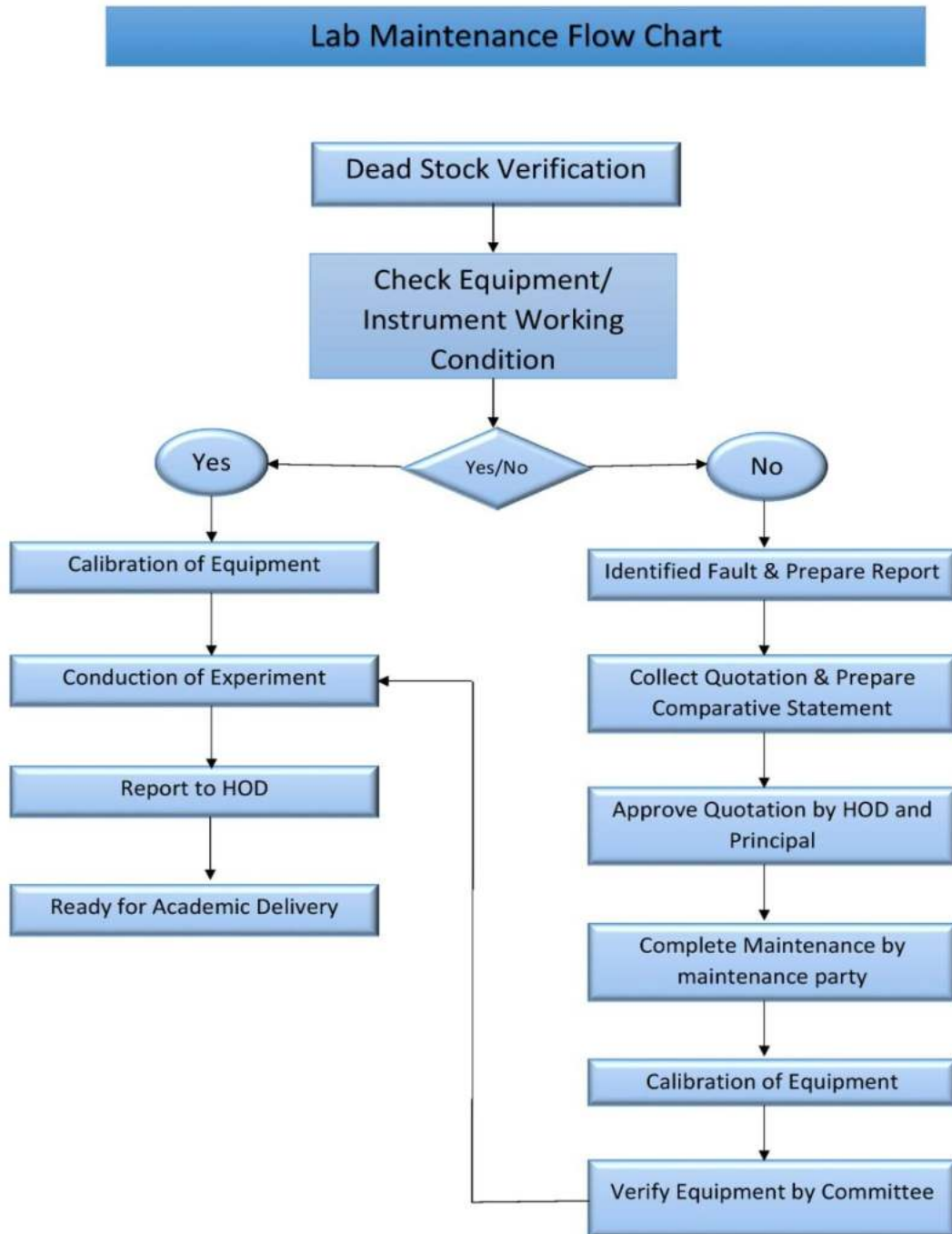


Fig. 6.3.1 a Flow Chart of Lab Maintenance Process

1) Records-:**A) Dead Stock Register-:**

- 1) To maintain inward record of all equipment, tools in proper way.
- 2) A register containing details of equipment, tools, suppliers with perspective with date, time, purpose & signature mentioned.

B) Laboratory Manual -:

- 1) Separate lab manual is available in every lab & maintain properly.
- 2) To provide a stepwise experiment procedure to conduct experiments safely and a written format to make a report of lab experiment.

C) Logbook-:

- 1) Logbooks are available in every lab & maintained regularly by lab in charge.
- 2) Experiment conduction details & lab user's details are mentioned in the logbook.

D) Laboratory time-table-:

- 1) Batch wise laboratory Time Table is displayed in every lab.
- 2) To know the engagement of the students as well staff and technical manpower concerned to the lab so the floating of the lab utilization can be managed time to time.
- 3) Lab utilization is done as per the laboratory timetable.

E) Purchase orders and bills-:

- 1) Purchase order Xerox copy & billing details of lab equipment every lab are maintained further contact and maintenance aspect.

SAMARTH EDUCATIONAL DEAD STOCK						
Name of item: <u>Office Mouthpiece APP</u>						
Nomenclature: <u>OMP</u>						
Sr No.	Bill No. & Date	Details of the supplier	Description of Material	Rate	Quantity Purchased	Cost (including taxes)
1	MRS/11-12/12007	M/S. Modest Refrigeration services Plot No. 40/94, Gavindaji Marathe industrial estate, Sangali - Miraj Road, Miraj India Telefax - 91433 2398 cell - 9773835870	Office Mouthpiece Apparatus		1	37750/-

TRUST, SATARA REGISTER					
Room Number: <u>611 518</u>					
Reference:					
Dead Stock No	Indent No & date	Signature of Lab Assistant	Signature of Lab Incharge	Signature of HOD	Remarks
	M/E/01-12/11501				
	M/E/01-143/710/11				
	M/E/03/1-01				

Fig. 6.3.1 a. Sample of Dead Stock Register

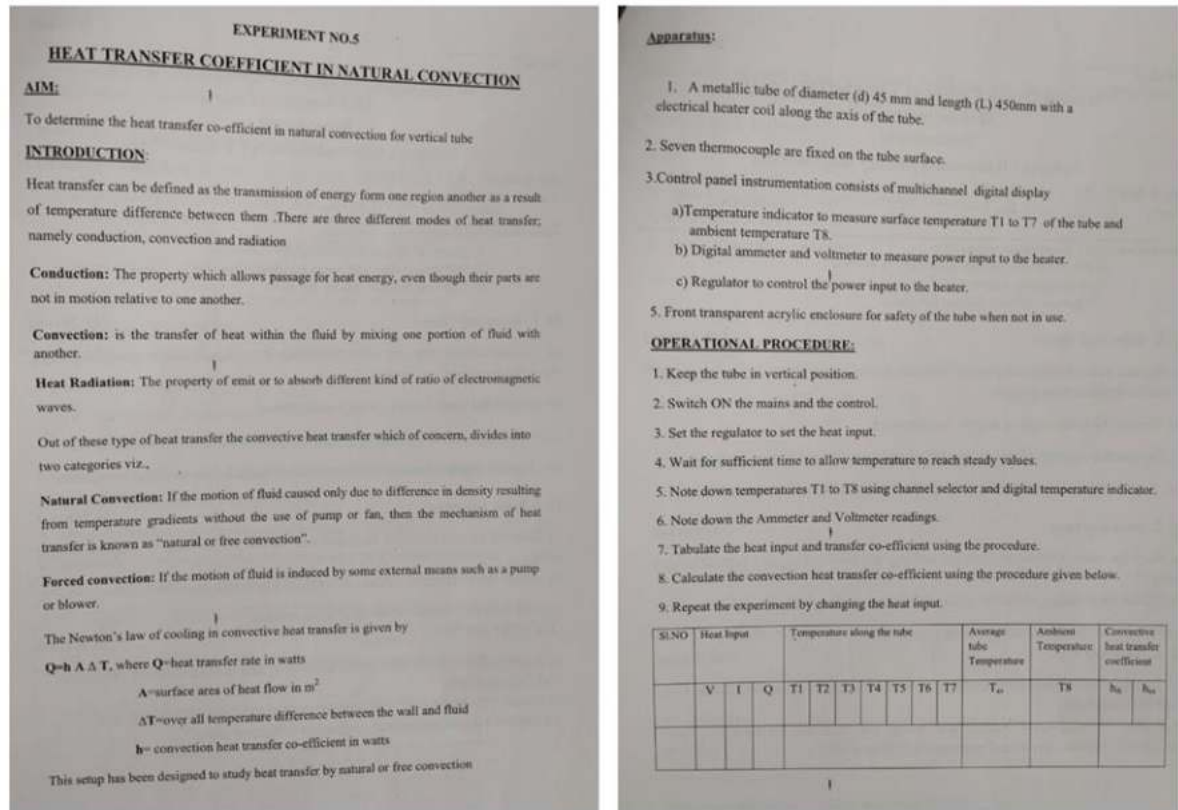


Fig. 6.3.1.b. Sample of Lab Manual

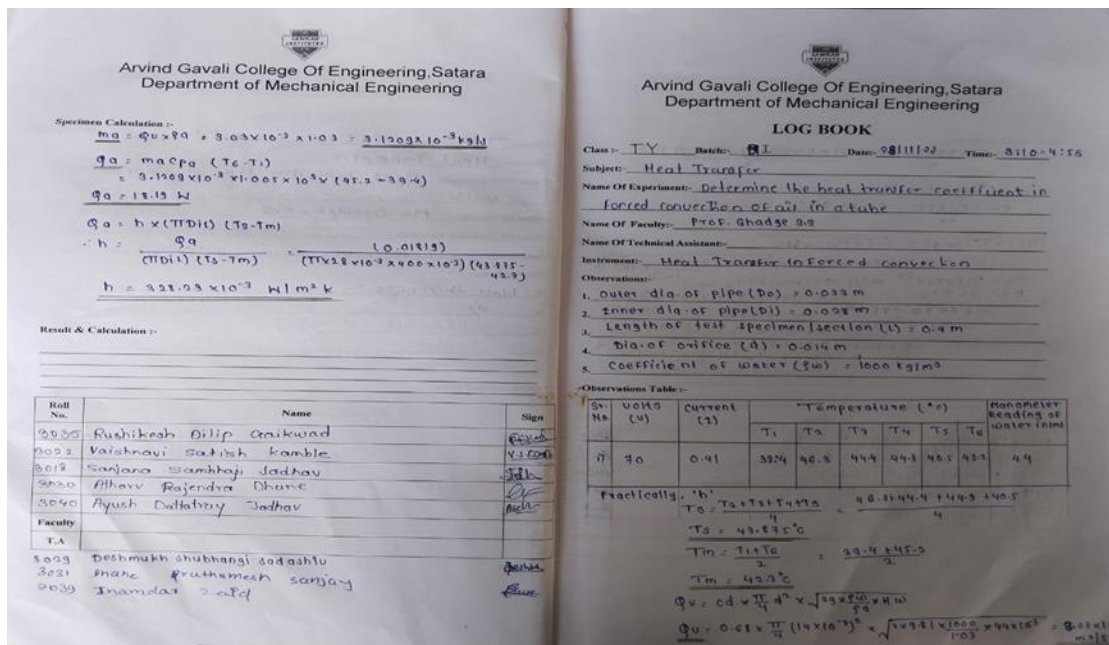


Fig.6.3.1.c. Sample log book

Samarth Education Trust's
 Arvind Gavali College of Engineering
 At- Panmalewadi, Post-Varye, Satara
 DEPARTMENT OF MECHANICAL ENGINEERING

IC ENGINE LAB									
Academic Year: 2021-22									
TIMETABLE									
DAY	10:00 - 11:00	11:00 - 12:00	12:00 - 12:40	12:40 - 01:40	01:40 - 02:40	02:40 - 03:00	03:00 - 04:00	04:00 - 05:00	05:00 - 05:20
MONDAY			Recess	SI-III- ICE (GSS) (WW119)		Recess			
TUESDAY				DI-IV -ICE (GSS) (WW119)					
WEDNESDAY				SI-IV ICE (GSS) (WW119)					
THURSDAY				MI-III- ICE (GSS) (WW119)					
FRIDAY	MI-IV- ICE (GSS) (WW119)							MI-IV- ICE (GSS) (WW119)	


Checked by


HOD
(Mr. Patil S.P.)




Principal
(Dr. Pharande V.A.)
Arvind Gavali College of Engineering
Panmalewadi, Satara

Figure 6.3.1 d Sample laboratory Time Table



ESTIMATE

GST Number - 27AAP17888G1203

DigiPro 3D
H. No. 184, Sr. No. 13, Satavwadi, Hadapsar
Pune, Maharashtra 411028
India

Mobile: +91 8080 210 534
www.digipro3d.com

BILL TO
Arvind Gavali College of Engineering
 Principal
 Satara, Maharashtra
 India
 shivadeanand@yahoo.in

Estimate Number: MH/2020/212
Estimate Date: June 17, 2021
Expires On: July 2, 2021
Grand Total (INR): ₹85,000.00


Items	Quantity	Price	Amount
DigiPro 3D XFAB Printer Model: XFAB 200 Bed Size: 200x200x200 mm 32 bit controller Touch Screen Interface Print Resume function	1	₹72,033.90	₹72,033.90
Subtotal:			₹72,033.90
SGST 9%:			₹6,483.05
CGST 9%:			₹6,483.05
Total:			₹85,000.00
Grand Total (INR):			₹85,000.00

Notes / Terms
 Terms and Conditions:
 1. 100% Payment in advance.
 2. For customize 3D printer manufacturing delivery time varies from 15 to 20 days.
 3. We offer 12 month warranty on 3D Printer except consumables.
 4. After sales service support is available during warranty period through mail, chat, skype and call.
 5. Subject to Pune jurisdiction.
 Payment Details:
 Bank Name: State Bank of India (SBI)
 Branch: Vijaynagar Chowk, Sangli
 IFSC Code: SBIN0017528
 Account Number: 38367109147

After claiming
4 GST cancelled
by issuing cheque
for amount Name.

Page 1 of 2 for Estimate #MH/2020/212

Figure 6.3.1 e. Sample of Purchase Bill



CASH / CREDIT MEMO Mob. 9850951120

V. R. ENGINEERING WORKS

"Rajopadhye Complex", Near Ambabai Talim, MIRAJ-416410

Manufacturers of : Critical Jobs Machining, Fabrication & Engineering
Equipment, Building Model's, Anatomy Model's & Traders

No. : 193

TAX INVOICE

Date : 28-3-23

M/s. ARVIND GAHAT COLLEGE OF ENGINEERING SATARA

Ref No - AGCE/Mech/2022-23/252 Date: 16/02/2023

Sr. No.	Particulars	Quantity	Rate	Amount	
				Rs.	Ps.
	Bill No 192 Total Amount			96,300	00
20	Central fuel pump pressure gauge	1		4,900	00
21	Reynold-glass tube,	1		4,800	00
22	Venturi & orifice	1		4,900	00
23	orifice-xy pointer	1		7,700	00
24	Air conditioning test rig	1		4,900	00
25	Refrigeration test rig	1		8,700	00
26	Ice plant test rig-	1		9,700	00
27	vapour absorption rig	1		8,600	00
28	Diesel engine test rig	1		6,900	00
29	set of slip gauge-83	1		2,900	00
30	Thru end gauge	1		700	00
31	Floating carriage diameter	1		21,00	00
6	Thermometer (4 nos) (New Purchase)	1		1,800	00
7	Red wood viscometer (New Air)	1		8,900	00
				1,78,800	00
			30% Advance. -	53,640	00
			Total	1,25,160	00

IN WORDS Rs. One lakh Twenty Five Thousand one hundred sixty only.

VAT TIN No. 27720213631 V
CST TIN No. 27720213631 C

I hereby certify that my/our Registration certificate under the Maharashtra Value Added Tax Act 2002, is in force on the date on which the sale of goods specified in this Tax Invoice is made by me/us and that the transaction is duly covered by the Tax Invoice has been effected by me/us and it shall be accounted for in the next quarter of sales while filing of return and the due tax, if any, payable on the sale has been paid or shall be paid.

V. R. ENGINEERING WORKS
MIRAJ-416410

For V. R. ENGINEERING WORKS

Figure 6.3.1 e. Sample of Purchase Bill

3. Overall Ambience:**Equipment:**

1. All laboratories are well furnished with all the necessary equipment/ instruments.
2. All equipment are maintained in good working condition.

Accommodation and Environment:

1. The laboratories are provided with adequate working space.
2. Dos and Don'ts and Safety measures rules are displayed in each laboratory.
3. Proper seating arrangement is provided for the students and the faculty.
4. Laboratory manuals are available in the all laboratories.
5. Sufficient numbers of windows are available for ventilation.
6. Lighting system is very effective, along with the natural light in every laboratory.
7. It is maintained with cleaning, sweeping and washing.

6.4 Project laboratories (5)

Total Marks 5.00
Institute Marks 5.00

Central workshop has dedicated space allotted for project work with basic manufacturing facilities, machining processes for individual work, project work, commercial consultancy and event work.



Fig. 6.3.2 Project Laboratory

Table 6.4a: List of components provided in project laboratory

Sr. No.	Components	Purpose
1	Compressor	To provide compressed air
2	Rheino Motors	High torque high RPM applications
3	Small Spanner Set	Handling of small nuts in assembly and disassembly of various devices
4	Pneumatic Cylinder	Linear actuations applications
5	Dcv	Direction Control (Pneumatic)
6	Mini Screw Driver Set	Handling of small screws in assembly and disassembly of various devices
7	Portable Drill Machine	Hand drilling
8	Pressure Regulator	Regulating pneumatic pressure
9	MIG Welding Setup	Fabrication work
10	Milling Machine	Pipe Development. Milling Operations
11	Hydraulic Hack Saw	Precision cutting of large diameter components in large

	Machine	quantity
12	Oxy Acetylene Welding Setup	TIG project fabrication work
13	Radial Drill Machine	Drilling of large holes beyond capacity of sensitive drill machine
14	All Geared Lathe	Turning operations performed on job which are larger than capacity of belt driven lathe machine
15	Arduino Boards	Micro-Controllers

Table 6.4b: List of additional facilities provided in project laboratories

Sr. No.	Name of the Facility	Utilization
1	All Geared Lathe	Turning operations performed on job which are larger than capacity of belt driven lathe machine
2	Angle Grinders	Project fabrication work
3	Anvil, Sewage Block	Hot / cold forging
4	Arc Welding Transformer	Fabrication work
5	Bench Drilling Machine	Drilling up to 10 mm holes
6	Bench Vice	Woodworking
7	Bench Vice	Tool and cutter grinding
8	Bubble Level Indicator	Precise leveling
9	C Clamps	Work holding
10	Chain Vice	Holding components
11	Chop Saw Machines	Project fabrication work
12	Hand Shearing Machine	For cutting of up to 2mm thick sheet
13	High Torque Spanner Sets	Precise tightening of bolts assembly
14	Hydraulic Hack Saw Machine	Precision cutting of large diameter components in large quantity
15	Internal & External Calipers	For precise measurement of external and internal diameter
16	Jig Saw Machine	Slotting operations
17	Medium Duty Lathe	Turning operations performed on job which are having maximum diameter 100 mm.
18	MIG Welding Setup	Project Fabrication work
19	Milling Machine Pipe Development.	Milling operations
20	Oxy Acetylene Welding Setup	TIG project fabrication work
21	Pipe Threading Set	For external fittings and threading
22	Pipe Vice	Pipe holding for threading, fitting etc.
23	Plastic Injection Moulding Machine	For manufacturing plastic components
24	Ply Cutter	Ply cutting
25	Radial Drill Machine	Drilling of large holes beyond capacity of sensitive drill

		machine
26	Resistance Spot Welding	Machine fabrication work
27	Surface Grinding	Precise surface finishing
28	Surface Planner	Circular saw wood working
29	Surface Plate	Precise measurement
30	Vernier	Precise length measurement
31	Vernier Height Gauge	Precise height measurement
32	Wood Turning Lathe	Wood working

6.5 Safety measures in laboratories (10)**Total Marks 8.00****Institute Marks: 8.00**

Sr. No	Laboratory Name	Safety Measures
1.	Machine Drawing and CAD Laboratory (311)	<ol style="list-style-type: none"> 1. Sufficient space is available for easy and free movement in the lab. 2. Laboratory apparatus are regularly inspected to ensure proper maintenance. 3. Proper illumination is available in the lab. 4. Electrical devices are periodically inspected so that the electrical equipments remain in good condition and no power cords are frayed or have exposed wiring. 5. Do's & Don'ts are displayed in each laboratory.
2.	Theory of Machine Laboratory (312)	<ol style="list-style-type: none"> 1. Sufficient space is available for easy and free movement in the lab. 2. Laboratory apparatus are regularly inspected to ensure proper maintenance. 3. Proper illumination is available in the lab. 4. Electrical devices are periodically inspected so that the electrical equipments remain in good condition and no power cords are frayed or have exposed wiring. 5. Do's & Don'ts are displayed in each

		laboratory.
3.	Mechatronics Laboratory (319)	<ol style="list-style-type: none"> 1. Sufficient space is available for easy and free movement in the lab. 2. Laboratory apparatus are regularly inspected to ensure proper maintenance. 3. Proper illumination is available in the lab. 4. Electrical devices are periodically inspected so that the electrical equipments remain in good condition and no power cords are frayed or have exposed wiring. 5. Do's & Don'ts are displayed in each laboratory.
4.	Fluid Mechanics and Material Science Laboratory (309)	<ol style="list-style-type: none"> 1. Sufficient space is available for easy and free movement in the lab. 2. Laboratory apparatus are regularly inspected to ensure proper maintenance. 3. Proper illumination is available in the lab. 4. Electrical devices are periodically inspected so that the electrical equipments remain in good condition and no power cords are frayed or have exposed wiring. 5. Do's & Don'ts are displayed in each laboratory.
5.	Heat Transfer/ Metrology & Quality Control Laboratory (308)	<ol style="list-style-type: none"> 1. Sufficient space is available for easy and free movement in the lab. 2. Laboratory apparatus are regularly inspected to ensure proper maintenance. 3. Proper illumination is available in the lab. 4. Electrical devices are periodically inspected so that the electrical equipments remain in good condition and no power cords are frayed or have exposed wiring.

		5. Do's & Don'ts are displayed in each laboratory.
6.	I.C. Engine Lab (009)	<ol style="list-style-type: none">1. Sufficient space is available for easy and free movement in the lab.2. Laboratory apparatus are regularly inspected to ensure proper maintenance.3. Proper illumination is available in the lab.4. Electrical devices are periodically inspected so that the electrical equipments remain in good condition and no power cords are frayed or have exposed wiring.5. Do's & Don'ts are displayed in each laboratory.

CRITERION 07	CONTINUOUS IMPROVEMENT	50
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7.1. Actions taken based on the results of evaluation of each of the Pos & PSOs (20)

POs and PSOs Attainment Levels and Actions for improvement: 2022-23

PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Target	2.40	2.36	2.04	2.23	2.48	1.79	1.72	1.64	2.02	1.81	1.88	1.80	2.21	1.62
Attainment	2.60	2.50	2.34	2.43	2.48	2.34	2.25	2.37	2.23	2.25	2.38	2.26	2.44	2.24

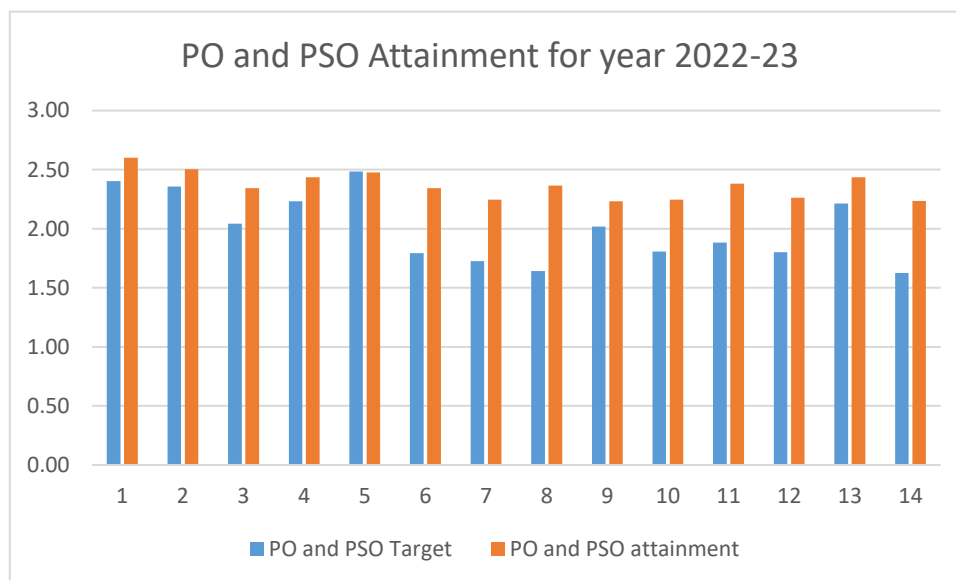


Figure.7.1a PO Target vs. PO Attainment for year 2022-23

PO's	Target Level	Attainment Level	Observations
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
PO1	2.40	2.60	Target achieved. <ul style="list-style-type: none"> • Due to knowledge of engineering & basic concepts.
Action 1: More emphasis given on assignment solving.			
PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
PO2	2.36	2.50	Target achieved. <ul style="list-style-type: none"> • Mechanical Engineering students gain problem solving and analyzing skills through various basic courses like Theory of Machines, Machine Design etc.
Action 1: Students are solved numerical assignments to identify, formulate and analyze engineering problems.			
Action 2: Guide to students to use identified online study material available like MOOCs courses which are self-paced.			
PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.			
PO3	2.04	2.34	Target achieved. <ul style="list-style-type: none"> • The courses like Projects, Basic Human Rights, QTPM, Programme core courses. • Different activities carried out under NSS Camp like tree plantation, blood donation camp contributed for wellness of society
Action 1: Students are to be provided with a question bank and made to practice unsolved problems from books as well.			
Action 2: Hands on workshop conducted for students.			
PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.			
PO4	2.23	2.43	Target achieved. <ul style="list-style-type: none"> • Students are participated in various technical events.
Action 1: Students are participated to solve practical problems through attending Hackathon.			
Action 2: Emphasis on simulations through lab/virtual platforms.			
PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.			

PO5	2.48	2.48	<p>Target achieved.</p> <ul style="list-style-type: none"> Teaching learning process is accompanied with Autocad software.
<p>Action 1: To achieve modern tool usage department has planned and purchased 3D printing machine.</p> <p>Action 2: Department also focuses on availability of modern equipment & tools like availability of Intelligent Interactive Panel and projectors in classroom, industrial training, industry supported labs helped to attain.</p>			
<p>PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.</p>			
PO6	1.79	2.34	<p>Target achieved.</p> <ul style="list-style-type: none"> It is observed that incorporation of responsibilities towards solving societal and health issues needs to be focused.
<p>Action 1: To understand the safety concerns and social aspects; a cell of 100 students are working under National Social Service.</p> <p>Action 2: Projects based on environment, healthcare, security and social issues was emphasized.</p>			
<p>PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</p>			
PO7	1.723	2.25	<p>Target achieved.</p> <ul style="list-style-type: none"> Different activities carried out under NSS In our curriculum Energy and Renewable Energy Sources are taught in our curriculum.
<p>Action 1: Different activities are carried out under NSS such as tree plantation.</p> <p>Action 2: Promoted paperless work through online submission to MOODLE and use of one sided paper for notices on notices board and departmental paper work.</p>			
<p>PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.</p>			
PO8	1.64	2.37	<p>Target achieved.</p> <ul style="list-style-type: none"> The ethics have to largely taken care of at all Course delivery particularly in Project and Seminar for report writings.
<p>Action 1: Separate GFM (Guardian Faculty Member) is appointed for batch of 20 Students for addressing personal issues, counseling, teaching ethics.</p> <p>Action 2: Industry culture awareness programs are organized to make students aware about industrial ethics which includes session on paper publication, IPR, Plagiarism free content in seminar and project report.</p> <p>Action 3: Institute student have proper uniform which indirectly contribute to teach ethical values of uniformity</p>			

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO9	2.02	2.23	<p>Target achieved.</p> <ul style="list-style-type: none"> • Courses like seminar, project, project based learning courses, laboratory involve individual and teamwork
<p>Action 1: Encouragement to participate in various state/national, zonal, university level competition of project, sports. Participation in social activities. Various days/event organization and management by students only helped them to grow as an individual and to cooperate in team.</p> <p>Action 2: TARUNAI-students annual cultural program is organized every year where in students actively participate to showcase their skill as an individual and as team</p> <p>Action 3: Group discussion through enhanced activities of Projects, Mini-projects.</p>			
PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.			
PO10	1.81	2.25	<p>Target achieved.</p> <ul style="list-style-type: none"> • Skills of documentation, communication, presentation during project and seminar is satisfactory but due to rural background there is scope for improvement.
<p>Action 1: In academic time table separate time slot allotted for soft skill improvement session. Special couch is appointed for the same.</p> <p>Action 2: Student participated in various online soft skill development courses offered by various MOOCS platforms like NPTEL.</p> <p>Action 3: Different cultural events, sports, social activities, project competition, industrial visits, Industrial training etc. contributed in students soft skill development</p>			
PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.			
PO11	1.88	2.38	<p>Target achieved.</p> <ul style="list-style-type: none"> • Students are able to apply knowledge and understanding of the engineering and management principles to their project work, as a member and are able to work effectively in a team.
<p>Action 1: Department students participated in various project competitions and secured prizes.</p> <p>Action 2: Department is having MOUs with various industries. Number of projects are industry sponsored projects which helps student to learn project management and finance</p>			
PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.			
PO12	1.80	2.26	<p>Target Achieved</p> <ul style="list-style-type: none"> • Students are observed to be capable for the technological development through various technical events.

Action 1: Students participation in various activities like extracurricular, project competition developed their lifelong learning ability.			
PSO1: The students will be able to acquire competencies in the usage of design, thermal and manufacturing principles to develop a product and process.			
PSO1	2.21	2.44	Target Achieved <ul style="list-style-type: none"> Students are trained through various hands-on courses
Action 1: Students are acquired knowledge through passing curriculum and through various hands-on courses of respective domains and industrial visit.			
PSO 2: The students will be able to impart technological inputs and acquire managerial skills to become technocrats and entrepreneurs.			
PSO2	1.62	2.24	Target Achieved <ul style="list-style-type: none"> Students are able to work as technocrats in the industries as well as they have proved themselves as the entrepreneurs.
Action 1: Various alumni guest lectures are organized through industrial resource persons.			
Action 2: Students are oriented about entrepreneurship through skill development courses.			

**Actions taken based on the results of evaluation of each of the Pos & PSOs
(20)**

POs and PSOs Attainment Levels and Actions for improvement: 2021-22

PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Target	2.35	2.27	2.09	1.99	2.17	1.92	1.71	1.71	2.27	1.87	1.77	1.96	2.00	1.65
Attainment	2.65	2.62	2.63	2.54	2.58	2.55	2.66	2.65	2.62	2.65	2.62	2.61	2.55	2.59

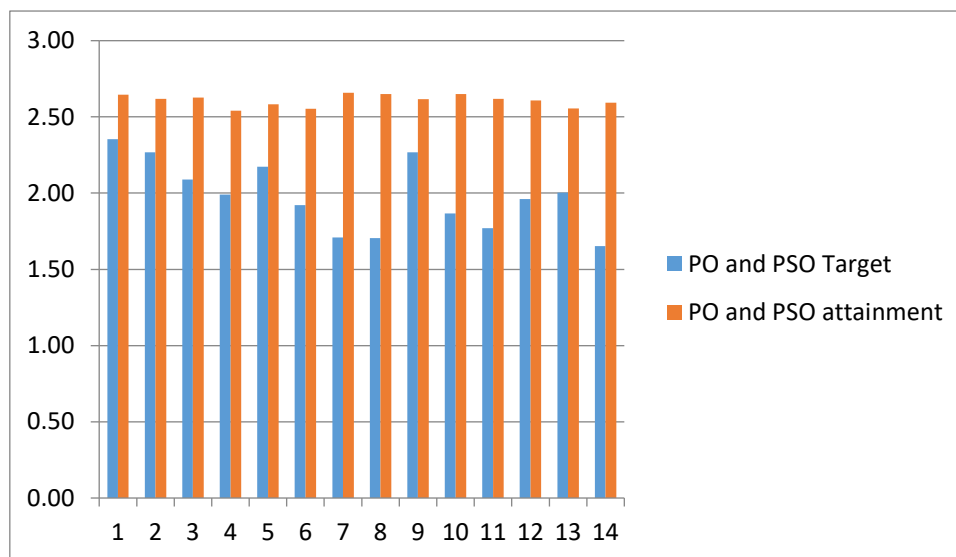


Figure.7.1b PO Target vs. PO Attainment for year 2021-22

PO's	Target Level	Attainment Level	Observations
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
PO1	2.35	2.65	Target achieved. • Due to knowledge of engineering & basic concepts.
Action 1: Additional classes are arranged for all direct entry students to cover entire syllabus from starting with prerequisites. Action 2: More emphasis given on assignment solving.			
PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
PO2	2.27	2.62	Target achieved. • Mechanical Engineering students gain problem solving and analyzing skills through various basic courses like Machine Design etc.
Action 1: Students are solved different numerical assignments to identify, formulate and analyze engineering problems. Action 2: Guide students to use identified online study material available like MOOCs courses which are self-paced.			
PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.			
PO3	2.09	2.63	Target achieved. • Hands on workshop on design software.
Action 1: Necessary inputs regarding analysis of experiments and interpretation of results obtained will be given relevant information. Action 2: Students are to be provided with a question bank and made to practice unsolved problems from books as well.			
PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.			
PO4	1.99	2.54	Target achieved. • Students are participated in various technical events and extension activity.
Action 1: Students are participated to solve practical problems through attending Dipex, Industry Sponsor projects. Action 2: More efforts and plan for Internship has been taken.			
PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering			

activities with an understanding of the limitations.			
PO5	2.17	2.58	<p>Target achieved.</p> <ul style="list-style-type: none"> Teaching learning process is accompanied with various digital platforms, interactive panels.
<p>Action 1: Expert lecture are arranged on usage of 3D modeling and CAE tools.</p> <p>Action 2: Department also focuses on availability of modern tools like availability of Intelligent Interactive Panel and projectors in classroom.</p>			
PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.			
PO6	1.92	2.55	<p>Target achieved.</p> <ul style="list-style-type: none"> It is observed that incorporation of responsibilities towards solving societal and health issues needs to be focused.
<p>Action 1: Previous year activities are carried out.</p> <p>Action 2: Projects based on environment, healthcare, security and social issues was emphasized.</p>			
PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
PO7	1.71	2.66	<p>Target achieved.</p> <ul style="list-style-type: none"> Environmental courses are in the curriculum and extension activities are carried out.
<p>Action 1: Different initiatives such as tree plantation, no vehicle day,</p> <p>Action 2: Promoted paperless work through online submission to MOODLE and use of one sided paper for notices on notices board and departmental paper work.</p>			
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	1.71	2.65	<p>Target achieved.</p> <ul style="list-style-type: none"> Target is achieved with small margin due to as university curriculum has less inclusion of courses related to ethics Need to focus on conduction of ethics related sessions.
<p>Action 1: Separate GFM (Guardian Faculty Member) is appointed for batch of 20 Students for addressing personal issues, counseling, teaching ethics.</p> <p>Action 2: Different industry culture awareness programs are organized to make students aware about industrial ethics which includes session on paper publication, IPR, Plagiarism free content in seminar and project report.</p> <p>Action 3: Institute student have proper uniform which indirectly contribute to teach ethical values of uniformity</p>			
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			

PO9	2.27	2.62	<p>Target achieved.</p> <ul style="list-style-type: none"> Courses like seminar, project, project based learning courses involve individual and teamwork
<p>Action 1: Continues assessment is kept for seminar and project to enhance individual and team work</p> <p>Action 2: Encouragement to participate in various state/national, zonal, university level competition of project, sports. Participation in social activities. Various days/event organization and management by students only helped them to grow as an individual and to cooperate in team.</p> <p>Action 3: TARUNAI-students annual cultural program is organized every year where in students actively participate to showcase their skill as an individual and as team</p>			
<p>PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.</p>			
PO10	1.87	2.65	<p>Target achieved.</p> <ul style="list-style-type: none"> Skills of documentation, communication, presentation during project and seminar is satisfactory but due to rural background there is scope for improvement.
<p>Action 1: In academic time table separate time slot allotted for soft skill improvement session. Special couch is appointed for the same.</p> <p>Action 2: Student participated in various online soft skill development courses offered by various MOOCS platforms like NPTEL.</p> <p>Action 3: Different cultural events, sports, social activities, project competition, industrial visits, Industrial training etc. contributed in students soft skill development</p>			
<p>PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.</p>			
PO11	1.77	2.62	<p>Target achieved.</p> <ul style="list-style-type: none"> Students are able to apply knowledge and understanding of the engineering and management principles to their project work, as a member and are able to work effectively in a team.
<p>Action 1: Department students participated in various project competitions and secured prizes.</p> <p>Action 2: Department is having MOUs with various industries. Number of projects are industry sponsored projects which helps student to learn project management and finance</p>			
<p>PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.</p>			
PO12	1.96	2.61	<p>Target Achieved</p> <ul style="list-style-type: none"> Students are observed to be capable for the

			technological development through various technical events.
<p>Action 1: Students are encouraged to do MOOC courses like NPTEL,</p> <p>Action 2: Students participation in various activities like extracurricular, project competition developed their lifelong learning ability</p>			
<p>PSO1: The students will be able to acquire competencies in the usage of design, thermal and manufacturing principles to develop a product and process.</p>			
PSO1	2.00	2.55	<p>Target Achieved</p> <ul style="list-style-type: none"> Students are trained through various hands-on courses
<p>Action 1: Students are trained through various hands-on courses of respective domains.</p>			
<p>PSO 2: The students will be able to impart technological inputs and acquire managerial skills to become technocrats and entrepreneurs.</p>			
PSO2	1.65	2.59	<p>Target Achieved</p> <ul style="list-style-type: none"> Students are able to work as technocrats in the industries as well as they have proved themselves as the entrepreneurs.
<p>Action 1: Various expert session are organized through industrial resource persons.</p> <p>Action 2: Students are oriented about entrepreneurship through skill development courses.</p>			

Actions taken based on the results of evaluation of each of the Pos & PSOs (20)

POs and PSOs Attainment Levels and Actions for improvement: 2020-21

PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Target	2.39	2.27	1.97	2.12	2.51	1.86	1.79	1.70	1.89	1.87	1.69	1.81	2.22	1.60
Attainment	2.65	2.54	2.53	2.45	2.54	2.45	2.26	2.35	2.32	2.36	2.39	2.41	2.72	2.37

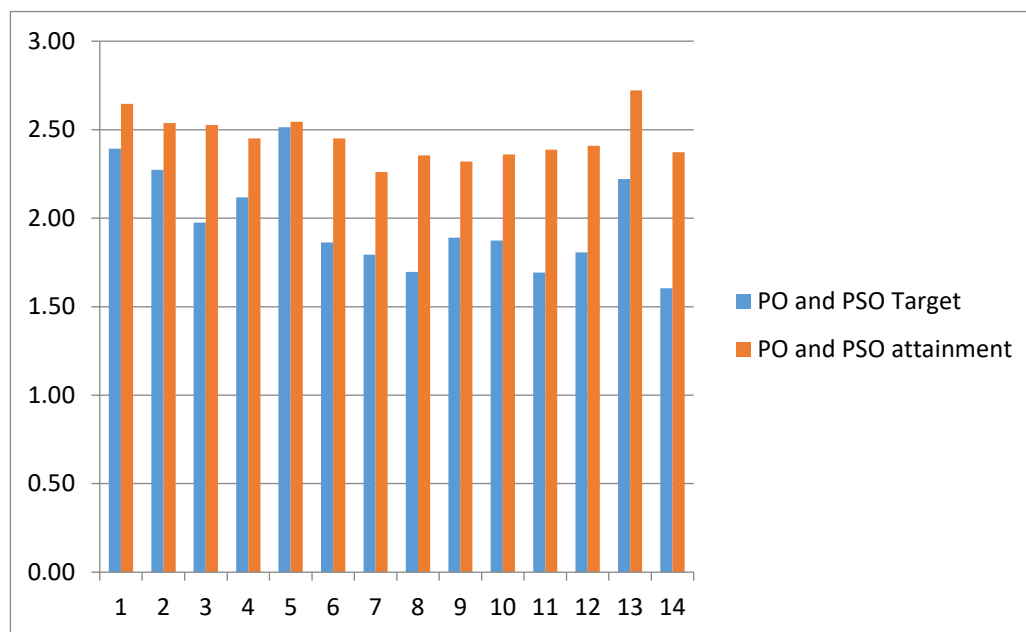


Figure.7.1c PO Target vs. PO Attainment for year 2020-21

PO's	Target Level	Attainment Level	Observations
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
PO1	2.39	2.65	Target achieved. • Due to knowledge of engineering & basic concepts.
Action 1: More emphasis given on online assignments solving.			
PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
PO2	2.27	2.54	Target achieved. • Mechanical Engineering students gain problem solving and analyzing skills through various basic courses like Engineering Mathematics III etc.
Action 1: Students are asked to solve different numerical assignments to identify, formulate and analyze engineering problems through online platform.			
PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.			
PO3	1.97	2.53	Target achieved.
Action 1: Students are to be provided with a question bank and made to practice unsolved problems from books as well.			
PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.			
PO4	2.12	2.45	Target achieved.
Action 1:			
PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.			
PO5	2.51	2.54	Target achieved. • Teaching learning process is accompanied with various virtual lab , Google meet and MOOCS courses etc.
Action 1: All faculty members of department focusing on utilizing digital modern tools like Google meet and Zoom platform			

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.			
PO6	1.86	2.45	Target Achieved
Action 1:			
PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
PO7	1.79	2.26	Target Achieved • NSS activity carried out.
Action 1: Different initiatives such distribution of medicine for COVID-19 under NSS.			
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	1.70	2.35	Target Achieved
Action 1:			
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO9	1.89	2.32	Target achieved.
Action 1: Individual assignments are solved through online mode.			
PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.			
PO10	1.87	2.36	Target achieved.
Action 1: Communication analyzed through online meeting platforms.			
PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.			
PO11	1.69	2.39	Target achieved.
Action 1:			

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.			
PO12	1.81	2.41	Target Achieved
Action 1: Students are encouraged to do MOOC courses like NPTEL,			
PSO1: The students will be able to acquire competencies in the usage of design, thermal and manufacturing principles to develop a product and process.			
PSO1	2.22	2.72	Target Achieved
Action 1:			
PSO 2: The students will be able to impart technological inputs and acquire managerial skills to become technocrats and entrepreneurs.			
PSO2	1.60	2.37	Target Achieved
Action 1: Online expert sessions are organized through industrial resource persons.			

7.2. Academic audit and actions taken thereof during the period of assessment (10)

Academic audit is a one of the best practice to ascertain adequate and operative excellence assurance mechanisms in terms of procedures, their applicability, that ensures quality input and subsequently quality output. The main aim of conducting academic audit is to assess the academic performance of both individual faculty and the whole department. This practice develops accountability of the individual members with regards to their academic performance. By conducting academic audit, the strength and weakness of the department can be assessed. The quantification of the academic performance helps us to compare the academic performance of departments and members of faculty.

Academic Audit:

The institute has well defined process of academic audit to evaluate the performance of different departments of the Institute such as; teaching process, laboratory maintenance and various departmental activities. Following are the objectives of academic audit

1. To assess the academic performance of individual faculty in a department.
2. To assess the academic performance of the department as a whole.
3. To identify the strengths and limitations of the department.
4. To make the individual faculty and the department accountable
5. To assure quality working of laboratory.

In the implementation of this process, the Internal Quality Assurance Cell (IQAC) constitutes an Academic Audit Committee (AAC) to audit each department twice in a semester, i.e., one at just before the commencement of semester while the other is just before the end of that semester. The members of AAC are given below:

1. Chairperson of IQAC.
2. Coordinator of IQAC.
3. One Professor/Associate Professor from the respective department.
4. One Professor/Associate Professor from the other department

I. Academic Audit:

Departmental academic audit is conducted in every academic year-

Pre-semester audit is conducted at the department level by respective academic coordinator along with HOD before the commencement of new semester. Course files including Lesson plan, notes, assignments, lab manual, question banks etc. are

checked and academic monitoring check list is prepared. Recommendations are given to faculty members as per the checklist.

At the beginning of semester readiness is verified through following points:

a. Theory Subjects:

1. As per curriculum of D.B.A.T.U. University
2. Time Table
3. Academic Calendar
4. Course File:
 - i. Course & Faculty Details
 - ii. Vision, Mission of Institute
 - iii. Vision, Mission of Department
 - iv. Program Educational Objectives
 - v. Program Outcomes
 - vi. Program Specific Outcomes
 - vii. Course Syllabus as per D.B.A.T.U. University
 - viii. Course Objectives & Outcomes
 - ix. Course outcome & Program outcome mapping
 - x. Teaching Plan
 - xi. Laboratory Plan
 - xii. Roll Call List of Students
 - xiii. Course Material

b. Laboratory Subjects:

- i. Lab Manual
- ii. Lab Plan
- iii. List of Experiments as per University Curriculum
- iv. Software & Hardware requirements


End-Semester Audit:

End-semester audit is conducted at the end of semester by inviting external faculty member and following points are get audited.

- i. Adherence to prepared teaching plan
- ii. Student attendance record
- iii. Unit test papers & their evaluation
- iv. GFM Record
- v. Practical Sessions record
- vi. Viva record

This audit ensures smooth conduction of academics as per targeted plan. Suggestions and corrective actions are given to faculty members as per the check lists. Academic summary report is prepared by departmental academic coordinator and discussed in HOD meeting for further corrective actions. Following are audit outcomes:

- i. Quality assurance in academic monitoring system
- ii. Uniformity in policy implementation throughout the Institution
- iii. Areas for improvement are identified and fulfilled



SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING

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Dr. Babasaheb Ambedkar Technological University (BATU), Lonere.
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Tal. & Dist.-Satara.-415 015 (Maharashtra)
* Phone : 02162 - 261122 , 260100
* e-mail : agoenggsatara@gmail.com

* Institute Code : Engg. DTE EN-6545
* Poly.Code : DTE DN-6545
* Poly. MSBTE-1617

Ref No.: AGCE / Nov - 2022 / No - 231 Date: 10 NOV 2022

Letter of Invitation

To,
Dr. Uday A. Dabade,
Professor,
Walchand College of Engineering,
Sangli

Respected Sir,

On behalf of management of Samarth Educational Trust Arvind Gavali College of Engineering, Satara, it gives me immense pleasure to invite you as an expert for DBATU Academic Audit of our Institute on 18th November 2022, Friday 11:00 am

Samarth Educational Trust has been actively associated with educational activities since its inception in 1988 and is developing fast into a prime educational center in the western region of Maharashtra. It has presently the following constituent institutes under its umbrella:

- Arvind Gavali College of Engineering & Polytechnic (AGCE)
- Sawkar Homeopathic Medical College
- Arvind Gavali College of Pharmacy (B. Pharm)
- Sawkar Pharmacy College (D. Pharm)
- Sawkar Science College


AGCE is one of the most rapidly evolving engineering institute which is affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere. Institute is having lush green, eco-friendly campus conducive to overall development of the students leading to their enhancement in employability. The Institute is offering B.Tech. in Mechanical, Civil, Electronics and Telecommunication, Electrical, Computer Science. Also M.Tech. in Mechanical (Heat Power Engineering). NATIONAL EDUCATION EXCELLENCE AWARDS & CONFERENCE 2021 has presented our college as **MOST PROMISING & TRUSTED ENGINEERING COLLEGE OF THE YEAR 2021 MAHARASHTRA**.

Academic audit helps to assess the academic performance of the Institute and also to get suggestions for overall progress of the Institute.

It is our honor and pleasure to invite you as an expert on 18th November 2022, Friday Kindly grace the occasion with your presence.

Thanking you,

Principal



Dr. Vilas Pharande
Principal
Arvind Gavali College Of Engineering
Panmalewadi, Satara




Figure 7.2.a Sample Invitation Letter for External Academic Audit

Dr. Babasaheb Ambedkar Technological University
Academic Audit of Engineering Colleges
Format - II (To be filled individually by Faculty Member)

Centre/SubCentre: AGCE, Satara District: Satara

1	Name of the College and Address	<u>Arvind Gavali College of Engg. Satara.</u>		
2	Name of the Faculty Member	<u>Mr. Kadam Anjun Anun</u>		
3	Name of the Subject taught during academic year	<u>mechatronics 2021-22</u>		
4	Date of Joining in Degree College/Date of Joining in the present Institution	<u>15/08/2016</u>	Date of Retirement:	
S.No.	Activity	Status (Give Details, not just Yes/No)	Impression of Academic Advisor along with grade A(Good)/B(Satisfactory)/C(poor) after Observation	Recommendation/Suggestions by Academic Advisors
Curricular Aspects				
5	Annual Curricular plan	<u>Yes</u>	<u>A</u>	<u>✓</u>
6	Curriculum enrichment / Value	<u>Yes</u>	<u>A</u>	<u>✓</u>
7	Whether conducting Add on Courses & role in conduct of course	<u>NO</u>	<u>C</u>	<u>conduct Add on courses</u>
8	Feedback from students	<u>Yes</u>	<u>A</u>	<u>✓</u>
Teaching, Learning and Evaluation				
9	Teaching Diary & Teaching Plan	<u>Yes</u>	<u>A</u>	<u>✓</u>
10	Coverage of syllabus so far (%)	<u>Yes</u>	<u>A</u>	<u>✓</u>
11	Record of students attendance	<u>Yes</u>	<u>A</u>	<u>✓</u>
12	Use of ICT - PPT & Audio-video Aids	<u>Yes</u>	<u>A</u>	<u>✓</u>
13	Record of students assignments	<u>Yes</u>	<u>B</u>	<u>✓</u>
14	Record of field trips	<u>NO</u>	<u>-</u>	<u>Arrange Field trip</u>
15	Record of student seminars conducted	<u>NO</u>	<u>B</u>	<u>Conduct seminars</u>
16	Record of academic competitions conducted if any (Quiz, Role play)	<u>Yes</u>	<u>A</u>	<u>✓</u>
17	Other Student centric learning Methods	<u>Yes</u>	<u>A</u>	<u>✓</u>
18	Record of Extension Lectures given	<u>Yes</u>	<u>A</u>	<u>✓</u>
19	Record of invited lectures arranged	<u>NO</u>	<u>-</u>	<u>Arrange guest lecture</u>
20	Record of internal examinations and University Exams	<u>Yes</u>	<u>A</u>	<u>✓</u>
21	Pass percentage of University Exams / Semester in respective subject for the last three years.(paper wise)	<u>Yes</u>	<u>A</u>	<u>✓</u>
22	Record of remedial classes conducted for slow learners	<u>Yes</u>	<u>A</u>	<u>✓</u>



S.No.	Activity	Status (Give Details, not just Yes/No)	Impression of Academic Advisor along with grade A(Good)/B(Satisfactory)/C (poor) after Observation	Recommendation/Suggestions by Academic Advisors
Research, Extension and consultancy				
23	Record of Research work (,Paper publication, Book publication, Articles)	Yes	A	✓
24	Record of Student Projects	Yes	sign A	✓
25	Record of seminars / workshops attended / organized /Papers presented	Yes	A	✓
26	Record of extension work undertaken	No	-	✓
27	Record of MoUs, if any	No	-	-
28	Record of Consultancy work	Yes	A	✓
Infrastructure and learning Resources				
29	Utilization of Departmental Library	No	-	✓
30	Availability of CDs,Videos	No	-	-
31	Virtual labs / Open Educational Resources (OERs)	Yes	A	✓
	Development of any educational resource	No	-	-
Student support and progression				
32	Record of Activities conducted to contribute to the students' career opportunities	No	-	✓
33	Mentoring / Counselling to students for curricular and co-curricular activities	Yes	A	✓
34	Newspaper clippings or other materials as additional resource	Yes	A	✓
	Any Student team project for Technology Development	Yes	A	✓
Governance and Leadership				
35	Record of additional administrative responsibilities performed	Yes	A	✓
36	Record of innovative practices	No	-	✓
37	Any outstanding contribution	No	-	✓
38	Whether above(related activities)entered in into Departmental Activities Register	Yes	A	✓
39	Maintenance of Departmental Activities Register	Yes	A	✓
40	Check Departmental Documentation (should be available with I/c of dept.) 1. Dept. Time Table 2. Faculty-wise Annual Curricular Plans 3. Facultywise wise Teaching Diary & Plans 4. Departmental Activity Register along with documentary Evidences 5. Faculty wise API formats along with Evidences	Yes		
	Signature of the Faculty member			
	Note: the Format is to be filled by all the Faculty and verified by the Head of Department	MOD (Mech)		Signature of the Principal Arvind Gavali College of Engineering Satara

Figure 7.2.b Sample Audited Course File Record

Academic Audit Summary Sheet 2021-22

Institution/University Department: **Arvind Gavali College of Engineering, Satara**Program Title: **Engineering**

Degree Level: Undergraduate Academic Audit Status: ____ First Academic Audit ____ Second

Academic Audit

Evaluation Results

		Met/not met	% achieved
1	LEARNING OBJECTIVES AND RESOURCES		
1.1	The Faculty member has prepared Course Files as per the learning objectives of the program	Met	74
1.2	The Faculty member has shared his course file with the students of the class through Intranet/ Social media or any other means	Met	70
1.3	The faculty member documented specific benchmarks of his course to account for learning objectives	Met	72
2	CURRICULUM AND CO-CURRICULUM		
2.1	The faculty member collaborated with other faculty members for effective design, sequence of courses and delivery of course for improvements and documented these efforts appropriately	Met	69
2.2	The faculty member documented a plan for analyzing the course content in terms of achieving program objectives.	Met	67
2.3	The faculty member documented a plan for review of curriculum and co-curriculum comparing those with the best practices elsewhere or in best institutes	Met	64
3	TEACHING AND LEARNING PROCESSES		
3.1	The faculty member analysed his/her own methods for improving teaching and learning throughout the program and practiced them.	Met	76
3.2	The faculty member developed and promoted effective instructional methods, other than lecturing, so that student achieve the learning objectives.	Met	70
3.3	The faculty member developed materials for achieving student mastery of learning objectives.	Met	68
4.0	STUDENT LEARNING ASSESSMENT		
4.1	The Faculty member has announced the method of continuous assessment at the beginning of the course and followed it throughout.	Met	76
4.2	The faculty member developed techniques, other than written test, for the student learning assessments to improve the program.	Met	64
4.3	The faculty member has documented assessments of student learning	Met	76
4.4	The faculty member has developed measurable indicators of student learning success	Met	74
4.5	The faculty member has developed and documented a continuous improvement plan that incorporates multiple measures to assess student learning and program effectiveness.	Met	77
4.6	The Student has put in his/her own efforts in the learning process from resources outside the Institute.	Met	62
4.7	The students are challenged enough to use their knowledge creatively	Met	69

5.0	QUALITY ASSURANCE		
5.1	There is an existing process in the Institute to understand the parameters of quality of teaching and learning processes	Met	66
5.2	There is an initiative to understand the parameters of quality of teaching and learning processes, if not existing.	Met	70
5.3	There is commitment to making continuous quality improvements in the program a top priority	Met	72
5.4	The performance of students in Internal Assessment and University Examinations is comparable.	Met	78
5.5	There is sufficient feedback obtained from stakeholders in development of academic processes in the College.	Met	74
5.6	There is sufficient evidence of attempts to understand the industries/ Society's need in delivery of appropriate course content to the students	Met	64
6	OVERALL ASSESSMENT		
6.1	The Academic Audit process was Faculty driven.	Met	80
6.2	The Academic Audit process (self-study and visit) included descriptions of the program's quality processes including all five focal areas.	Met	80
6.3	The Audit resulted in a candid description of weaknesses in program processes and suggestions for improvements.	Met	80
6.4	There is openness and thoroughness of the faculty members in completing the academic audit of this program.	Met	75
6.5	The Academic Audit process included involvement of and inputs from stakeholder groups identified by the program's faculty members	Met	85
7	FOLLOW-UP OF PREVIOUS AUDIT		
7.1	An action plan was developed as a result of the previous Academic Audit.	Met	Yes
7.2	There is documented evidence that recommendations made by the previous Academic Audit Team have been considered and, when feasible and appropriate, implemented and tracked.	Met	Yes
7.3	There is documented evidence that the program has been implemented and tracked the progress of and use of results from improvement initiatives cited by the faculty its self-study.	Met	Yes
8	SUPPORT		
8.1	The program regularly evaluates its library, equipment and facilities, encouraging necessary improvements within the context of overall college resources.	Met	74
8.2	The program's operating budget is consistent with the needs of the program.	Met	76
8.3	The program has a history of enrolment rates sufficient to sustain high quality and cost-effectiveness.	Met	78
8.4	The program has a history of graduation rate sufficient to sustain the quality of the program.	Met	72
8.5	The program has a history of placement rate sufficient to sustain high quality of program outcome.	Met	67
8.6	The Program has a history of generating support from industries and alumni to sustain itself.	Met	69
Signatures of Academic Advisors			
1. Dr. Uday A. Dabade, Professor, Walchand College of Engineering, Sangli-----			
2. Dr. Kumthekar Madhav Bhalchandra, Retired Professor, Karad Government College, Karad-----			

Figure 7.2.c Sample Academic Audit Summary Sheet



Fig 7.2d Academic Audit 2021-22 Committee interaction and document verification is being carried out.

7.3. Improvement in Placement, Higher Studies and Entrepreneurship (10)

- Institute has a Training and Placement cell, responsible for grooming the students to be industry ready and provide opportunities for placement.
- T&P cell organizes various programs for overall personality development of the students. Also Training placement coordinator helps students search Internship opportunities in Mechanical industries.
- Experienced industry professionals in the respective domain of job profiles are invited for guest lectures.
- Through these activities, the students are made aware of the opportunities in various fields along with the required job profile. At the same time, they get a chance to interact with these industry professionals to take advantage of their experience in respective field of expertise.
- Career guidance books such as GRE, GATE, TOEFL are available in the library.
- In addition, with T&P Cell, Institute has initiated Campus to Corporate activity to help students improve communication skills, interpersonal skills, societal awareness and inculcate ethics.
- Institute has initiated aptitude training sessions in order to train students for placement aptitude tests.
- The aim of entrepreneurship development cell is to improve and generate a culture of innovation amongst the students and budding entrepreneurs and start their own business. Under entrepreneur development cell (EDC), institute has organized sessions to motivate and guide students to work on ideas in commercial aspect.

Placement details for academic year 2019-20 to 2021-22 as shown in Table 7.3a

Items	CAY (2021-22)	CAYm1 (2020-21)	CAYm2 (2019-20)
No. of final year students (N)	101	95	49
No. of students placed (x)	83	73	38
No. of students admitted to higher studies (y)	5	1	1
No. of students turned entrepreneur in engineering/technology (z)	2	1	-
$x + y + z =$	90	75	39
Placement Index : $(x + y + z)/N$	0.89	0.79	0.79
Average placement = $(P1 + P2 + P3)/3$	0.83		
% Placement	82.18	76.84	77.55

Table 7.3a Data for Placements

PLACEMENT 2021-2022

SR. NO	STUDENT NAME	ENROLLMENT NO.	EMPLOYEE NAME	APPOINTMENT NO
1	1965451612003	MADHAVE ROHIT KAILAS	Maharashtra Scooters LTD.Satara	TPC/1612/2022/003
2	1965451612004	YADAV OMKAR JAYANT	Shambhu Industries	TPC/1612/2022/004
3	1965451612007	YADAV ANIKET ANIL	Asia Tech Center, Pune	TPC/1612/2022/007
4	1965451612012	JAGADALE ANIKET RAJU	Shree Ganesh Industries, Satara	TPC/1612/2022/012
5	1965451612013	SHELAKHE RUPESH SUNIL	Shree Mahalaxmi services, Pune	TPC/1612/2022/013
6	1965451612014	SHINDE SANKET HEMANT	Divide by zero	TPC/1612/2022/014
7	1965451612015	GODASE MANOJ PANDURANG	SATARA ENGINEERING , PVT. LTD. SATARA	TPC/1612/2022/015
8	1965451612017	PAWAR PRAMOD BHIKU	KPIT Technologies Limited	TPC/1612/2022/017
9	1965451612018	ANIT BALWANT MORE	Align Engineering	TPC/1612/2022/018
10	1965451612020	LAD PRITHVIRAJ MASU	Sarvgram	TPC/1612/2022/020
11	1965451612021	LEMBHE AKASH AVINASH	Test Yantra Software Solutions, pune	TPC/1612/2022/021
12	1965451612025	SURYAWANSHI JAYRAM DIPAK	Cooper Corporation Pvt. Ltd	TPC/1612/2022/025
13	1965451612027	MAYUR DILIP MONDE	Sutra Systems India PVT LTD, Pune	TPC/1612/2022/027
14	1965451612028	DESAI PAVAN VIJAYKUMAR	BVG India Ltd, Satara	TPC/1612/2022/028
15	1965451612030	BHOITE DEEPAK AVINASH	Cooper Corporation PVT.LTD.Satara	TPC/1612/2022/030
16	1965451612032	JADHAV SUSHANT SAMADHAN	Shri Ganesh industries	TPC/1612/2022/032
17	1965451612033	JADHAV ROHIT PRADIP	Align Engineering	TPC/1612/2022/033

18	1965451612036	PRATIK SUDHAKAR SHINDE	GsPeb civil works pvt. ltd.	TPC/1612/2022/036
19	1965451612037	KADAM OMKAR PRAVIN	AVM ELECTRICALS INDIA PVT. LTD	TPC/1612/2022/037
20	1965451612038	DUBAL NANDKUMAR SANJAY	ToshniwalHyvacPvt Ltd , Mumbai	TPC/1612/2022/038
21	1965451612040	LANKESHWAR ABHISHEK HANMANT	JJEPL,Satara	TPC/1612/2022/040
22	1965451612041	SHINDE PRAJWAL SUNIL	Prajwal Enterprises	TPC/1612/2022/041
23	1965451612043	BHASKAR ASHUTOSH SUBHASH	Orgatma Organic Science Pvt Ltd Satara	TPC/1612/2022/043
24	1965451612046	ATTAR AMAN AKBAR	Prajwal Enterprises	TPC/1612/2022/046
25	1965451612049	SHINDE PRATHMESH NIRAJ	Wipro	TPC/1612/2022/049
26	1965451612050	KHUSPE MAYUR SHANKAR	Cummins	TPC/1612/2022/050
27	1965451612051	SAWANT SHUBHAM RAJENDRA	Kinemach	TPC/1612/2022/051
28	1965451612052	JAGTAP GAURAV PRADIP	York Transport EquipmentsPvt Ltd	TPC/1612/2022/052
29	1965451612054	PAWAR VAIBHAV ANANDA	Align Engineering	TPC/1612/2022/054
30	1965451612056	KADAM SWAPNIL MOHAN	PR Engineering Satara	TPC/1612/2022/056
31	1965451612057	PAWAR ASHISH BHIKU	SKF India Limited,Pune	TPC/1612/2022/057
32	1965451612059	ADHISHRI SHIVAJI PAWAR	Shri Sai Civil And Techno EnggPvt Ltd	TPC/1612/2022/059
33	1965451612060	PANDHARPATTE AJINKYA KALIDAS	Tri Tech Metals Pvt Ltd, Satara	TPC/1612/2022/060
34	1965451612061	MALI KISHOR KUMAR	Yashaswi	TPC/1612/2022/061

35	1965451612063	KADAM CHANDRASEN BHARAT	ACPL	TPC/1612/2022/063
36	1965451612066	ASAWALE ROHIT GHANASHAM	Forbes Marshal Pvt Ltd, Pune	TPC/1612/2022/066
37	1965451612071	SURYAWANSHI PRATI KSHA RAVINDRA	Mahekar Engineers	TPC/1612/2022/071
38	1965451612072	CHAVAN SHWETA HANMANTRAO	Faurecia Interiors	TPC/1612/2022/072
39	1965451612073	KAMTHE SHRIRAM SHASHIKANT	Nilsan Engineering Solutions	TPC/1612/2022/073
40	1965451612074	PATIL ROHIT RAVINDRA	Pan Gulf Technologices	TPC/1612/2022/074
41	1965451612077	SHEWALE MAYURI BHIMRAO	Delfingen	TPC/1612/2022/077
42	1965451612081	MOHITE VAIBHAV VASANT	Prajwal Enterprises	TPC/1612/2022/081
43	1965451612091	PAWAR VAIBHAV RAJARAM	PR Engineering Satara	TPC/1612/2022/091
44	1965451612092	KANASE RAVIRAJ DADASAHEB	Shri Ganesh Industries	TPC/1612/2022/092
45	1965451612094	OMKAR ANIL DHOLE	Bharat Forge	TPC/1612/2022/094
46	1965451612099	DESHMUKH ROHAN PANDURANG	AjinkyataraAutomotivesPvt .Ltd	TPC/1612/2022/099
47	1965451612103	SHEWALE NIKHIL VILAS	Renuka Enterprises	TPC/1612/2022/103
48	1965451612109	BHILARE OMKAR LAXMAN	Prajwal Enterprises	TPC/1612/2022/109
49	1965451612110	PAWAR SAGAR DILIP	AVM ELECTRICALS INDIA PVT. LTD	TPC/1612/2022/110
50	1965451612111	JADHAV RUSHIKESH MAHADEV	Yashvantrao Technical And Training foundation	TPC/1612/2022/111
51	1965451612112	AHIRE AKSHAY ARUN	Auto choice	TPC/1612/2022/112
52	1965451612113	JAMBHALE AKSHAY MARUTI	Auto choice	TPC/1612/2022/113

53	1965451612114	DESAI RANJEET BHASKAR	Auto choice	TPC/1612/2022/114
54	1965451612116	SAWANT NIKITA NAMADEV	Universal Solution,Pune	TPC/1612/2022/116
55	1965451612118	THORAT VAIBHAV RAVINDRA	Profound Edutech, Pune	TPC/1612/2022/118
56	1965451612120	KITTUR KEDAR SAHADEV	Forbes Marshal Pvt Ltd, Pune	TPC/1612/2022/120
57	1965451612121	SALUNKHE NILESH SUNIL	Renuka Enterprises	TPC/1612/2022/212
58	PRN:51654520181161210096	KADAM ABHIJEET DEEPAK	AVM ENGINEERING	TPC/1612/2022/0096
59	PRN:51654520181161210098	DHANE NIKHIL SUNIL	AjinkyataraAutomotivesPvt .Ltd	TPC/1612/2022/0098
60	PRN:51654520181161210099	POWAR ASHUTOSH ANIL	Renuka Enterprises	TPC/1612/2022/0099
61	PRN:51654520181161210109	KUMBHAR GANESH SURESH	Shri Jagadamba Engineering Works,Satara	TPC/1612/2022/0109
62	PRN:51654520181161210110	BHOSALE PRATHAMESH PRAMOD	ShriannPlastiv Pvt. Ltd.	TPC/1612/2022/0110
63	PRN:51654520181161210111	PAWAR RAJESH RAMCHANDRA	Shambhu Industries	TPC/1612/2022/0111
64	1965451612005	JADHAV SURAJ BAJIRAO	Om Enterprises,Satara	TPC/1612/2022/005
65	1965451612011	SOURAV TIKADAR	ATHRAV ENGINEERING	TPC/1612/2022/011
66	1965451612023	PATIL SHUBHAM SANJAY	Zerg Corporation Satara	TPC/1612/2022/023
67	1965451612034	TAVARE SHAMBHURAJ KUBER	Zerg Corporation Satara	TPC/1612/2022/034
68	1965451612039	SUTAR JYOTI DATTATRAYA	ATHRAV ENGINEERING	TPC/1612/2022/039
69	1965451612042	KANASE AKASH RAJENDRA	Shambhu Industries	TPC/1612/2022/042
70	1965451612044	JADHAV OMKAR PRAKASH	Gholap Engineering Works	TPC/1612/2022/044

71	1965451612053	SHINDE KUNAL NARAYAN	Shambhu Industries	TPC/1612/2022/053
72	1965451612055	CHAVAN SHUBHAM SANJAY	Gholap Engineering Works	TPC/1612/2022/055
73	1965451612064	SURYAWANSHI HRUSHIKESH PRAKASH	Gholap Engineering Works	TPC/1612/2022/064
74	1965451612090	MUJAWAR NAYUM AJIM	Om Enterprises,Satara	TPC/1612/2022/090
75	1965451612093	SHINDE VEDANT VIKAS	Renuka Enterprises	TPC/1612/2022/093
76	1965451612098	PAWAR ABHIJIT PRADEEP	Zerg Corporation Satara	TPC/1612/2022/098
77	PRN:51654520181161210103	BHOSALE NIKHIL BHAUSO	Om Enterprises,Satara	TPC/1612/2022/0103
78	PRN:51654520181161210104	GHORPADE HARSHADA RAMDAS	Zerg Corporation Satara	TPC/1612/2022/0104
79	PRN:51654520181161210105	JAGTAP RUSHIKESH MADHUKAR	Gholap Engineering Works	TPC/1612/2022/0105
80	PRN:51654520181161210107	GAIKWAD ANIKET SACHIN	Om Enterprises,Satara	TPC/1612/2022/0107
81	PRN:51654520181161210108	PANASKAR PRATIK CHANDRAKANT	ATHRAV ENGINEERING	TPC/1612/2022/0108
82	PRN:51654520181161210112	DESAI MUSKAN NISAR	Renuka Enterprises	TPC/1612/2022/0112
83	PRN:51654520181161210113	CHAVAN RUSHIKESH DASHARATH	Gholap Engineering Works	TPC/1612/2022/0113
84	1965451612048	ASMITA ANANDA BHOSALE	International university of Applied Science, Berlin	Higher Studies
85	1965451612105	BHOSALE INDRAJEET LAXMAN	LLB	Higher Studies
86	1965451612106	JADHAV SWAPNIL SITARAM	Centre For Development Of Advanced Computing Admission To PG Diploma Course September 2022	Higher Studies
87	PRN:51654520181161210102	GHADAGE KISHOR LAXMAN	International university of Applied Science, Berlin	Higher Studies

88	PRN:51654520181161210106	PUSTAKE UTKARSH RAVINDRA	International University of Applied Sciences	Higher Studies
89	1965451612089	POL YOGESH SHIVAJI	Food Industries	ENTERPRENATURE
90	1965451612095	GHORPADE AKSHAY GULAB	Om Bhawanimata Motors and Car Care	ENTERPRENATURE

PLACEMENT 2020-2021

SR. NO	STUDENT NAME	ENROLLMENT NO.	EMPLOYEE NAME	APPOINTMENT NO
1	PRN:51654520171161210001	ABHISHEK SHANKARRAO KATKAR	ShambhuIndusteies	TPC/1612/2021/001
2	PRN:51654520171161210002	ANIL SHIVAJI HASABE	DESCOSOLUTIONS PVT LTD	TPC/1612/2021/002
3	PRN:51654520171161210004	SHINDE INDRAJIT VILAS	CEE Engineering Pvt ltd Pune	TPC/1612/2021/004
4	PRN:51654520171161210005	SHRADDHA YASHWANT BHOSALE	Infosys	TPC/1612/2021/005
5	PRN:51654520171161210007	SURAJ ANIL SUTAR	OM EMTERPRISE, SATARA	TPC/1612/2021/007
6	PRN:51654520171161210010	NARGOJE KRISHANA POPAT	TBK India Private Limited	TPC/1612/2021/010
7	PRN:51654520171161210012	MULIK AKASH DIPAK	Zerg Corporation Satara	TPC/1612/2021/012
8	PRN:51654520171161210013	SHIRKE MAYUR NAMDEV	Auto Choice	TPC/1612/2021/013
9	PRN:51654520171161210014	SIDDHANT SANJAY WAJE	AjinkyataraAutomotivesPvt. Ltd.	TPC/1612/2021/014
10	PRN:51654520171161210015	KUMBHAR SIDDHESH DATTATRAYA	OM EMTERPRISE, SATARA	TPC/1612/2021/015
11	PRN:51654520171161210016	SUTAR SACHIN BASAVRAJ	Datametica Solutions Pvt Ltd	TPC/1612/2021/016
12	PRN:51654520171161210017	S MOHAMEDRAFEEQ M SADAkkATHULLA	Shriann Plastic Pvt.Ltd.	TPC/1612/2021/017
13	PRN:51654520171161210018	PATIL DHIRAJ SHAMRAO	OM EMTERPRISE, SATARA	TPC/1612/2021/018
14	PRN:51654520171161210020	BHOSALE ROHIT MOHAN	Precise Systems Satara	TPC/1612/2021/020
15	PRN:51654520171161210021	PADWAL SHUBHAM SHIVAJI	Atharva Engineering, Satara	TPC/1612/2021/021
16	PRN:51654520171161210022	AVINASH RAMESH	Pando Software Consultants,	TPC/1612/2021/022

		MATRE	Noida	
17	PRN:51654520171161210023	KADAM VAIBHAV SUBHASH	OM JAI ASSOCIATE	TPC/1612/2021/023
18	PRN:51654520171161210024	PATIL DIGVIJAY RAVINDRAKUMAR	TCS	TPC/1612/2021/024
19	PRN:51654520171161210027	ASAWALE SURAJ DNYANDEV	AjinkyataraAutomotivesPvt. Ltd.	TPC/1612/2021/027
20	PRN:51654520171161210030	AKSHATA BABANRAO SHEDGE	Precision Group, Pune	TPC/1612/2021/030
21	PRN:51654520171161210031	DAREKAR ANIKET AVINASH	PR Engineering Satara	TPC/1612/2021/031
22	PRN:51654520171161210035	RAJESH MANSING MORE	Shri Ganesh Industries	TPC/1612/2021/035
23	PRN:51654520171161210036	LONDHE RANJIT DEVANAND	Shriann Plastic Pvt.Ltd.	TPC/1612/2021/036
24	PRN:51654520181161210001	NIKAM AKASH SUNIL	SeinumeroNirmanPvt Ltd, Pune	TPC/1612/2021/0001
25	PRN:51654520181161210002	PATIL JEEVAN JAYWANT	RenukaEnterpriese	TPC/1612/2021/0002
26	PRN:51654520181161210004	JADHAV SHUBHAM KISAN	SLE TECHNOLOGY CONSULTING INDIA PRIVATE LIMITED	TPC/1612/2021/0004
27	PRN:51654520181161210007	GOGAWALE DHANRAJ LAXMAN	AVM Engineeering	TPC/1612/2021/0007
28	PRN:51654520181161210008	KANKEKAR YOGESH ASHOK	HNB	TPC/1612/2021/0008
29	PRN:51654520181161210010	KODAG SHUBHAM BABAN	Wipro	TPC/1612/2021/0010
30	PRN:51654520181161210014	CHAVAN AKASHAY MAHADEO	Shriann Plastic Pvt.Ltd.	TPC/1612/2021/0014
31	PRN:51654520181161210015	JADHAV GANESH MADHUKAR	Satara Engineering Works	TPC/1612/2021/0015
32	PRN:51654520181161210017	ASAWALE SHARAD PRAKASH	TCS	TPC/1612/2021/0017
33	PRN:51654520181161210018	CHAVAN PRATIK PRADIP	Shri Ganesh Industries	TPC/1612/2021/0018

34	PRN:51654520181161210020	MANDHARE ALPESH SHIVAJI	EveryIndiaPvt Ltd, Bangalore, 8067387000	TPC/1612/2021/0020
35	PRN:51654520181161210021	SHINDE AKSHAY ARVIND	AjinkyataraAutomotivesPvt. Ltd.	TPC/1612/2021/0021
36	PRN:51654520181161210022	SHINDE ANIKET CHANDRASHEKHAR	Cognizant	TPC/1612/2021/0022
37	PRN:51654520181161210023	CHAVAN AKASH SANJAY	Gholap Engineering Works	TPC/1612/2021/0023
38	PRN:51654520181161210026	SHINDE PUJA PRAKASH	Infosys	TPC/1612/2021/0026
39	PRN:51654520181161210027	PAWLE HRITUJA RAMAKANT	TCS	TPC/1612/2021/0027
40	PRN:51654520181161210028	HERKAL SHRIKANT KRISHNA	JCB India Ltd, Pune	TPC/1612/2021/0028
41	PRN:51654520181161210029	SURYAWANSHI APARNA VASANT	Tata AutoCompGotion Green Energy Solutions Private Limited	TPC/1612/2021/0029
42	PRN:51654520181161210030	PATIL SNEHAL JAGANNATH	TCS	TPC/1612/2021/0030
43	PRN:51654520181161210031	LAD KAVITA RAJESH	SIEMENS	TPC/1612/2021/0031
44	PRN:51654520181161210032	DESHMUKH AISHWARYA SANTOSH	TCS	TPC/1612/2021/0032
45	PRN:51654520181161210034	GAIKWAD VISHAL RAJU	Gurukrupa Industries, Pune 0206521004	TPC/1612/2021/0034
46	PRN:51654520181161210035	HARANE DIGAMBAR ASHOK	Teknovance Solutions Pvt. Ltd., Pune	TPC/1612/2021/0035
47	PRN:51654520181161210038	DHOTRE SHUBHAM CHANDRAKANT	BigLeap Technologies & Solutions Pvt Ltd, Pune	TPC/1612/2021/0038
48	PRN:51654520181161210039	BAGANE VIVEK VIJAYKUMAR	Shree SVS System Pune	TPC/1612/2021/0039
49	PRN:51654520181161210040	KAKADE AJAY SANJAY	AVM Engineering	TPC/1612/2021/0040
50	PRN:51654520181161210041	PANDHARPURE RUGVEDA RAMESH	AVM Engineering	TPC/1612/2021/0041
51	PRN:51654520181161210043	PAWAR AJIT SANJAYKUMAR	Satara Engineering Works	TPC/1612/2021/0043

52	PRN:51654520181161210044	SAPKAL AMIT KISAN	HEF SHINE , PUNE	TPC/1612/2021/0044
53	PRN:51654520181161210048	SHINDE YOGESH RAOSAHEB	Shambbu Industries	TPC/1612/2021/0048
54	PRN:51654520181161210049	SALUNKHE AKASH LAHU	Zerg Corporation Satara	TPC/1612/2021/0049
55	PRN:51654520181161210050	SUTAR ABHISHEK BALIRAM	AVM ELECTRICALS	TPC/1612/2021/0050
56	PRN:51654520181161210051	SURYAWANSHI AASHUTOSH AVINASH	Atharva Engineering, Satara	TPC/1612/2021/0051
57	PRN:51654520181161210053	NAWAJ ASLAM PATEL	Auto Choice	TPC/1612/2021/0053
58	PRN:51654520181161210054	SANKPAL ADITYA PRAVIN	PR Engineering Satara	TPC/1612/2021/0054
59	PRN:51654520181161210055	SAWANT SHUBHAM DATTATRAY	Infosys	TPC/1612/2021/0055
60	PRN:51654520181161210058	ROHILE NIHAL ANJUMANALLI	Infosys	TPC/1612/2021/0058
61	PRN:51654520181161210062	PAWAR SUSHANT VASANT	TATA	TPC/1612/2021/0062
62	PRN:51654520181161210065	GURAV AKSHAY SHIRISH	Atharva Engineering, Satara	TPC/1612/2021/0065
63	PRN:51654520181161210072	PAWAR SUSHANT DAYANAND	Sindhuraj Solar, Sangli	TPC/1612/2021/0072
64	PRN:51654520181161210073	KADAM UMESH BHIMARAO	PR ENGINEERING , SATARA	TPC/1612/2021/0073
65	PRN:51654520181161210074	PAWAR JAYADEEP JAGADEV	Sindhuraj Solar, Sangli	TPC/1612/2021/0074
66	PRN:51654520181161210077	HIRUGADE VIKAS SHIVAJI	YTTF	TPC/1612/2021/0077
67	PRN:51654520181161210079	KADAM PUSHPAL NAYAKU	Teamlease Services Ltd	TPC/1612/2021/0079
68	PRN:51654520181161210083	CHAVAN KIRAN VITTHAL	PajanjapeAutocastPvt Ltd, Satara	TPC/1612/2021/0083
69	PRN:51654520181161210085	NAWADKAR RUPESH BHASKAR	Zerg Corporation Satara	TPC/1612/2021/0085

70	PRN:51654520181161210086	CHAVAN ROHIT SHANKAR	Auto Choice	TPC/1612/2021/0086
71	PRN:51654520181161210088	BHOSALE PRATIK NARENDRA	Sindhuraj Solar, Sangli	TPC/1612/2021/0088
72	PRN:51654520181161210092	NADAF WASEEM HARUN	Three D Magic Info Solution Pvt Ltd	TPC/1612/2021/0092
73	PRN:51654520181161210129	PATEL ARBAAJ JIYAUDIN	Cognizant	TPC/1612/2021/0129
74	PRN:5165452017161210033	CHAVAN PRATHMESH PRAVIN	HIGHER STUDIES	HIGHER STUDIES
75	PRN:51654520181161210067	AGRAWAL RATIK KAPIL	ENTERPRENATURE	ENTERPRENATUR E

PLACEMENT 2019-2020

SR. NO	STUDENT NAME	ENROLLMENT NO.	EMPLOYEE NAME	APPOINTMENT NO
1	PATIL ANIKET	2016102802	TECHTREE IT SYSTEMS PVT LTD, MUMBAI	TPC/1612/2020/802
2	PISAL SONALI	2016102805	INFOSYS	TPC/1612/2020/805
3	BARGE AJINKYA	2016102808	ULTRA ENGINEERS, PUNE	TPC/1612/2020/808
4	SABALE AKSHAY	2016102814	SINDHURAJ SOLAR, SANGLI	TPC/1612/2020/814
5	PATIL SHUBHAM	2016102817	Ajinkyatara Automotive Pvt.Ltd	TPC/1612/2020/817
6	MANE KETAN	2016102818	ZERG CORPORATION, SATARA	TPC/1612/2020/818
7	KALE HARIDAS	2016102822	SINDHURAJ SOLAR, SANGLI	TPC/1612/2020/822
8	MANE SUSHANT	2016102824	TVH INDIA	TPC/1612/2020/824
9	NIKAM SOURABH	2016102825	GHOLAP ENGINEERING WORKS	TPC/1612/2020/825
10	PATIL RAVINA	2017106584	ZERG CORPORATION, SATARA	TPC/1612/2020/584
11	SURWASE SHUBHAM	2017106585	TCSL	TPC/1612/2020/585
12	DALAVI KIRAN	2017106586	INDIAN ARMY	TPC/1612/2020/586
13	MANE ONKAR	2017106588	INFOSYS, PUNE	TPC/1612/2020/588
14	SHINDE MEGHA	2017106591	WIPRO PARI INDUSTRIES, SHIRVAL	TPC/1612/2020/591
15	PATIL PRAGATI	2017106594	UTKARSH TRASMISSION PVT LTD	TPC/1612/2020/594
16	SAWANT PRAVIN	2017106598	BYJU'S	TPC/1612/2020/598
17	PAWAR SANKET	2017106601	Ajinkyatara Automotive Pvt.Ltd	TPC/1612/2020/601
18	MANE MAYUR	2017106606	INDIAN POST	TPC/1612/2020/606

19	MANE SARIKA	2017106609	OGNIBENE	TPC/1612/2020/609
20	WAGHMARE SHUBHAM	2017106610	Align Engineering	TPC/1612/2020/610
21	SABALE SOMNATH	2017106611	LOGICON TECHNOSOLUTIONS PVT LTD, PUNE	TPC/1612/2020/611
22	SATRE AKSHAY	2017106613	GHADAGE PATIL INDUSTRIES LTD KOLHAPUR	TPC/1612/2020/613
23	WAINGADE RAMDAS	2017106616	Shri Ganesh Inustries	TPC/1612/2020/616
24	YEJARE SANGRAMSINGH	2017106617	TARA TOOLS, PUNE	TPC/1612/2020/617
25	MALUSARE VISHAL	2017106618	SATARA ENGINEERING, SATARA	TPC/1612/2020/618
26	PATIL PRATIKSHA	2017106619	INFOSYS	TPC/1612/2020/619
27	NAIK SANGRAM	2017106623	Align Engineering	TPC/1612/2020/623
28	JADHAV ANIKET	2017106624	OM ENTERPRISE, SATARA	TPC/1612/2020/624
29	JADHAV AMOL	2017106625	ATHARV ENGINEERING, SATARA	TPC/1612/2020/625
30	JADHAV ROHAN	2017106626	SINDHURAJ SOLAR, SANGLI	TPC/1612/2020/626
31	YEWALE VIKRAM	2017106629	GHOL	TPC/1612/2020/629
32	PARAMANE AKSHAY	2017106636	VARROC ENGINEERING LTD	TPC/1612/2020/636
33	SHETE OMKAR	2017106638	SPACO TECHNOLOGIES INDIA PVT LTD, PUNE	TPC/1612/2020/638
34	MANE SURAJ	2017106640	OM ENTERPRISE, SATARA	TPC/1612/2020/640
35	JADHAV PRANIL	2017106646	ATHARV ENGINEERING	TPC/1612/2020/646
36	CHAVAN SANKET	2017106647	NIPRO INDIA CORPORATION, SHIRWAL	TPC/1612/2020/647

37	JADHAV RAHUL	2017106652	Tagloy Media Pvt.Ltd	TPC/1612/2020/652
38	BHABAN RUSHIKESH	2017106656	INFOSYS, PUNE	TPC/1612/2020/656
39	SHIVANIKAKADE	2017106643	M.TECH. AGCE SATARA	HIGHER STUDIES

7.4. Improvement in the quality of students admitted to the program(10)

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

ITE M		CAY (2022-23)	CAY m1 (2021-22)	CAYm2 (2020-21)
National level entrance examination (JEE)	No. of students admitted	0	0	01
	Opening score/rank	0	0	48665
	Closing score/rank	0	0	48665
State/University level examination/others MH-CET / Diploma	No. of students admitted	28	23	36
	Opening score/rank	28379	37819	94413
	Closing score/rank	122093	97314	87534
Name of entrance examination for lateral entry (Direct Second Year: MSBTE Diploma Final Semester)	No. of students admitted	37	103	110
	Opening score/rank	10635	17483	9406
	Closing score/rank	50924	68979	61528
Average CBSE/Any other board result of admitted students(Physics, chemistry, Maths)		0	0	0

Table 7.4a Quality of students admitted to the program

CRITERION 08	FIRST YEAR ACADEMICS	50
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Please provide First year faculty information considering load for the particular program

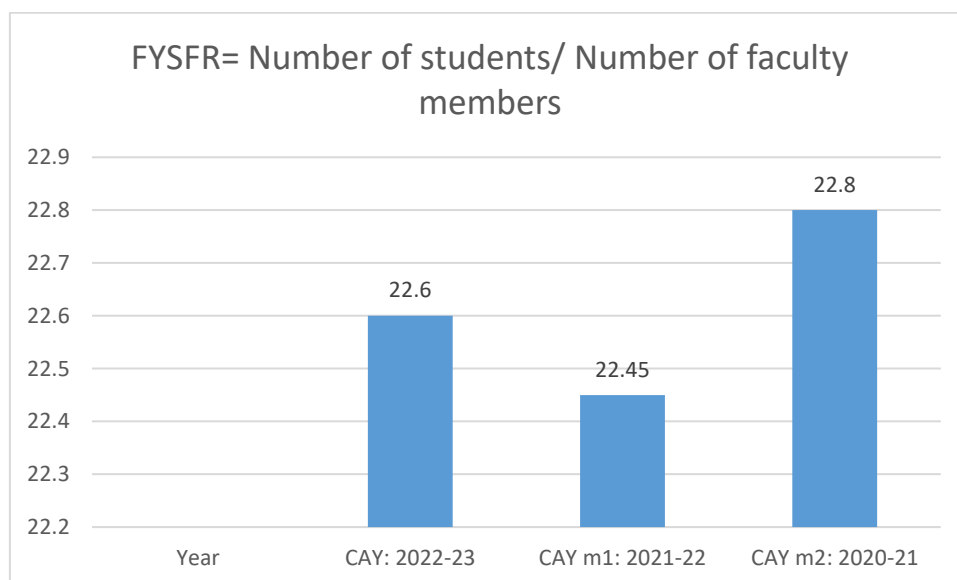
Name of the faculty member	PANN o.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load(%)			Currently Associated (Yes/No)	Date Of leaving (In case Currently Associated is 'No')
							CAY (2022-23)	CAY (2021-22)	CAY (2020-21)		
Ashwini Deepak Kasture	BTSP K5524 K	M.S c	14-06-2017	Mathematics	Assistant Professor	15-06-2012	100	100	100	Yes	
Pooja Ramchandra Bhosale	ERAP B9485 B	M.S c,B. Ed	08-07-2019	Mathematics	Assistant Professor	01-07-2019	100	100	100	Yes	
Vidya Atul Salunkhe	CJPS9 748B	M.S c	19-05-1999	Mathematics	Assistant Professor	01-08-2019	100	100	100	Yes	
Ms.Swapnali Shinde	PGTPS 0243D	M.S c	30-08-2021	Mathematics	Assistant Professor	01-07-2022	100	0	0	Yes	
Ms.Sonali S.More	EVMP 4519P	M.S c	24/3/2018	Mathematics	Assiatant Prof.	2/7/2022	100	0	0	No	31/06/2023
Madan Prabhakar Jagdale	BEGPJ 8774P	M.S c	08-07-2019	Mathematics	Assistant Professor	01-07-2019	0	100	100	No	31/05/2022
Ruksar Rajmohamad Sayyad	IWNP S7798 C	M.S c.	04-07-2017	Mathematics	Assistant Professor	01-08-2020	0	0	100	Yes	
Pranita Dadaso Pol	DHZZ P7754 R	M.S c.	01-06-2018	Chemistry	Assistant Professor	15-07-2019	0	100	100	Yes	
Komal Rajendra Nikam	BIZPN 4929H	M.S c.	13-07-2015	Chemistry	Assistant Professor	01-06-2019	0	100	100	Yes	
Namita Pratik Mahajan	ETRP B8924 A	M.S c	06-06-2019	Chemistry	Assistant Professor	01-11-2020	0	0	0	Yes	
Priya Yashwant Kuthe	HPUP K3410 K	B.E	21-08-2017	Chemical	Assistant Professor	12-10-2021	100	100	0	Yes	
Mrs.Rohini Bhosale	ENPP B2533 D	M.S c	30-07-2017	Chemistry	Assistant Professor	21-07-2022	100	0	0	yes	
Tejaswini Dnyaneshwar Jadhav	BUIPJ 1243D	M.S c	24-10-2020	Physics	Assistant Professor	17-03-2021	0	100	0	No	31/06/2022
Kanchan Sanjay Mahamuni	EHFP M5540 B	M.S c	24-10-2020	Physics	Assistant Professor	17-03-2021	100	100	0	No	31/06/2023
AshwiniAnkush Babar	AQSP B8546 L	M.S c	11-06-2010	Physics	Assistant Professor	01-06-2019	0	0	100	No	31/10/2021
Dr. Nitin Ramchandra Jadhav	AGSPJ 2278D	M.A	07-03-2020	ENGLISH	Assistant Professor	02-07-2020	100	100	100	Yes	

Nikita Sanjay Bhilare	FBDP B7735 Q	M.A SET	09-07-2019	English	Assistant Professor	16-03-2021	100	100	0	Yes	
Thoravi Rahul Yadav	BLVP M6822 M	MA	10-07-2008	ENGLISH	Assistant Professor	01-06-2019	0	0	100	No	30-04-2021
Aanand Sudhir Shivde	CCLPS 6118J	M.E	30-09-2014	Mechanical	Assistant Professor	06-01-2019	0	0	100	No	31-07-2021
Kamlesh Kumawat	ENEP K1812 H	M.E	20-10-2016	Mechanical	Assistant Prof.	03/07/2017	0	0	100	No	31/3/2021
Mr.Amol Ghorpade	BTDP G5946 C	M.E	10/10/2017	Mechanical	Assistant Prof	1/10/21	100	100	0	No	2/5/2023
Pratik Manohar Tambe	AXPP T2681 Q	M.E	31-07-2017	Mechanical	Assistant Professor	01-07-2019	100	100	0	No	31-12-2022
Pranav Avinash Pathak	BFAPP 7243G	M.E	20-10-2016	CSE	Assistant Professor	22-08-2011	22	35	38	Yes	
Gujar Vijay Bhanudas	AMEP G4168 K	M.E	22/02/2011	CSE	Assistant Professor	1/11/2020	15	0	0	Yes	
Suraj Shivaji Shinde	EKQP S2010J M.E/M.Tech	M.E	12-12-2018	Civil	Assistant Professor	02-12-2021	55	50	0	No	31/05/2023
Abhay V.gujar	ABPP G5152 M	M.E		Civil	Assistant Prof.	25/06/2010	0	0	75	Yes	
Sapkal Rajendra	BNHP S3023 E	M.E	25/06/2013	Civil	Assistant Professor	1/06/2016	50	0	0	Yes	
Diksha Sanjay Jadhav	BGXPJ 6890B	M.Tech	01-06-2019	Civil	Assistant Professor	22-07-2019	0	0	19	Yes	
Kolekar A.B.	GDSP K1558 L	M.Tech	18/01/2019	Civil	Assistant Professor	1/06/2019	0	0	86	No	1/05/2021
Dr. Prashant Ramesh Bamane	BHXP B5112 K	PhD ,M.E.	24-12-2014	Civil	Associate Professor	01-09-2021	81	72	0	Yes	
Vishal Sharad Hingmire	AEBP H8372 K	M.E	23-11-2013	E & TC	Assistant Professor	12-02-2011	17	13	0	Yes	
Dr.Shinde Deepali	CBQP S4461 N	PhD	24/09/2015	E & TC	Associate Professor	15/02/2023	20	0	0	Yes	
Rahul Prakash Sakhare	FCOPS 8416K	MTech	05-06-2017	E & TC	Assistant Professor	07-01-2019	0	0	29	Yes	

8.1. First Year Student-Faculty Ratio (FYSFR) (5)

Assessment = $(5 \times 20) / \text{Average FYSFR (Limited to Max. 5)}$

Year	Number of students (Approved intake strength)	Number of faculty members(considering fractional load)	FYSFR= Number of students/ Number of faculty members
CAY: 2022-23	330	14.60	22.60
CAY m1: 2021-22	330	14.70	22.45
CAY m2: 2020-21	330	14.47	22.80
Average Assessment			22.62
Assessment = $(05 \times 20) / \text{Average FYSTR}$			4.42

Graphical Presentation of First Year Student Faculty Ratio

8.2. Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification = $(5x + 3y)/RF$,

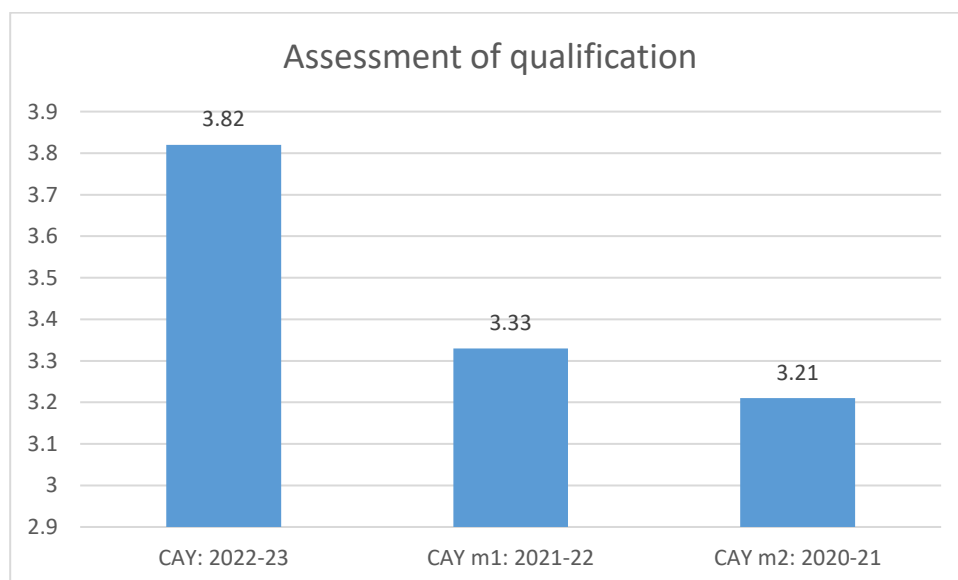
x= Number of Regular Faculty with Ph.D,

y = Number of Regular Faculty with Post-graduate qualification

RF= Number of faculty members required as per SFR of 20:1

Year	X	Y	RF	Assessment of qualification
CAY: 2022-23	3	16	16.5	3.82
CAY m1: 2021-22	2	15	16.5	3.33
CAY m2: 2020-21	1	16	16.5	3.21
Average Assessment of Qualification				3.45

Graphical Presentation of Assessment of Qualification:



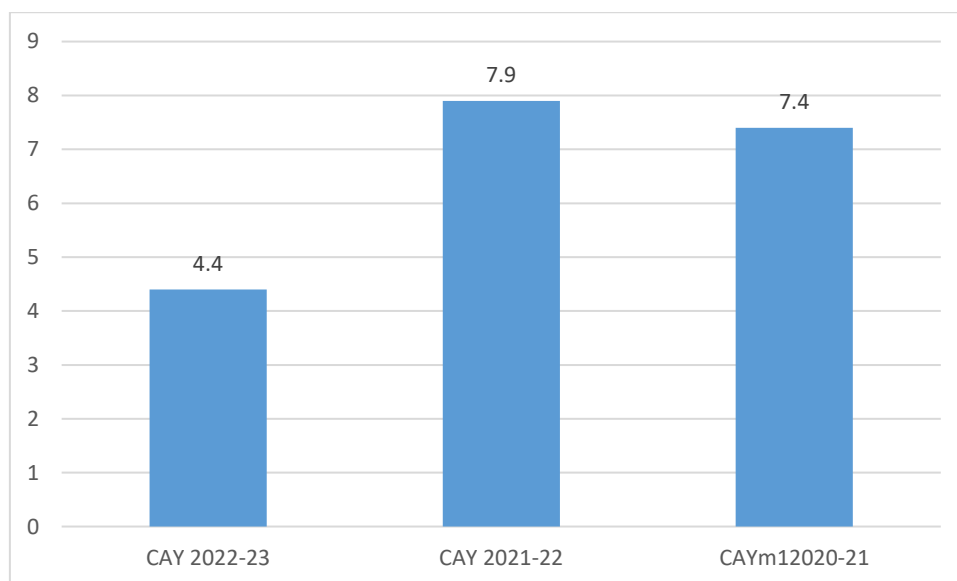
8.3. First Year Academic Performance (10)

Academic Performance (AP) = (Mean of the percentage of marks in First Year of all successful students/10) x (number of successful students/number of students appeared in the examination)

Year	Mean of the % marks of successful student X	X/10	Total Successful students y	Total Appeared Students z	AP	AVE. API
CAY 2022-23	CSE	6.90	126	133	6.54	6.69
	E &TC	6.97	23	34	4.72	
	Mech	7.33	9	15	4.40	
	Civ	0	1	03	0	
	Elec	6.80	22	30	4.99	
CAY m1: 2021-22	CSE	8.35	69	69	8.35	
	E &TC	8.11	45	45	8.11	
	Mech	7.943	10	10	7.9	
	Civ	7.76	9	9	7.76	
	Elec	8.05	8	8	8.05	
CAY m2: 2020-21	CSE	8.6	52	52	8.6	
	E &TC	8.4	29	29	8.4	
	Mech	7.4	21	21	7.04	
	Civ	7.6	13	13	7.6	
	Elec	8.0	22	22	8.0	

Year (MECH)	Mean of the % marks of successful student X	X/10	Total Successful students y	Total Appeared Students Z	AP	AVE. API
CAY 2022-23	73.3	7.33	9	15	4.40	6.57
CAY 2021-22	79.43	7.943	10	10	7.9	
CAYm12020-21	74	7.4	21	21	7.4	

Graphical Presentation of Academic Performance



8.4. Attainment of Course Outcomes of first year courses (10)

8.4.1 Describe the assessment processes used to gather the data upon which the

evaluation of Course Outcomes of first year is done (5) Data collection methods:

- Two Internal CA Tests of 10 marks and One MSE of 20 marks are conducted per semester and Question papers are set according to defined course outcomes.
- Final examination of 60 marks is conducted by the University.

- Evaluation of course outcome is based on Internal Tests and university examination with weighted average 40:60.
- Lab assessment is based on practical performance of students and two CA practical exam of 15 marks.

Sr.No.	Direct Assessment tools	Outcome
1	CA Internal Test -2 MSE -1	Attainment of course outcome and programme outcome
2	Assignments, Tutorials, quiz	Designed for course outcome
3	Laboratory work, Orals ,Lab CA exam	Practical knowledge

8.4.2. Record the attainment of Course Outcomes of all first year courses (5) for Mechanical Engineering students. Attainment levels are set based on performance in Internal Semester Evaluation and University examinations.

Sr. No.	Assessment Tool	Attainment Level
1	University Examination	Level 3->71 - 100% student score Level 2- 51 - 70% student score Level 1- 40 - 50% student score
2	CA Test	Level 3->71 - 100% student score Level 2- 51 - 70% student score Level 1- 40 - 50% student scoredent score

3	MSE	Level 3->71 - 100% student score Level 2- 51 - 70% student score Level 1- 40 - 50% student score
4	LAB	Level 3->81 - 100% student score Level 2- 61 - 80% student score Level 1- 40 - 60% student score

8.5. Attainment of Program Outcomes from first year courses (20)

Following table shows the attainment of COs of first year courses yearwise

1. Indicate results of evaluation of each relevant PO and/or PSO, if applicable Indicate results of evaluation of each relevant PO and/or PSO, if applicable(15) CO-PO set level indicating Matrix

Academic year 2022-23

Course Code	Course	CO1	CO2	CO3	CO4
BTBS101	Engg. Mathematics-I	1.00	1.10	1.10	1.00
BTBS102	Engg. Physics	1.10	0.95	1.20	1.10
BTES203	Engg. Graphics	2.90	2.85	2.70	2.80
BTHM104	Communication Skill	2.80	2.80	2.78	2.80
BTES105	Energy and Environment Engg.	2.20	2.25	2.22	2.30
BTBS102L	Engineering Physics lab	2.40	3.00	2.40	2.40
BTES106	Basic Electrical and Electronics Engg. (Audit sub)	3.00	2.90	2.90	3.00
BTES108L	Engineering Mechanics Lab	2.00	2.00	2.60	2.60
BTES108L	Engineering Graphics Lab	2.00	2.00	2.00	2.60
BTHM109L	Communication Skills Lab	2.00	2.00	2.00	2.00
BTBS201	Engg. Mathematics-II	1.00	1.10	1.08	1.10
BTBS202	Engg. Chemistry	2.32	2.32	2.16	2.20
BTES203	Engg. Mechanics	2.40	2.35	2.15	2.00

BTES204	Computer Programming in C	1.40	1.55	1.70	1.30
BTES205	Workshop Practice	2.00	2.00	2.00	2.00
BTES206	Basic Civil and Mechanical Engineering(audit sub)	2.90	2.80	2.80	2.80
BTBS107L	Engineering Chemistry Lab	2.40	2.40	3.00	3.00
BTES210S	Seminar	2.40	2.40	2.40	2.40

Core Science and Engineering CO-PO Attainment 2022-23 (Mechanical Engineering)

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
M1	0.70	1.07	0.98	0.92							0.93	0.71	0.49	0.49
CHEM	2.39	2.18	1.78			2.18	2.39		2.39			1.78		
MECHANICS	1.39	1.58	2.05	1.28	0.80		1.36					1.76	1.00	1.02
Comp Prog In C	1.17	1.35	1.42	1.26	1.62					0.88	1.08	0.87	1.34	1.33
BEEE	1.30					0.65	0.87							
Engg Chem Lab	2.80	2.56	2.10			2.56	2.80		2.80			2.10		
Engg Mech Lab	1.33	1.65	2.12				1.27					1.72	0.93	1.00
Workshop	1.09				1.70				0.73	0.36			0.18	
M2	0.71	1.08	0.97	0.97		0.49						0.71	0.49	0.48
Phy	0.96	0.96	0.96	1.44		1.44	1.44					0.96	0.48	
Graphics	2.83	2.83	1.66	1.88	2.83		2.12		1.19	1.87	1.89	1.10	2.83	0.94
Comm skills					0.73			1.10	1.82	2.01		1.46	0.72	2.20
EEE	1.85		1.99		1.57		2.37		1.59	1.60		1.96	0.79	1.57
BCME	0.71	1.42	0.94	0.94	0.63					1.25	0.94	0.96	1.42	0.95
Phy lab	1.65	1.65	1.65	2.48		2.48	2.48					1.65	0.83	
Graphics lab	0.59	1.46	0.73			0.18	0.00		0.73	0.81		0.81	1.22	0.77
Comm skills lab					0.94			1.41	2.36	2.59		1.89	0.95	2.83
Seminar					1.00				2.67	2.67		1.75	1.00	1.00

PO levels set and achieved Attainment (2022-23):

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Target	2.00	2.20	2.14	2.44	1.44	1.43	2.25	1.40	2.29	2.26	2.00	2.00		
AY 22-23	1.43	1.65	1.49	1.40	1.31	1.43	1.71	1.26	1.81	1.56	1.21	1.39	0.98	1.22

**8.5.2. Actions taken based on the results of evaluation of relevant POs (5)
Academic Year-2022-23**

POs Attainment Levels and Actions for Improvement- (2022-23)

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			

PO 1	2.00	1.43	Target is not attained ● The students have a limited grasp of the core principles of engineering.
Action: 1. Greater emphasis will be placed on thoroughly comprehending the fundamentals of engineering.			

PO 2 : Problem Analysis

PO 2	2.20	1.65	Target is not attained ● The students are experiencing a deficiency in their literature review outcomes and in identifying engineering-related issues.
Action: 1The goal for the upcoming academic year is to exert efforts in order to attain the predefined target 2. There will be an increased emphasis on generating fresh ideas to address these issues.			

PO 3 : Design/development of Solutions

PO 3	2.14	1.49	Target is not attained <ul style="list-style-type: none"> ● In the realm of research and development, the students faced challenges in recognizing issues concerning public health and safety, as well as addressing cultural and societal needs.
Action: 1. The same target will be considered for the next academic year. 2. More focus will be given to practicals, experiments, projects to improve their skills and not merely learning.			

PO 4 : Conduct Investigations of Complex Problems

PO 4	2.44	1.40	Target is not attained <ul style="list-style-type: none"> ● Students are facing challenges when it comes to conducting investigations into complex problems.
Action: 1. The goal for the upcoming academic year is to exert efforts in order to attain the predefined target 2. As teaching and learning is at an advanced level, more emphasis is given on the use of latest technology.			

PO 5 : Modern Tool Usage

PO 5	1.44	1.31	Target is not attained <ul style="list-style-type: none"> ● There is a need for greater utilization of the National Program of Technical Enhance Learning (NPTEL) as a teaching resource, with a focus on integrating more
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			contemporary tools and technologies
Action: 1. The objective for the forthcoming academic year is to dedicate efforts toward achieving the predetermined goal. 2. More thrust will be given for the use of various modern tools like ICT panels, Moodle, PPTs, FTPs, and Digital Library.			

PO 6 : The Engineer and Society

PO 6	1.43	1.43	Target is attained ● The students could assess societal, health, safety, legal and cultural issues, clearly
Action: 1. The same target will be considered for the next academic year 2 A strong bond will be forged with society by addressing their needs by conducting activities like exhibitions, and group discussions on societal needs related to engineering and professionalism, will be organised.			

PO 7 : Environment and Sustainability

PO 7	2.25	1.71	Target is not attained - The students' concerns regarding environmental issues lack depth, and there is a need for improvement in their approach to sustainable development.
Action: 1. The goal for the upcoming academic year is to commit efforts towards achieving the established objective. 2. The various environmental issues such as global warming, pollution, and e-waste will be highlighted by conducting various awareness programmes.			

PO 8 : Ethics

PO 8	1.40	1.26	Target is not attained - Students need improvement in their awareness of the importance
------	------	------	--

			of ethics and professional principles.
<p>Action: 1. The aim for the upcoming academic year is to devote efforts to accomplish the set objective.</p> <p>2. The importance of ethical behaviour in engineering students, will be emphasized and expert talks on ethics in engineering domain will be organized.</p>			

PO 9 : Individual and Team Work

PO 9	2.29	1.81	Target is not attained - It has been observed that students need to enhance their ability to work both individually and as part of a team when working on projects
<p>Action: 1. The goal for the approaching academic year is to allocate efforts towards achieving the predetermined aim.</p> <p>2. The students will be motivated to participate in co curricular and extra curricular activities.</p>			

PO 10 : Communication

PO 10	2.26	1.56	Target is not attained - It has been noted that students require a stronger focus on improving their proficiency in linguistic, public speaking, communication, and computing skills
<p>Action: 1 We'll aim to achieve the same target in the upcoming academic year</p> <p>2. Soft skills programmes and expert lecture will be arranged to highlight its importance and necessity in daily life and also the industry in particular.</p>			

PO 11 : Project Management and Finance

PO 11	2.00	1.21	Target is not attained - The students' knowledge of project management is inadequate.
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Action: 1. The same target will be considered for the next academic year.
 2. Mini projects from the first year itself will help the students' to improve their understanding of the topic, cultivating team spirit, problem-solving ability, and managerial skills will be included.

PO 12 : Life-long Learning

PO 12	2.00	1.39	Target is not attained - Greater emphasis will be placed on instilling the concept of lifelong learning among the students.
<p>Action: 1. We will put in efforts to attain the identical target in the forthcoming academic year.</p> <p>2. The students will be motivated to participate in co-curricular and extracurricular activities.</p> <p>3. Expert lectures pertaining to various fields and career development programmes will be organized.</p>			

CRITERION 09	STUDENT SUPPORT SYSTEMS	80
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STUDENT SUPPORT SYSTEMS

9.1 Mentoring system to help at individual level (5)

The role of the faculty as a Guardian Faculty mentor is one of nurturing support for a student during the transition period in academic, professional as well as personal augmentation. In all departments of the Institution, mentoring is a continuous process where Guardian faculty mentors serve as a resource who will respond to many questions, that the student might pose; support students in choosing course work that meets their needs and interests; encourage students to actively participate in seminars and laboratory work that are realistic in scope; and counsel the students on any other academic, professional, personal growth, etc., for necessary advice/guidance/help.

Guardian Faculty Mentor:

- For monitoring the overall development of students and encourage the students to participate in all grooming activities conducted by various cells, one faculty is assigned as Guardian Faculty Mentor to every batch consisting the 15 students.
- The guardian faculty mentor conducts periodical meeting with students in order to evaluate their academic performance and proper orientation towards the program, as well as guide them to rectify any shortcomings and to solve any problems.
- Every GFM is in contact with parents of respective students and communicates them about student performance, attendance and any other issues.
- GFM discuss the various policies conducted by the Institute with students and helps them take maximum benefits from them.
- Students are motivated and guided to participate in co-curricular and extra-curricular activities.
- GFM helps students for solving their personal issues such as psychological issues, confidence level, negative emotional management, leadership quality, time management, teamwork etc.

- **Following issues are discussed with students:**

- i. Attendance
- ii. Personal issues
- iii. Behavior
- iv. Understanding problems
- v. Difficulty in writing/ speaking
- vi. Confidence level
- vii. Hostel/Food issues(Homesickness)
- viii. Girl's/Women's issues
- ix. In case of any other observations, it is noted and discussed.

1. Class Advisor:

A class Advisor is appointed to monitor & coordinate the activities of the respective class. Class Advisor maintains a record of defaulter list, roll call list, etc. and mentors the students related to academic performance, less attendance, etc.

2. Academic Guidance:

- Support to improve performance of students: Based on the previous year's result and Mid Semester Examination performance and overall behavior of students; weak and bright students are identified in each class and appropriate mentoring is done to improve the performance of weak students and motivate bright students.
- Remedial classes are conducted for students who have backlogs. Unit wise discussion is conducted in each remedial session.
- Program coordinator, course coordinators, class Advisors & GFMs continuously communicate with students and motivate them to perform well in academics and enhance their knowledge through various modes like Add on courses, internships, etc.
- Parents-Teacher Meeting is held once in semester to brief the progress of their wards to their parents. This process has improved students' academic performance, attendance and

Participation in co-curricular and extra-curricular activities.

3. Professional and Career Guidance:

- A dedicated **Training & Placement Coordinator (TPC)** is appointed by the institute to coordinate the placement related activities.
- Various career guidance sessions like higher education opportunities in India and abroad, latest trends in industries etc. are conducted throughout the year for students to enhance their vision and broaden their mindset to lead their lives on a successful career path.
- Apart from higher education opportunities, sessions like aptitude training, group discussion sessions, interview preparations, etc. are regularly conducted by TPCs to improve students' performance in placement activities for various companies.
- On the technical front, several technical training sessions are conducted by course coordinators and industry persons alike for students to keep them updated with latest technical knowledge.
- Students are encouraged to take part in various co-curricular & extra-curricular events to ensure their all-round development by participating and organizing such events at regular intervals.

Efficacy of Mentoring System:

- After mentoring and counseling it was observed that the academic performance of students improved.
- Also some of abilities such as time management, teamwork, goal setting and softskills were improved.
- In some cases, it helped students to overcome in securities about their abilities as an engineering student and encouraged them to prepare for the next steps in their academic program and career.

PERSONAL DETAILS (2022-23)

Name of Student: Matkar Akansha D.
 Address: At - post Vikhale, Tal - Koregaon Dist satara
 Student Mobile No: 8857819880
 Parent Mobile No: 9910584635
 Parents Occupation: Farmer
 E-mail: akanshamatkar19@gmail.com
 Branch: Mechanical
 Blood Group: AB+
 Class: TY-BTech
 Roll No: 3051
 GFM Name: Dr. SAI Bellary
 GFM Mob No: 9962604864



Note: * Students having attendance more than 75% are eligible for Institute Scholarship.
 * Laptop / Tablets are allowed during practical for academic purpose.

Academic Calendar, Term - II

APRIL // Suggestion

TARUNAJI - 2023

05/04/23	9:30	5:30
06/04/23		
07/04/23		
08/04/23		

20-21/4/23
 24-2023 to 18-4-23

1st Saturday
 16-4-23 - national level technical project competition - co-ordinate & participant.
 20-4-23 to 21-4-23 - participate in poster & project competition at spum college Malegaon.

3rd Saturday

Fig. 9.1.a: GFM Diary

Time Table, Term - II

Class: _____

Time	9:30 to 10:30	10:30 to 11:30	11:30 to 12:30	12:30 to 1:10
MON		C2C	MD-II	
TUE	MP-II		PLM	Recess
WED	Aptitude	MQC		
THU	MP-II	MD-II	QTPM	
FRI	PLM	QTPM	MD-II	
SAT				

Subject Abbreviation	Name of Subject	TH	TW	POE
MD-II	Machine design-II			
MP-II	manuf. process			
QTPM	quantitative techniques & product life cycle management			
PLM	metrology & quality control			
MQC				

Time Table, Term - II

Time	1:10 to 2:10	2:10 to 3:10	3:10 to 3:30	3:30 to 4:30	4:30 to 5:30
MQC	MP-II		mini project	seminar	
	MQC		sports	MD-II	MP-II
	MP-II		TPO		
	MQC	PLM		semi-nay	mini project
	MD-II				

Name of Faculty	Contact Number
Mr. Kamble, A.V	9067493289
Mrs. Alarkar, M.N	9158476167
Mr. Patil, S.P.	8208327353
Dr. Gholap, A.B	9767688123
Mr. Kamble, R.R.	994441891

Fig. 9.1.b: GFM Diary

9.2. Feedback analysis and reward/corrective measures taken, if any (10)
(Institute Marks :)

Feedback collected for all courses: Yes

The feedback process helps course coordinators understand the lacunas and scope for improvements. Also it appreciates the hard work done by the course coordinators.

Feedback collection process:

The teaching-learning system followed by any educational institution needs continuous refinement. To facilitate this process of continuous refinement, the institution has adopted a feedback system that takes suggestions from students of each program.

This eventually helps to fine-tune the teaching-learning process and the curriculum. The institution follows a well-defined feedback system. It has been identified as one of the important processes in our teaching learning system.

The students those who have attendance more than average are given an opportunity to express their opinion with regards to effectiveness in teaching by a teacher, which are detailed in the feedback format. The feedback from students regarding the quality of teaching is collected twice in a semester, using Google apps. This also helps the teachers in improving their teaching methodology.

Feedback is collected online twice in a semester (either through Moodle / GoogleForm) from students with above average attendance. This feedback is completely anonymous and students are encouraged to give their honest feedback.

The feedback is collected on five-point scale

Arvind Gavali College of Engineering,
Satara
Department of Mechanical Engineering

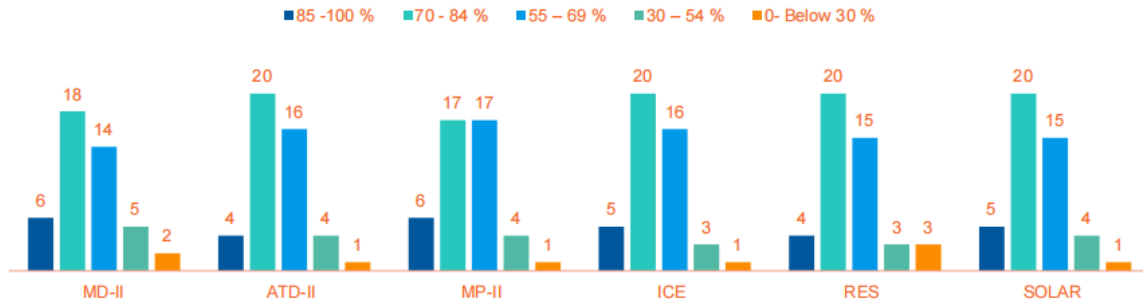
Third Year Feedback

Month : April 2022
Total Responses : 45
Total Class Strength : 68
Feedback Percentage : 66.17%

FACULTY – SUBJECT DISTRIBUTION

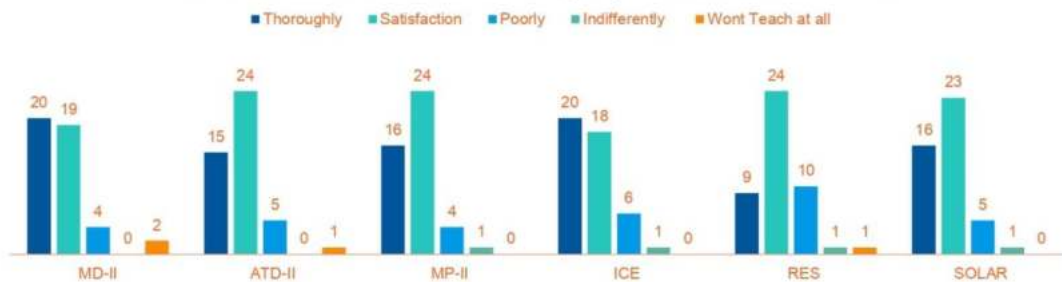
Sr. No	Subject	Abbrev.	Name of Faculty	Abbrev.
01	Machine Design-II	MD-II	Mr. Kamble Ankur V.	KAV
02	Applied Thermodynamics -II	ATD-II	Mr. Shivade A.S.	SAS
03	Manufacturing Processes- II	MP-II	Mr. Matkar Mahesh V.	MMV
04	I.C. Engines	ICE	Mr. Ghadage Suraj S.	GSS
05	Renewable Energy Sources	RES	Mr. Kadam A..A.	KAA
06	Solar Energy	SOLAR	Mr. Tambe Pratik M.	TPM

1.How much of the syllabus was covered in the class?



Faculty	KAV	SAS	MMV	GSS	CAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
85-100 %	6	4	6	5	4	5	11.11111
70-84 %	18	20	17	20	20	20	42.59259
55-69 %	14	16	17	16	15	15	34.44444
30-54 %	5	4	4	3	3	4	8.518519
0- Below 30 %	2	1	1	1	3	1	3.333333

2.How well did the teachers prepare for the classes?



Faculty	KAV	SAS	MMV	GSS	CAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Thoroughly	20	15	16	20	9	16	35.55556
Satisfaction	19	24	24	18	24	23	48.88889
Poorly	4	5	4	6	10	5	12.59259
Indifferently	0	0	1	1	1	1	1.481481
Wont Teach at all	2	1	0	0	1	0	1.481481

3.How well were the teachers able to communicate?



Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Always Effective	17	13	12	13	10	15	29.62963
Sometime effective	20	23	22	21	24	24	49.62963
Just Satisfactory	2	5	8	7	7	3	11.85185
Generally Ineffective	2	2	1	2	2	1	3.703704
Very Poor Communication	4	2	2	2	2	2	5.185185

4. The teacher's approach to teaching can best be described as



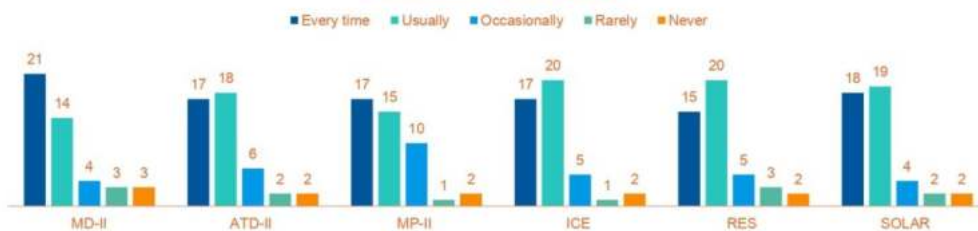
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Excellent	13	7	12	9	4	10	20.37037
Very Good	15	23	17	20	22	21	43.7037
Good	10	12	12	12	13	11	25.92593
Fair	5	2	3	3	4	2	7.037037
Poor	2	1	1	1	2	1	2.962963

5. Fairness of the internal evaluation process by the teachers



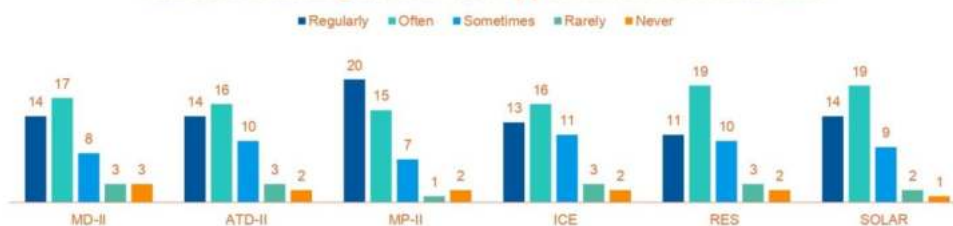
Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Always fair	15	12	11	14	11	13	28.14815
Usually	18	23	23	20	21	22	47.03704
Sometimes	7	6	9	6	11	7	17.03704
Unfair	5	4	2	5	2	3	7.777778
Never	0	0	0	0	0	0	0

6. Was your performance in assignments/extra practice test discussed with you?



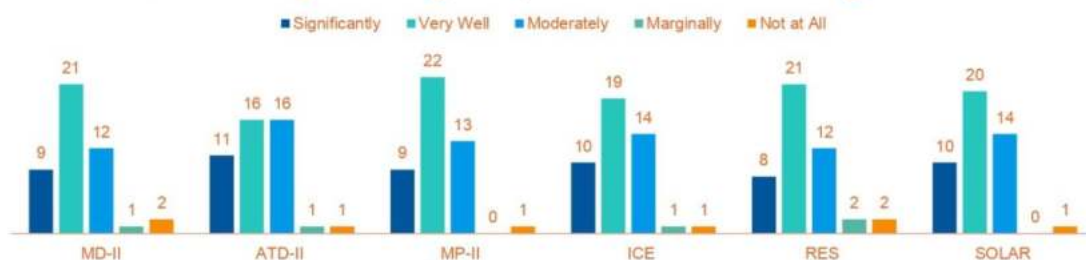
Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	21	17	17	17	15	18	38.88889
Usually	14	18	15	20	20	19	39.25926
Occasionally	4	6	10	5	5	4	12.59259
Rarely	3	2	1	1	3	2	4.444444
Never	3	2	2	2	2	2	4.814815

7. The faculty takes active interest in promoting internship, student exchange, field visit opportunities for students.



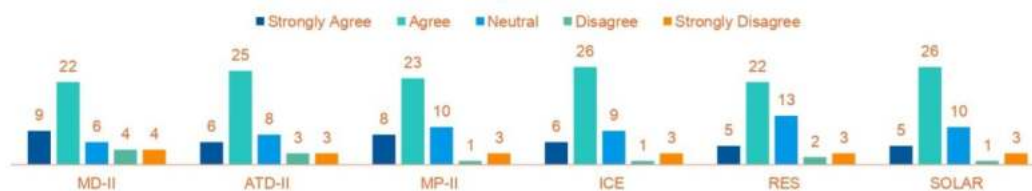
Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Regularly	14	14	20	13	11	14	31.85185
Often	17	16	15	16	19	19	37.77778
Sometimes	8	10	7	11	10	9	20.37037
Rarely	3	3	1	3	3	2	5.555556
Never	3	2	2	2	2	1	4.444444

8. The teaching and mentoring process in your institution facilitates you in cognitive, social and emotional growth.



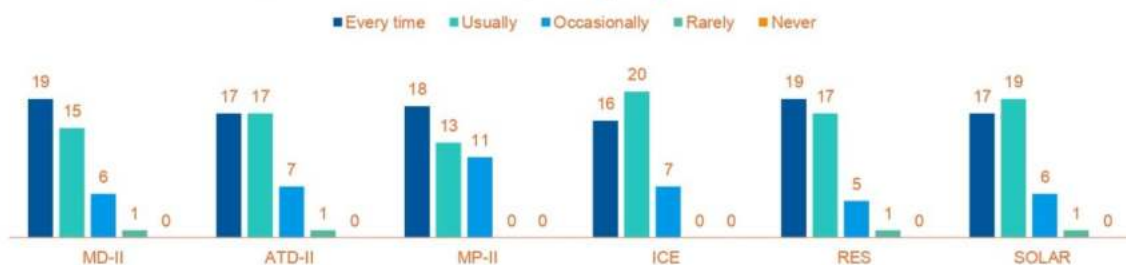
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Significantly	9	11	9	10	8	10	21.11111
Very Well	21	16	22	19	21	20	44.07407
Moderately	12	16	13	14	12	14	30
Marginally	1	1	0	1	2	0	1.851852
Not at All	2	1	1	1	2	1	2.962963

9. The institute provides multiple opportunities to learn and grow



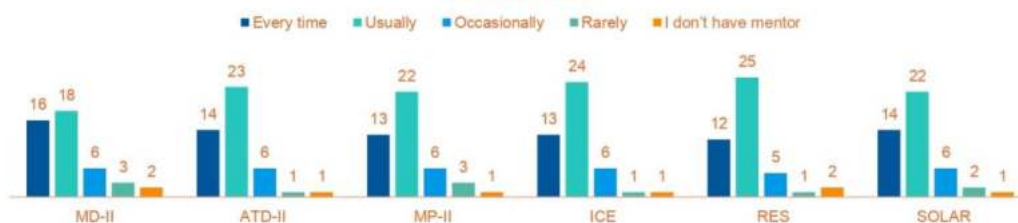
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Strongly Agree	9	6	8	6	5	5	14.44444
Agree	22	25	23	26	22	26	53.33333
Neutral	6	8	10	9	13	10	20.74074
Disagree	4	3	1	1	2	1	4.444444
Strongly Disagree	4	3	3	3	3	3	7.037037

10. Teachers inform you about your expected competencies, course outcomes, and program outcomes



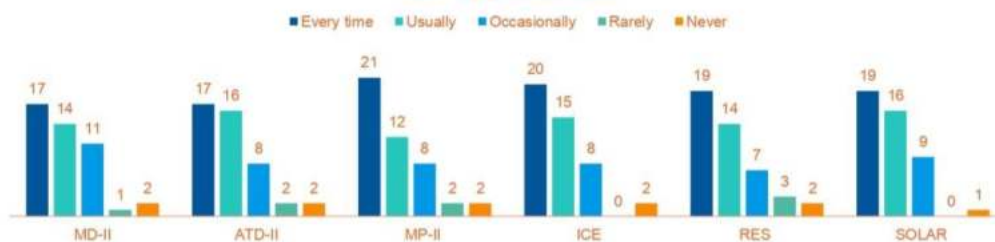
Faculty	KAV	SAS	MMV	GSS	CAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	19	17	18	16	19	17	39.25926
Usually	15	17	13	20	17	19	37.40741
Occasionally	6	7	11	7	5	6	15.55556
Rarely	1	1	0	0	1	1	1.481481
Never	0	0	0	0	0	0	0

11. Your mentor does a necessary follow-up with as assigned task to you



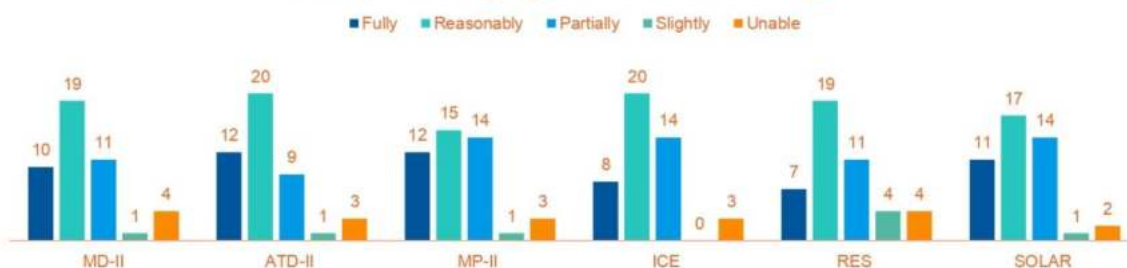
Faculty	KAV	SAS	MMV	GSS	CAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	16	14	13	13	12	14	30.37037
Usually	18	23	22	24	25	22	49.62963
Occasionally	6	6	6	6	5	6	12.96296
Rarely	3	1	3	1	1	2	4.074074
I don't have mentor	2	1	1	1	2	1	2.962963

12. The teacher illustrates the concepts through examples and applications



Faculty	KAV	SAS	MMV	GSS	CAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	17	17	21	20	19	19	41.85185
Usually	14	16	12	15	14	16	32.22222
Occasionally	11	8	8	8	7	9	18.88889
Rarely	1	2	2	0	3	0	2.962963
Never	2	2	2	2	2	1	4.074074

13. The teacher identifies your strengths and encourage you with providing right level of challenges



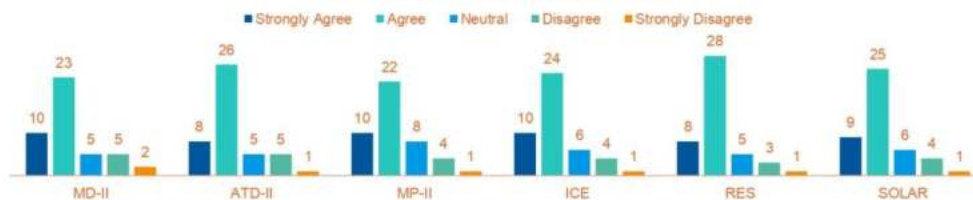
Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Fully	10	12	12	8	7	11	22.22222
Reasonably	19	20	15	20	19	17	40.74074
Partially	11	9	14	14	11	14	27.03704
Slightly	1	1	1	0	4	1	2.962963
Unable	4	3	3	3	4	2	7.037037

14. Teachers are able to identify your weaknesses and help you to overcome them



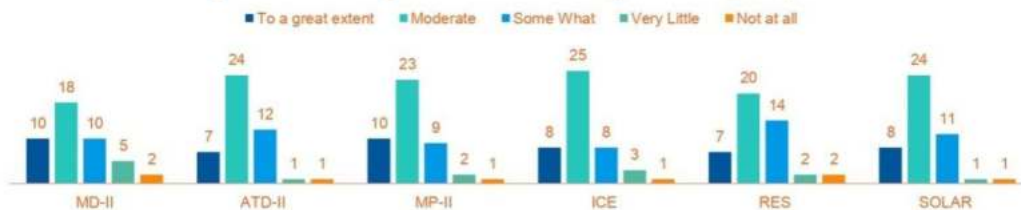
Faculty	KAV	NPR	MMV	GSS	TPM	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Every time	15	11	12	12	11	10	26.2963
Usually	13	16	16	16	16	17	34.81481
Occasionally	12	14	13	12	11	15	28.51852
Rarely	0	1	1	2	3	1	2.962963
Never	5	3	3	3	4	2	7.407407

15. The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.



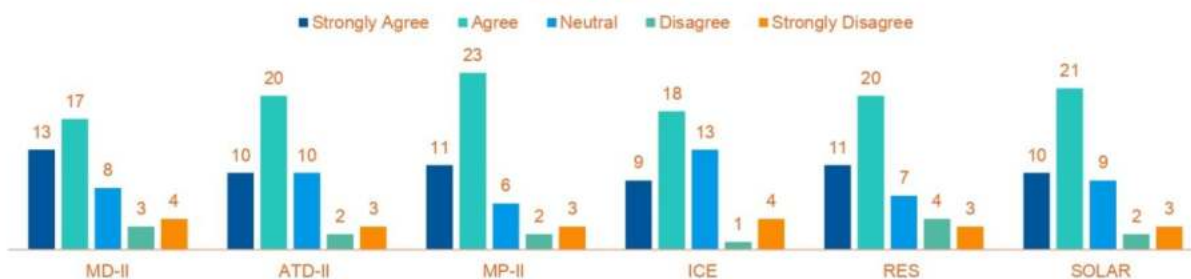
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Strongly Agree	10	8	10	10	8	9	20.37037
Agree	23	26	22	24	28	25	54.81481
Neutral	5	5	8	6	5	6	12.96296
Disagree	5	5	4	4	3	4	9.259259
Strongly Disagree	2	1	1	1	1	1	2.592593

16. The institute/ teachers use student-centric methods, such as experiential learning, participative learning and problem-solving methodologies for enhancing learning experiences



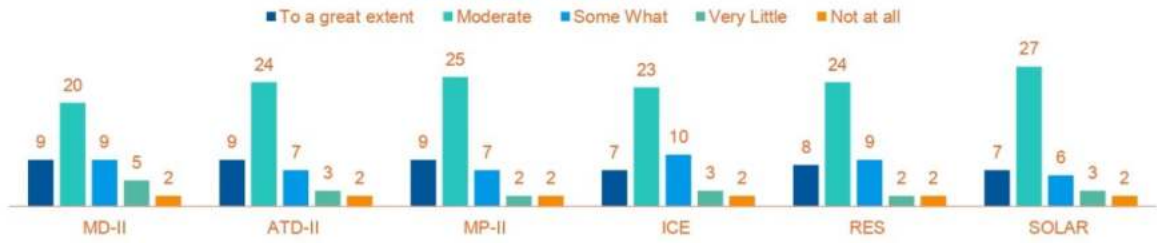
Faculty	KAV	SAS	MMV	GSS	CAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
To a great extent	10	7	10	8	7	8	18.51852
Moderate	18	24	23	25	20	24	49.62963
Some What	10	12	9	8	14	11	23.7037
Very Little	5	1	2	3	2	1	5.185185
Not at all	2	1	1	1	2	1	2.962963

17. Teachers encourage you to participate in extracurricular activities



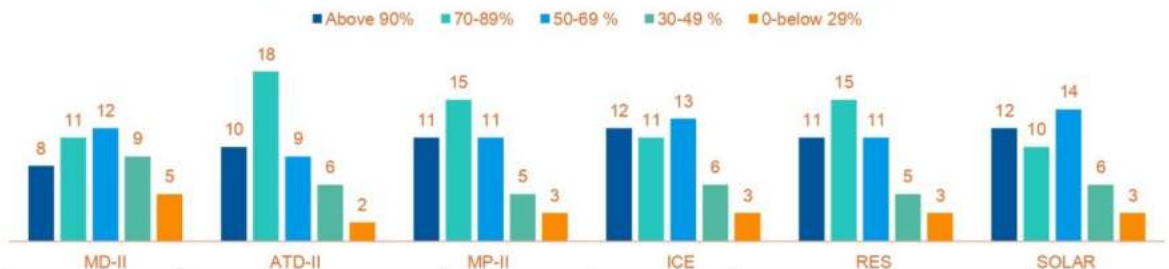
Faculty	KAV	SAS	MMV	GSS	CAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Strongly Agree	13	10	11	9	11	10	23.7037
Agree	17	20	23	18	20	21	44.07407
Neutral	8	10	6	13	7	9	19.62963
Disagree	3	2	2	1	4	2	5.185185
Strongly Disagree	4	3	3	4	3	3	7.407407

18. Efforts are made by teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work



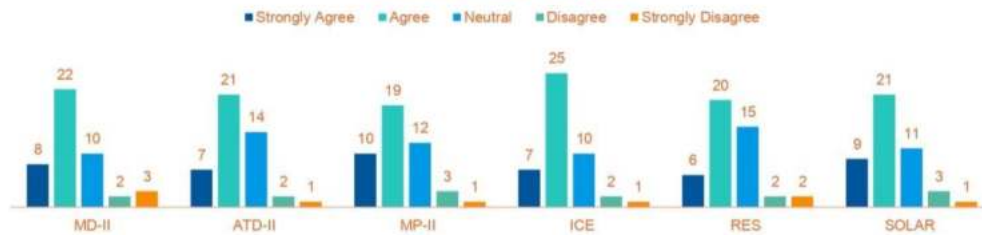
Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
To a great extent	9	9	9	7	8	7	18.14815
Moderate	20	24	25	23	24	27	52.96296
Some What	9	7	7	10	9	6	17.77778
Very Little	5	3	2	3	2	3	6.666667
Not at all	2	2	2	2	2	2	4.444444

19. What percentage of teachers use ICT tools such as LCD projector, Multimedia, etc while teaching?



Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Above 90%	8	10	11	12	11	12	20.74074
70-89%	11	18	15	11	15	10	25.55556
50-69%	12	9	11	13	11	14	21.48148
30-49%	9	6	5	6	5	6	10.37037
0-below 29%	5	2	3	3	3	3	5.185185

20. The overall quality of teaching-learning process in your institute is very good



Faculty	KAV	SAS	MMV	GSS	KAA	TPM	%
Subject	MD-II	ATD-II	MP-II	ICE	RES	SOLAR	
Strongly Agree	8	7	10	7	6	9	14.44444
Agree	22	21	19	25	20	21	39.25926
Neutral	10	14	12	10	15	11	22.96296
Disagree	2	2	3	2	2	3	4.44444
Strongly Disagree	3	1	1	1	2	1	2.22222

Fig. 9.2.a: Feedback Collection

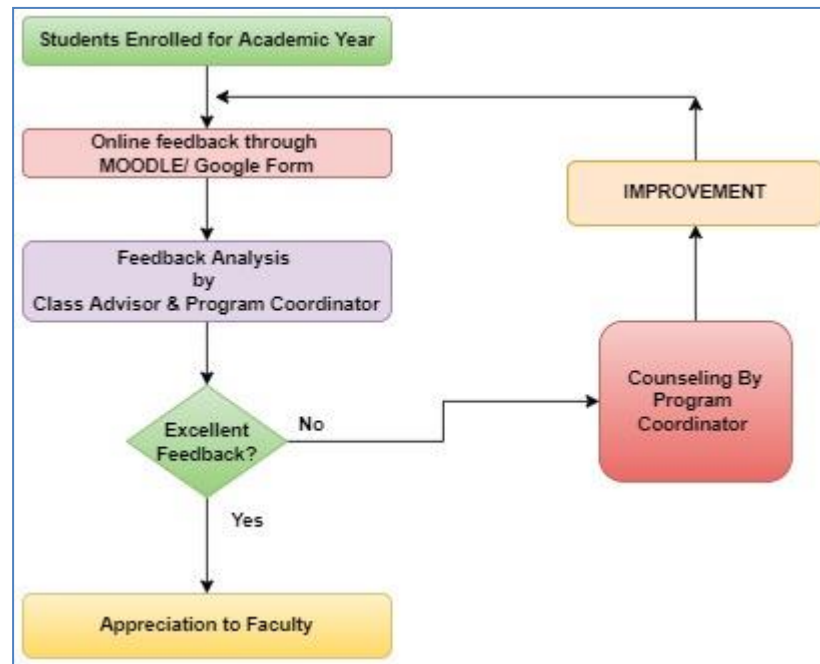


Fig.9.2.b: Feedback Collection and analysis Process

Students Feedback Analysis procedure

The staff appraisal committee members at program level collect the online feedback and prepare the consolidated report. The staff appraisal committee members analyze feedback and discuss it with program coordinator and accordingly corrective and preventive measures are carried out if necessary. This feedback is communicated to the concerned faculty through program coordinator.

Effectiveness of Feedback System:

- Faculties having poor feedback in mid semester were counseled by program coordinator. During counseling program coordinator gave suggestions for the improvement to the concern faculty.
- It was observed that after counseling, end semester feedback of concern faculty was improved.

OVERALL ANALYSIS

Sub	Faculty	Appreciation	Suggestions for improvement
MD-II	KAV	Performance discussion of assignments, Identification of Strength and Weakness of Students	Participative learning and problem solving, Field Visits
ATD-II	SAS	Use of ICT, Follow up of task	Review and continuous quality improvement, Multiple opportunities to learn
MP-II	MMV	Preparation for class, Efforts to inculcate soft skills	Identification of Strength and Weakness of Student, CO-PO discussion
ICE	GSS	Illustration of concepts through examples, Follow up of task	Identification of Strength and Weakness of Student, Multiple opportunities to learn
RES	KAA	CO-PO discussion, Use of ICT	Identification of Strength and Weakness of Students, Participative learning
SOLAR	TPM	Illustration of concepts through examples, Fairness of internal Evaluation	Field Visits, Identification of Strength and Weakness of Students

Fig. 9.2.c: Feedback Analysis

Action Taken

Subject	Faculty	Suggestions for improvement	Action	Remark of HOD
MD-II	KAV	Syllabus coverage is lagging	Plan for extra lecture	Conduct extra lecture to cover Syllabus
ATD-II	SAS	Teaching planning prepared	Prepared teaching plan for smooth continuation.	Plan atleast one hour teaching.
MP-II	MMV	Improve ICT Usage	Prepared ppt. for easy understanding.	Use interactive panel for easy understanding.
ICE	GSS	Identification of Strength and weakness of student	Discuss with each & every student	Follow the SWOT analysis.
RES	KAA	Improve teaching method is expected	explain topic with extra example	explain topics in details.
SOLAR	TPM	Arrange field visits	Will plan for industrial visit at Aundh.	Every month end industry visits must plan.


 AMC




 HOD



 Principal
 Hybrid Gavali College of Engineering
 Panmalewadi, Satara
 Principal
 Hybrid Gavali College of Engineering

Fig. 9.2.d: Corrective Action Taken

Corrective Measures:

Table9.2.a:Year-wise corrective measure data

Academic Year	Suggestion recognized through Feedback Process	Corrective actions taken
2022-23	Students Demand Internship for second year & third year students	<ul style="list-style-type: none"> ● Institute provide the industry for various Company
2021-22	Students demand for Practical based Learning.	<ul style="list-style-type: none"> ● Emphasis is given on Project Based Learning (IOT Projects + Projects involved for Seminar Course)
2020-21	Organize soft skill development program	<ul style="list-style-type: none"> ● Separate Slot for Soft skill Session (Campus to Corporate) is allotted in Timetable.
2019-20	Technical Training Program should be organized.	<ul style="list-style-type: none"> ● 4 Weeks Industry Training Program(Yugam Event) conducted for CNC,UG NX,SUPRA BAJA Designing Domains.
2018-19	More Usage of ICT TOOLS for Teaching Learning Process.	<ul style="list-style-type: none"> ● Students are encouraged to attempt Quizzes, MCQ Test on MOODLE. ● Facility of Intelligent Interactive Panel is Provided in Classrooms.

The suggestions/complaints/appreciations from the students are shared with the concerned course coordinator through program coordinator. This process is useful to evaluate course coordinator performance.

9.3. Feedback on facilities (5)

(InstituteMarks: 4)

Feedback collection procedure

The institute has set the process of facility feedback mechanism to improve the quality and performance. In every semester, feedback is collected from the students on the various facilities provided to them such as library, transport, internet, canteen, sports etc. The feedback from students regarding the facilities is collected in a semester.



SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING
 NAAC Accredited

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 Website: www.agce.sets.edu.in

• Address : Al Panmalewad, Post, Narye,
 Tal. & Dist. Satara. -415 015 (Maharashtra)
 • Phone : 02162-250100
 • Tele Fax : 02162 - 251122
 • e-mail : agcenggsatara@gmail.com

• Institute Code : Engrg. DTE EN-6545
 • Poly Code : DTE DN-6545
 • Poly. MSBTE-1617 (2nd Shift)

Facility/Services Feedback Form

Academic Year: 2022-23

Semester: VI

	Questions	Excellent	Very Good	Good
1	Is Adequate Reading Room Space available?	✓		
2	Book bank Service provided by the Librarian.	✓		
3	Store Services		✓	
4	Availability of Drinking Water	✓		
5	Usage of ICT Tools			✓
6	Transport Services		✓	
7	Support & Encouragement for Sports Activity	✓		
8	Your opinion on Office Administration / Account		✓	
9	Internet/Wi-Fi Facility			✓
10	Canteen Services		✓	

Suggestions (if Any):..... Wi-Fi speed should be more
 coverage area should be increase
 Sports boat should be more.



Fig 9.3.a: Facility Feedback Form

Feedback Analysis: The feedback is collected and analyzed based on the facilities provided like sports, canteen, library; etc .and corrective measures are taken as per the feedback (if required).

Corrective Action Taken:

Table9.3.a:Year-wise corrective measure data regarding facilities

Sr. No.	Academic Year	Comments given by student	Action Taken/outcomes
1	2019-20	Extend Library Timing	Library Closing time is extended. Reading Room is available for 12 hours.
		Decide and Fix the menu of Canteen.	Canteen Committee is formed.
2	2020-21	Store Services should be available after college hours or Saturday	Store Services are available on Saturday.
3	2021-22	Increase no. of buses for transportation for Rahimatpur, Medha Route.	Two New buses started for Rahimatpur route and Medha Route
		Increase Wi-Fi Internet Speed	Separate Network for Wi-Fi is established in order to receive higher frequency internet data.
4	2022-23	Gym atmosphere welcoming and inclusive	Institute Built open Gym facility for students

9.4. Self-Learning (5)

(Institute Marks: 4)

Scope for self-learning:

- Students are encouraged to register for online courses offered by world's leading MOOC Platforms like Coursera, NPTEL, Udemy.
- Exclusive Library Slot is assigned in timetable for self-learning.
- Digital Library available at institute level.(DELNET)
- Technical competitions, workshops, seminars, quiz competitions are being conducted where students actively participate.
- Students are also encouraged to register for national level competitions for overall development.

Facilities for self-learning:

- IIT Remote Center

- Open Source Videos
- Digital Library
- Internet WI-FI
- Virtual Lab
- DELNET Library
- NPTEL Local Chapter
- MOODLE

Students are facilitated with a well-equipped library provided with latest edition of books, e-Books, online and printed journals and modern labs. The college central library is well equipped with technical magazines, journals and NPTEL lecture videos. The Institute facilities use the library resources to enhance the self-learning of students in following ways:

- The Institute library has a collection of reference books, handbooks on different courses.
- Internet and Wi-Fi facility is provided to all students and staff.
- To update themselves with the current news and latest technological developments, students and staff avail the facilities of Newspapers and magazines in the library.
- Students are provided with the book bank facility for all students.
- Question paper sets of all subjects of previous University examination are available in the central library.
- Old project reports of students are maintained in departmental library which are referred regularly by students of the department

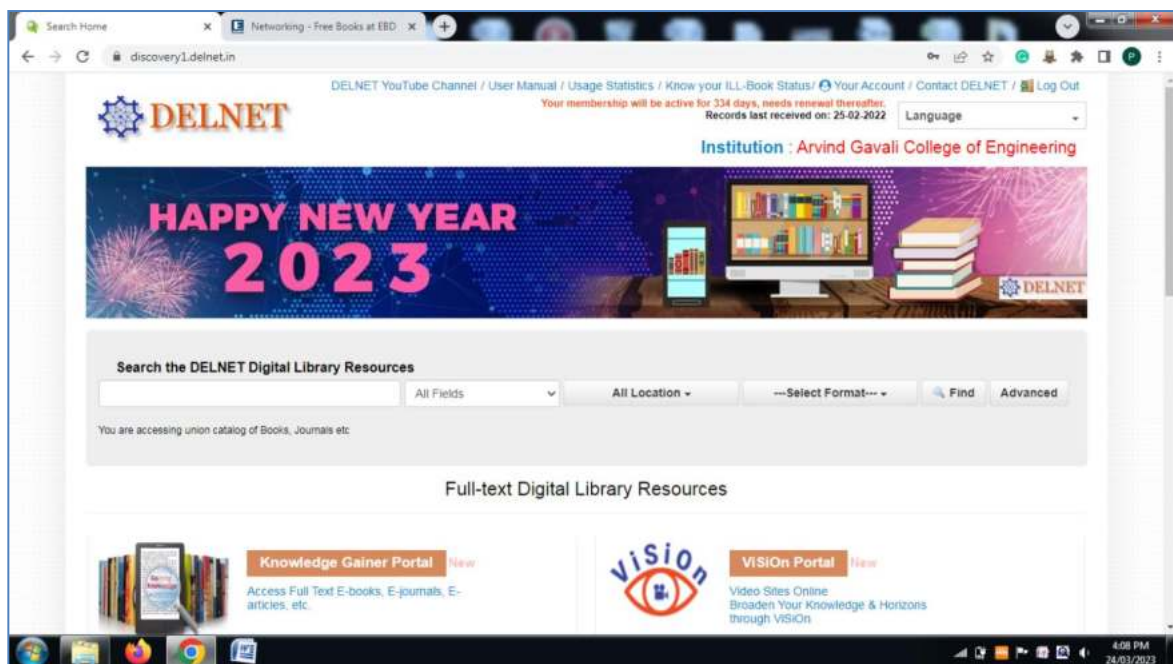




Fig. 9.4.a: Students Participating In Online Certification Courses

Effective Utilization:

- Students used various self-learning tools for their seminars, mini projects and final year projects.
- Every student has login ID and Password for accessing the internet.
- Students have been given access to library through KOHA software. This facilitates ease of access to library.
- Students have attended the Spoken English and Technical Skill Development sessions through IIT Remote Center.
- Students have been guided and encouraged to learn NPTEL courses through NPTEL Local Chapter.
- The college central library has NPTEL videos, educational CDs having lectures of renowned Professors.
- Students are provided DELNET library facility to refer online books, journals.
- Students have individual account on MOODLE and thereby they can attempt quizzes, read study materials uploaded by faculty members.

9.5. Career Guidance, Training, Placement (10)**(Institute Marks: 8)**

The institution may specify the facility, its management and its effectiveness for career guidance including counseling for higher studies, campus placement support, industry interaction for training/ internship /placement etc.

Facility:

- Institute has a Training and Placement cell, responsible for grooming the students to be industry ready and provide opportunities for placement.
- T&P cell organizes various programs for overall personality development of the students.
- Experienced industry professionals in the respective domain of job profiles are invited for guest lectures.
- Through these activities, the students are made aware of the opportunities in various fields along with the required job profile. At the same time, they get a chance to interact with these industry professionals to take advantage of their experience in respective field of expertise.
- Career guidance books such as GRE, GATE are available in the library.

In addition, with T&P Cell, Institute has initiated Campus To Corporate Activity to help students improve communication skills, interpersonal skills, societal awareness and inculcate ethics.

Facility Management:

- The students are groomed through lectures on aspects of pre-requisites for facing interviews such as preparing an effective prototype resume and effective measures and presentation skills to face an interview.
- The students are also counseled for taking up higher studies in India as well as abroad.

Placement Procedure:

Institute training and placement cell procedure is as follows

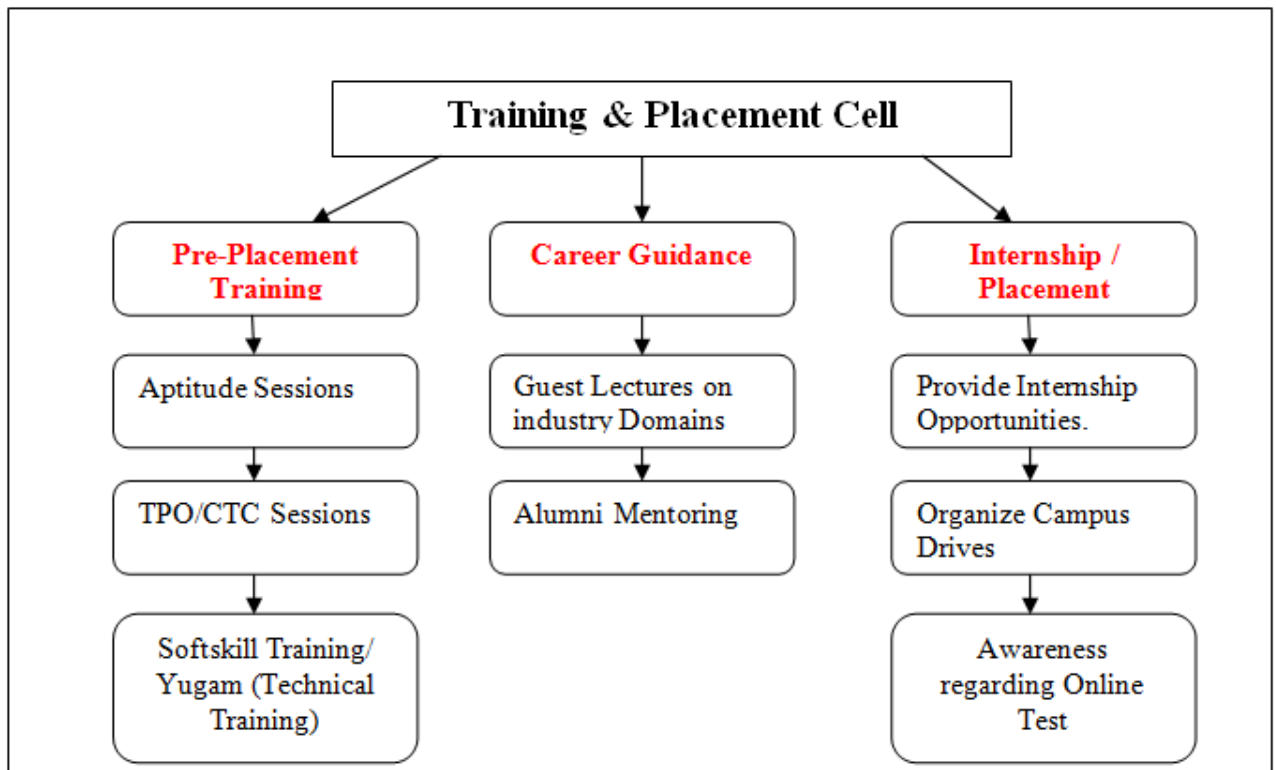


Fig. 9.5.a: Institute training and placement cell procedure

Counseling for Higher studies:

Following are the activities carried for higher studies counseling;

TableNo.9.5a Counseling for Higher Studies:

Academic Year	Details	Speaker/Expert	Date
2022-23	Opportunities in IT Industry and Japan	Mr. Bipin Kadam (Thinksmart Soft, Tokyo, Japan)	03/05/2023
2022-23	Higher studies in various abroad universities	Mr. Shekhar Bidwai	16/09/2022
2022-23	Guidance for GRE TOEFL	Mr. Amol Kawade	30/03/2023
2022-23	Guidance on Management Studies	Dr. Pranjali Ankule (I.S.B. &M., Pune)	14/12/2022
2021-22	German Language Training Program for promoting Students for M.S. opportunities in Germany.	Mrs. Sunita Shaligram (Trainer Chinmay Educational Consultancy, Pune)	1/03/2022 To 30/06/2022
2021-22	CDAC Preparation, Opportunities	Mr. Ashish Nalawade	31/05/2022
2021-22	EDUCON 2022 (Education Expo)	Pratyusha Employability Development(OPC) Pvt Ltd. In Association with Sawkar Institutes, Satara	14/05/2022 To 15/05/2022

Academic Year	Details	Speaker/Expert	Date
2021-22	GATE Orientation Session	GATE Tutor, Pune	22/1/2022
2020-21	Importance of Management Studies and Career Opportunities.	Mr. Omkar Tembe	16/05/2021
2020-21	How to Crack Gate Examination	Mr. Akash Pushkar (Gate Academy Pune)	5/12/2020
2020-21	Abroad career opportunities after engineering	Mr. Shubham Sasane (Elevitics, USA)	7/12/2020
2020-21	Prepare yourself for Abroad opportunities (M.S./ M.B.A)	Mr. Shekhar Bidwai, Director Chinmay Educational Consultancy, Pune	26/11/20
2019-20	Higher Education Opportunities in Abroad	Mr. Nik Kowels EU Business School, Germany (In association with CEC, Pune)	9/02/2020
2019-20	Opportunities after M.B.A.	M.I.R.M., Pune	4/10/2021
2019-20	Orientation Program on GATE by ACE Academy	ACE Academy, Pune	19/09/2019
2018-19	MBA CET Entrance Orientation	K.B.P.I.M.S.R., Satara	11/03/2019
2018-19	GATE Orientation Program	R.I.T. ,Sakharale	24/09/2018

Pre-Placement Training Activities:

Following are the activities carried for Pre-placement training;

Table No.9.5.b Pre-Placement training activities

Academic Year	Details	Speaker/Expert	Date
2022-23	Workshop on C,C++ and HTML	Mr. Swapnil Mapari (Disha Computers, Satara)	1/08/2023 To 14/08/2023
2022-23	Workshop on C,C++ and Java	Mr. Nilesh Sonawane (Design Solution, Karad)	7/08/2023 To 11/08/2023
2022-23	Workshop on AutoCad	Mr. Mahesh Sathe (Design Solution, Karad)	10/08/2023 To 18/08/2023

Academic Year	Details	Speaker/Expert	Date
2022-23	Workshop on PCB Designing and Manufacturing	Mr. Pravin Mohite (Aprontech, Satara)	7/08/2023 To 18/08/2023

2022-23	Workshop on C,C++ and Python	Mrs. Pranali Nalawade (Squirrel's Infotech)	7/08/2023 To 18/08/2023
2022-23	Workshop on Automation in IOT	Tushar Inamdar (Squarewave Automation Pvt Ltd, Satara)	1/08/2023 To 31/08/2023
2022-23	Five days Hands-on Workshop on Web Designing and Development using HTML, CSS, PHP, JavaScript and MySQL	Mr. Nikhil Kamble (Software Developer, Code Culture, Pune)	14/06/2023 To 19/06/2023
	Five days Workshop on Introduction to Python, AI and ML	Mr. Abhiraj Ubale (Software Developer, Code Culture, Pune)	22/05/2023 To 26/05/2023
2022-23	Developing Softskills	Mr. Sourabh Bhosale	13/02/23 to 17/02/2023
2022-23	Soft Skills for Emerging	Mr. Santosh Nalawade (Trainer, Aspiring Careers, Pune)	10/4/2023 To 13/04/2023
2021-22	English Speaking Session	Mr. Kale A.A. (A.G.C.E., Satara)	1/05/2022 To 30/06/2022
2021-22	Workshop on CATIA, CEO, SolidWorks for Mechanical Engineering Students.	Mr. Sathe Mahesh (Design Solution, Pune)	1/03/2022 To 31/05/2022
2021-22	Campus To Corporate Activity	Ms. Bhilare N.S. Mr. Kale A.A. (A.G.C.E., Satara)	1/05/2022 To 30/06/2022
2021-22	Aptitude Sessions	Mr. Patil S.P. Mrs. A.D. Kasture (A.G.C.E., Satara)	1/03/2022 To 30/05/2022
2021-22	Group Discussion: Etiquettes and Practice	Mr. Pathak P.A. Mr. Kale A.A. (A.G.C.E., Satara)	14/05/2022 21/05/2022 28/05/2022
2020-21	Development of Communication Skills	Prof. Pramod Dastoorkar (Professor, MIT Academy of Engg, Pune)	24/11/20
2020-21	Attitude Building for professional Excellence	Prof. Pramod Bhadakawade (Symbiosis International University Pune)	23/11/20
2019-20	Yugam – Four Week Training Program on Web Designing	1) Mr. Nikhil Korade (SplendorNet Technologies, Pune) 2) Ms. Ashwini Padwal (JA Solutions) 3) Mr. Shailesh Wagle (KPIT Hinjewadi) 4) Mr. Danish Shaikh (PHP & Java Programmer) 5) Prof.	29/7/2020 To 4/8/2020

		SuhasChavan(Asst Professor, Sinhgad College Pune.) 6) Mr. Roakhande S.A. (HefshinePvt Ltd.) 7) Mr. VikasPomane (CEO, UtrivaPvt Ltd.)	
2019-20	Yugam – Four Week Training Program on Internet of Things.	1)Mrs.KirtiWanjale (VIIT,Pune) 2)Mrs. VarshaPatil (Lembhe) (JSPM, Hadapsar) 3)Mr.Pravin P. Mote (TATA Communicatios, Pune) 4)Mr.AshishKalambe (Modelcam Technologies Pvt. Ltd, Pune) 5)Mr.NileshBhandare (Sloki Technologies Plt Ltd, Bangalore) 6)Mr.AkshayJadhav (Space Automation, Pune) 7)Mr.NirajKapase (DKTE, Ichalkaranji) 8)Mr.Vaibhav V. Nalawade (Institute of Computer Science, Satara) 9)Mr.PravinKoregave (Infinite Uptime India Pvt Ltd., Pune)	29/7/2020 To 4/8/2020

Academic Year	Details	Speaker/Expert	Date
2019-20	Yugam – Four Week Training Program on Artificial Intelligence	1)Dr. Pawar A.B (Sanjivani College of Engineering,Kopargao n) 2)Ms.PagarYogita S. (Progressive ES,College of Aurangabad) 3)MrsBalshetwar S.V. (Government College of Engineering,Karad) 4)DrShelakePriya M. (VIIT,Kondhawa Pune) 5)Dr.SaritaPanwar (AISSMS COE ,Pune)	29/7/2020 To 4/8/2020

		6)MrDhamalTushar .B. (Tata Technology Pune) 7)MsShilpaPimpalkar (AISSMS COE ,Pune) 8)MrRajgudeDattatray a (CyabageTechnology,P une) 9)Mr Gaikwad Vinod (Morning Star,Pune) 10)Mr Tiwari (Cognifront Technology Nashik) 11)Mr. JagdishKolhe (Cognifront Technology Nashik)	
2019-20	Personality Development Program by Rubicon Skill Development Pvt Ltd(10 th Sept to 12 th Sept, 2019)	Mr. Amar Shinde, Mr. Satya S.	10/9/19 to 12/9/19
2019-20	Workshop on Introduction to Arduino and Basic Electronics	Mr. Vishwajit Kulkarni, AGCE, Satara	9/9/19 To 14/9/19
2019-20	Aptitude Sessions (40 Sessions)	Asst. Prof. S. P. Patil Asst. Prof. S.D. Pawar Asst. Prof. A.D. kasture	1/9/2019 To 13/3/2020

Academic Year	Details	Speaker/Expert	Date
2019-20	Yugam – Four Week Training Program for Civil Engineering	Dr.R.R.Sorate (J.S.P.M.Bawadhan) Prof.A.P.Khatri (J.S.P.M.Narhe) Prof.Kakade Sir (COE,Pune) Prof. Chafalkar Sir (J.S.P.M.Tathawade) Prof. Ban Sir (Raisoni, Nagpur) Prof.Mule Sir, (J.S.P.M.Narhe) Mr.MilindVasudev (Lax Academy) Dr.Minde Sir (MIT,Kothrud) Mr. Jojo Mathew, (HIT,Nidasoshi) Prof. Khandekar Sir (PVPIT, Pune) Dr. Wagh Sir (Zeal	29 June, 2020 to 24 July,2020

		College, Pune) Prof. Vipul Naidu (PVPIT,Pune)	
2019-20	Yugam – Four Week Training Program on PCB Design (Electrical Engg. & E&TC Engg.)	Mr. Santosh Chavan (A S M Tracks, Shirwal) Prof. Venkatasaisreenath (BVSR,Ongol, AP) Prof. Sameer Bagwan (ADCET, Ashta) Dr. DhanashreeGawali (Singhad,Pune) Prof. Vishal Ambhore (VIIT, Pune) Mr. ShridharDudam (Smart Logic Technologies, Pune) Prof. NirajKapse (ElectrowingServies, Ichalkaranji) Mr.PrafullBagade (AutoTech, Nashik) Mr.TejasShilamkar (VertivEnergyPvt Ltd) Ms. Vinaya Kadam (Free Lancer)	29 June, 2020 to 24 July,2020

Academic Year	Details	Speaker/Expert	Date
2018-19	Softskill Development Program (under lead College Activity.)	Mr.Pulkit Singh Ms. Sylviya Johnson (Eka Training)	11/03/2019 To 13/03/2019
2018-19	Group Discussion Practice Session Activity	Mr. Pathak P.A. Mr.Khade V.C. Mr. Nikam P.R. (A.G.C.E., Satara)	6/1/2019 To 27/1/2019



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
HASAN ALLAUDDIN SHAIKH
 for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of **52** %

Online Assignments	18.97/25	Proctored Exam	33/75
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Total number of candidates certified in this course: **461**

Jan-Apr 2023
 (12 week course)

T.V. Bharat
Prof. T. V. Bharat
 Head, Centre for Educational Technology
 NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati



Roll No: NPTEL23ME55564600274

To validate the certificate



No. of credits recommended: 3 or 4

Fig.9.5.a:Yugam CNC Participant Certificate



Fig.9.5.b:English Speaking Session By Mr. A.A. Kale

Effectiveness: These measures have proven to be effective as it is evident as show in below table.

TableNo.9.5.c Year-wise Placement Data

Student Progression	Placement Percentage			
	2021-22	2020-21	2019-20	2018-19
CSE	83%	84%	81%	66%
E&TC	81%	94%	94%	90%
Civil	60%	85%	88%	91%
Electrical	76%	82%	82%	80%
Mechanical	66%	70%	80%	72%

9.6. Entrepreneurship Cell(5) (Institute Marks: 4)

The Entrepreneurship Development Cell (EDC) is started with the key objective of promoting and developing special knowledge of Entrepreneurship Development

The aim of entrepreneurship development cell is to improve and generate a culture of innovation amongst the students and budding entrepreneurs and start their own business.

Following activities are conducted by ED cell;

1. **Entrepreneurship Development Program** by MITCON Consultancy & Engineering Services on 18th and 19th January, 2019.
2. Organized **Industrial Motivation Campaign** for Youth by MSME, New Delhi and IGTR, Aurangabad on 18th & 19th October, 2019. (Resource person: Mr. Arnab Bhattacharya, Mr. ShebinCherian, Mr. S.D. Salunkhe RSETI, BOI Sangli)
3. Participation in **Orientation Program on Promotion and Facilitation of Entrepreneurship** among the students of AICTE affiliated institutes on 1st & 2nd February, 2020
4. Participation of Students in **One Day Workshop on Entrepreneurship Development** (8 Feb, 2020) under Lead College Activity.
5. **Entrepreneurship Development Program** by MITCON Consultancy & Engineering Services on 18th and 19th January, 2019.
6. Talk on **Entrepreneurship Development** by Mr. Kiran Mane from Home Multi- trading Company and Technical Institute, Satara on 9th March, 2022.
7. Organized session “**UdyojakataVikasYatra**” on 31st August 2023 for inculcating passion for entrepreneurship among the students. A session was conducted before inauguration of **UdyojakataVikasYatra**. **Dr. Dipak Shikrapurkar** has guided students regarding entrepreneurship.

The screenshot displays the IIC portal interface for Aravind Gavali College of Engineering (C-11245). The header shows the IIC ID as IC201912756 and a star rating for AY 2021-22. A notification indicates that the deadline for report submission has been extended until September 11, 2023. The main content area features a table of registered members for the Institute Innovation Course. The table columns are Roles, Name & Details, Department, Designation, Qualification, Experience in Years, and Action. The members listed are:

Roles	Name & Details	Department	Designation	Qualification	Experience in Years	Action
President	Dr. Vilas Pharande vilaspharande@gmail.com 8806661739		Director, Innovation, Incubation, and Linkages			
Innovation Activity	Mr. Suhas Patil iamsuhaspatil@gmail.com 9860928844	Mechanical Engineering	Assistant Professor	Post Graduate	10	
Convener, IPR Activity Coordinator	Dr. Gayatri Mirajkar gayatrimirajkar@gmail.com	Electronics and Telecommunication Engineering	Professor	Doctorate	15	
Start up Activity Coordinator	Mr. Arjun Kadam arjunkadamforu@gmail.com 9730177047	Mechanical Engineering	Assistant Professor	Post Graduate	8	
Social Media	Mr. Vishnu Khade vishnukhade9453@gmail.com 9545405775	Electronics and Telecommunication Engineering	Assistant Professor	Post Graduate	6	
ARIIA Coordinator	Mr. Vijay Gujar gujar.vijay@gmail.com 7972059171	Computer Science and Engineering	Assistant Professor	Post Graduate	20	
NIRF Coordinator	Mr. Ankur Kamble ankkam@gmail.com 9067493289	Mechanical Engineering	Assistant Professor	Post Graduate	7	
Internship Activity Coordinator	Dr. Manali Shah shah_manali1@gmail.com 9822610818	Computer Science and Engineering	Associate Professor	Doctorate	22	

Fig.9.6.a: Under ED Cell, institute has registered for Institute Innovation Course

स्वावलंबी भारत अभियान
(पश्चिम महाराष्ट्र प्रांत)
आणि
अखिल भारतीय विद्यार्थी परिषद, सातारा जिल्हा
समर्थ एज्युकेशन सोसायटीचे, अरविंद गवळी कॉलेज ऑफ इंजीनियरिंग
यांच्या संयुक्त विद्यमाने

उद्योजकता विकास यात्रा
दिनांक - ३१/०८/२०२३ ते १२/०९/२०२३

उद्घाटन समारंभ
दिनांक. ३१/०८/२०२३ रोजी सकाळी ११ वाजता संपन्न होत आहे.

उद्घाटक
श्री. समीर शेख
(मा. जिल्हा पोलिस अधिक्षक सो. सातारा जिल्हा)

प्रमुख वक्ते
डॉ. दिपक शिकारपूर
(प्रसिध्द संगणक तज्ज्ञ)

प्रमुख पाहुणे
श्री. निशांत गवळी
(सेक्टररी समार्ष पुणेकेशन सोसायटी सातारा)

कार्यक्रम अध्यक्ष
डॉ. विलास फरांदे
(प्राचार्य अ. अ. कॉलेज ऑफ इंजीनियरिंग)

प्रमुख उपस्थिती
श्री. मिलिंद देशपांडे (मात समन्वयक स्वावलंबी भारत अभियान, पश्चिम महाराष्ट्र)
श्री. उमेशचंद्र व्हडगव्हाळ (मा. व्यवस्थापक, जिल्हा उद्योग केंद्र, सातारा)
श्री. अनिल ठोंबरे (प्रदेश मंत्री, अखिल भारतीय विद्यार्थी परिषद, पश्चिम महाराष्ट्र)

यांची प्रमुख उपस्थिती नाभणार आहे.
आपले विनित
श्री. श्रीराज दिक्षित (जिल्हा समन्वयक, स्वावलंबी भारत अभियान, सातारा)
श्री. योगेंद्र सातपुत (जिल्हा मात समन्वयक, स्वावलंबी भारत अभियान, सातारा)
प्रा. डॉ. सविता वलभेटवार (जिल्हा प्रमुख, अखिल भारतीय विद्यार्थी परिषद, सातारा)
श्रीनाथ सारुंके (जिल्हा संयोजक, अखिल भारतीय विद्यार्थी परिषद, सातारा)

स्थळ - अरविंद गवळी कॉलेज ऑफ इंजीनियरिंग, वर्ये, सातारा

Fig. 9.6.b: UdyojakatVikasYatra organized at Institute.

Table No.9.6.a list of entrepreneurs

Sr. No	Nameof Student	Program	NameofOrganization
1	Randive Amol Sarjerao	CIVIL	A AEnterprizes, Ghatkopar
2	Kadam Arjun Suresh	CIVIL	Mahalakshmi Construction, Satara
3	Mane SourabhBajirao	CIVIL	Shree Datta Construction, Mhaswad
5	Patil Raj	CIVIL	M/S Raj Constro Corporation India
6	LoharRohitNamdev	CIVIL	The Engineer's Caffe
7	JdhavSanketShashikant	CIVIL	Rajveer Builders Satara
8	SutarOmkar Sanjay	CIVIL	Deeparch Construction, Umbraj
9	Mali Eknath Sadashiv	CIVIL	Mali Construction, Sangali
10	Thigale Chaitanya	ELECTRICAL	Vertical Electricals, Vita
11	Kalbhor Shivraj	ELECTRICAL	Gurudatta Electricals and Engineers, Satara
12	Raviraj Mohite	Electrical	Ravi Electricals, Satara
13	KarandePiyush	ELECTRICAL	Siddheshwar Electricals, Satara
14	BholeRohit	CSE	3 STAR IT Solutions, Satara (JIJAU IT Solutions)
15	Jagdale Akash	Mechanical	Four Square Engineering, Pune
16	Shaikh Sabar	Mechanical	CUBE Enterprise, Satara
17	Avinash Mankar	Mechanical	Solar Enterprises Satara
18	Prakalp Gogawale	Mechanical	PR Engineering, Satara
19	Vijay Ghadage	Mechanical	Ajinkyatara Automobile & Services, Satara
20	Akash Ghanwat	Mechanical	Autochoice Car Care, Satara
21	Sandip Varvate	Mechanical	Renuka Enterprises, Satara
22	Samadhan Jadhav	Mechanical	Satara Engineering Works, Satara

9.7. Co-curricular and Extra-curricular Activities (10) (Institute Marks: 10)**Sports Facilities:**

- The Institution has a separate sports ground for outdoor games like Cricket, Football, Volleyball, Kabaddi, Chess etc.
- Institute has indoor sports place for gymnasium, chess, and carom.
- Students are encouraged to participate in various zonal and inter-zonal tournaments. Students participate in inter and intra collegiate and University tournaments.
- The institution has multipurpose seminar hall which is utilized for Yoga & meditation purpose.
- Institute has contributed in **Satara Hill Marathon** Campaign. Students have volunteered in the preparation of campaign and set up the Water Stations.
- Every year Institute is organizing the “**Sawkar Trophy**” Intercollegiate Sports Event to provide platform for the students to showcase their ability, performance and professionalism. Cricket, Kabaddi, Kho-Kho, Bad Minton Competitions are organized under Sawkar Trophy.

Sports Achievements**TableNo.9.7.aYear-wisestudent’s sport achievement****TableNo.9.7.aYear-wisestudent’s sport achievement**

Academic Year 2022-23				
No	Name of the Student	Level	Event	Rank
1	Shubham dhane	University	Kho-KHo	Participant
2	Ayush Patil			
3	Shreyash Patil			
4	Pravinkumar Mahoor			
5	Akshay Galve			
6	Chaitanya Yadav			
7	Omkar Yadav			
8	Aniket Tikudave			
9	AtharvDhane	University	Chess	Participant
10	OmkarMiraje			
11	Anniruddha Kadam			
12	Hasan Shaikh			
13	OmkarMiraje			
14	AkankshaMatkar	University	Kabaddi	Participant
15	AishwaryaPanvelkar			
16	Arati Gaikwad			
17	Sanjana Jadhav			
18	Vaishnavi Kamble			
19	Shreya Chavan			

20	Pragati Ghadge			
21	Amruta Deshmukh			
22	Avishkar Kadam			
23	SawantOmkar	District	Badminton (Men's Single)	Runner-up
24	Surve Swaraj	University	Interzonal Wrestling	Winner

Academic Year 2021-22				
No	Name of the Student	Level	Event	Rank
1	Abhay Sanjay Chorage	Institute	Tug Of War	Participant
2	Akash AnandraoThorat			
3	Avdhut Ashok Mane			
4	Chaitanya SiddheshwarWagh			
5	HarshadaKishorShinde			
6	MandharePratikshaSomnath	Institute	Kabbadi	Participant
7	DagadeKshitija Sunil			
8	KumbharAadarshRajendra			
9	Kanase Abhishek Bapuso			
10	PatilAkshada Ashok			
11	KatkarAkshaliDilip			
12	MalusareAnkitaJagannath			
13	ShirkeAtharvaChandrakant			
14	Surveswaraj	State	Wrestling	Participant
Academic Year 2020-21				
No	Name of the Student	Level	Event	Rank
1	JadhavAyushDatray	Institute	Chessmania2K21	Participant
2	Attar MustanNisar			
3	Gaikwad RushikeshDilip			
4	PustakeUtkarsh			
5	Jaddhav Abhishek			
6	ShindeKavita Mohan			
Academic Year 2019-20				
No	Name of the Student	Level	Event	Rank
1	Swaraj Surve	Intercollegiate	Wrestling -57kg (By KBPCOE, Satara)	Runner Up
2	OmkarMahadik	University	Kabaddi (By DBATU, Lonere)	Participant
3	ShindeAkshay			
4	Mali Kishor			
5	Bhoite Aryan			
6	Shirke Sani			
7	Gaikwad Sushant			
8	Sutar Pratik			

9	Kalkundrikar Rahul			
10	PawarRushikesh	University	KHO-KHO (By DBATU, Lonere)	Participant
11	Pawar Mahesh			


No	Name of the Student	Level	Event	Rank
12	Pawarvaibhav	University	KHO-KHO (By DBATU, Lonere)	Participant
13	ChavanPrathmesh			
14	Anande Mahesh			
15	KoradeShubham			
16	SawantSachin			
17	Mulik Akash			
18	Nagargoje Krishna			
19	Kadam Vaibhav			
20	JadhavAtul			
21	KhatteAvishkar			
22	Waghmoderohit			
23	MullaAltaf			
24	Chavannamrata			
25	Gurav Kanchan			
26	SawantShital			
27	Dalvi Pranita			
28	KatkarArati			
29	Vedpathak Poonam			
30	Ingawalepratiksha			
31	Yadav Priyanka			
32	ShindeRutuja			
33	Sakunde Neha			
34	ShingateMayuri			
35	ChavanSakshi	University	Kabaddi (By DBATU, Lonere)	Winner
36	PatilSnehal			
37	PatilKarishma			
38	Chavanpooja			
39	More Shubhangi			
40	PawaleHrituja			
41	VelapureDivya			
42	DaphaleSayali			
43	Bhosale Priyanka			
44	Tarade Priyanka			
45	Abhishek katkar		Shot Foot (By DBATU, Lonere)	Participant
46	Jadhav Akash			
46	Katkar Abhishek		Relay 4*100 meter (By DBATU, Lonere)	Participant
47	JadhavOmkar			
48	Mali Kishor			
49	MahadikOmkar			

Academic Year 2018-19

No	Name of the Student	Level	Event	Rank
1	Abhishek Katkar	University	Shot Foot (By DBATU, Lonere)	Winner
			Running 100m & 200m(By DBATU, Lonere)	Participant
2	Vaibhavkadam		Running 800m & 1500m (By DBATU, Lonere)	Participant
3	Avishkarkhatte		Running 2000m (By DBATU, Lonere)	4rth Winner



Fig.9.7.a: Abhishek Katkar : Football Competition (DBAT University)



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ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA
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 Panmalewadi, Varye, Satara Ph.(02162) 200100

SAWKAR TROPHY -2K23

(State level competition)

05 to 07 April 2023

TUG-OF-WAR
 05th April, 2023
 Venue : AGCE GROUND
 Last date of registration
 04 April 2023
Student Co-Ordinator :
 Shubham Kulkar (Poly.Mech.) : 966277421,
 Pavan Pawar (Poly.Mech.) : 9307712018

CARROM
 06 April 2023
 Venue : AGCE Ground
 Last Date of Registration
 5 April 2023
Student Co-Ordinator :
 Mayuri Gole (FY.CW) : 9136448468
 Aditya Salekar (FY.CW) : 9652120314

VOLLEYBALL
 05th April 2023
 Venue : AGCE Ground
 Last date of registration
 04 April 2023
Student Co-Ordinator :
 Karthik Wadkar (TY.E&E) : 9413842798
 Varsha Kumbhar (TY.E&E) : 7500719116

BADMINTON
 06 April 2023
 Venue : AGCE Ground
 Last date of registration
 05 April 2023
Student Co-Ordinator :
 Varun Barge (Poly.E&TC) : 8010850103
 Shrutika Shinde (Poly.E&TC) : 8438760902

KABBADI
 05th April 2023
 Venue : AGCE Ground
 Last date of registration
 04 April 2023
Student Co-Ordinator :
 Sagar Shinde (Mech.) : 9817919893
 Akanksha Watar (Mech.) : 8817818889

KHO-KHO
 06 April 2023
 Venue : AGCE Ground
 Last date of registration
 05 April 2023
Student Co-Ordinator :
 Abhijit Pawshre (SY.CSE) : 9527126504
 Ayush Patil (TY.Mech) : 7972793344

ATHLETICS
 * 200 M. * 4x100 M. (Relay)
 07th April 2023
 Venue : AGCE Ground
 Last date of registration
 06 April 2023
Student Co-Ordinator :
 Snehal Shinde (Poly.CD) : 8263875933
 Raj Jadhav (Poly.CD) : 9322784447

CRICKET (BOYS)
 05th April 2023
 Venue : AGCE Ground
 Last date of registration
 04 April 2023
Student Co-Ordinator :
 Akash Thorat (Civil) : 7499612656
 Batram Kalbhor (Civil) : 9657278512
 Terms and condition apply

BOX CRICKET LEAGUE (Girls)
 07th April 2023
 Venue : AGCE Ground
 Last date of registration
 06 April 2023
Student Co-Ordinator :
 Arati Shinde (CSE) : 9370294399
 Utkarsh Koli (CSE) : 7721883765
 Terms and condition apply

CHESS
 07 April 2023
 Venue : AGCE Ground
 Last date of registration
 06 April 2023
Student Co-Ordinator :
 Pratik Patil (E&TC) : 7420993533
 Shevanti Pawar (E&TC) : 8208917622

Avishkar Kadam 9021316821
 Ritesh Jadhav 9370980177
STUDENT CO-ORDINATOR

Prof. Nikhil V. Ghadge
SPORTS CO-ORDINATOR

Dr. Vilas A. Pharande
PRINCIPAL

Hon. Shri. Nishant Gavali
SECRETARY

Hon. Shri. Arvind Gavali
CHAIRMAN

Fig.9.7.b: Annual Sports Event “SAWKAR TROPHY”

Contributions:

Satara Hill Half Marathon:

The SATARA HILL HALF MARATHON (SHHM) is held annually in the historic city of Satara, the erstwhile capital of the Maratha Kingdom founded by the legendary Warrior King Shrimant Chhatrapati Shivaji Raje Bhosale. The SATARA HALF HILL MARATHON is a proud member of the AIMS [Association of International Marathons and Distance Races] SHHM holds the [Guinness World Record](#) for the ‘Most People in a Single Mountain Run’. Usually held in the month of September, the event attracts runners from all over India & running enthusiasts from all around the world.

TableNo.9.7.b: SATARA HILL MARATHON ACTIVITIES

No.	Name of the Event	Date	Contribution
1	SHM 2019 (Satara Hill Half Marathon 2019)	25/08/2019	Volunteers, Water Stations
2	SHM 2018 (Satara Hill Half Marathon 2018)	02/09/2018	Volunteers, Water Stations
3	SHM 2022(Satara Hill Half Marathon 2022)	18/09/2022	Volunteers, Food Stations
4	MAS Marathon 2022	02/10/2022	Volunteers, Food Stations



Fig.9.7.c : MAS Marathon 2022 Activity for Runners

Cultural Facilities:

- Institute has dedicated cultural Club to facilitate various cultural Activities like Vaccination camp , Independence & Republican Day Celebration, Blood Donation Camp, Shivjayanti Celebration. To carry out above cultural activities separate space is provided in the Institute.
- Institute organizes Annual Social Gathering “**Tarunai**” every year.
- Students participates in various extra-curricular activities like Rangoli, along with celebration of various days like Rose Day, Chocolate Day, traditional day, Mismatch Day, Sari and Tie Blazer, Hollywood/Bollywood day etc.
- Variety entertainment programs including classical & western dance performances, singing & mimicry, fashion show etc. are organized in the institute for all the students.

- In this regard, institution has formed various committees for participating and organizing the cultural and sports activities. Every department has its own association through which various department symposiums, project presentation and other technical and non-technical events are being conducted.
- These association activities benefit in developing leadership skills and make them work in teams.

TableNo.9.7.c: Cultural Event participant data

Sr. No.	Academic Year	Details Of Cultural Event	Number Of Students Participated
1	2022-23	Shivjayanti Celebration	350
2		Western day & Mis Match day (05/05/2023)	522
3		Tie Blazer, Saree & Rose Day (06/04/2023)	650
4		School Dress & Food stall (07/04/2023)	467
5	2021-22	ShivSwarajya Din(6/6/2022)	620
6		Tarunai 2022 (4/05/2022)	367
7		Holi Celebration(22/03/2022)	268
8		Shivjayanti Celebration (19/02/2022)	552
9		Savitribai Phule Jayanti (3/01/2022)	254
10	2020-21	Shivjayanti Celebration (19/2/2021)	272
11		Marathi Rajyabhasha Divas (27/2/2021)	70
12		Women's Day and self defense Session(8/3/2021)	103
13		Traditional day(19/2/2021)	182
14		Sadi & Tie Blazer day(20/2/2021)	147
15		Hollywood / Bollywood day(21/02/2021)	146
16		Chocolate Day(23/02/2021)	160
17		2019-20	Independence Day Celebration(15/08/2019)
18	Dandia Cultural Event Celebration(4/10/2019)		575
19	Technical Rangoli Competition(25/01/2020)		144
20	Western Day ,Funky Day and Twins Day(14/02/2020)		233
21	Sadi Say and Tie blazer Day(15/02/2020)		280
22	Bollywood, Hollywood, Tollywood ,Mismatch Day(16/02/2020)		275

23		School Dress Day and Department Day(17/02/2020)	245
24		Shivjayanti Celebration(19/2/2020)	629
25		Traditional Day(19/02/2020)	168
26		Annual Day- (Tarunai-2020)	731
27		“NIRBHAYA” Walkathon by Nirbhaya Police Pathak (17/02/2020)	80



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Western Day & Mis-Match Day
(Song dedication, Chocolate Day)

Date:05/04/2023

Aadarsh Kumbhar (TY B.Tech.E&TC)
Mob.: 7249388170
Dhanashri Jadhav (TY B.Tech.E&TC)
Mob.: 9767628469

Prof. Sanskruti Nalawade, Mob.: 8999399165

तरुणाई -2023
Cultural Event 05 April to 08 April 2023
STATE LEVEL COMPETITIONS

ANNUAL DAY " TARUNAI 2023 "

Date:06/04/2023

Ruman Nalband (TY B.Tech. E&TC)
Mob.:8698335209
Aniruddha Kadam (TY B.Tech.Mech.)
Mob.: 9022203409
Omkar Salagare (TY B.Tech.Civil)
Mob.: 8793890220
Rohit V. Kadam (TY B.Tech.,Elect.)
Mob.: 9657261430
Pranali Tavare (TY B.Tech.CSE)
Mob.: 9404903728

Prof. Nikhil Ghadage, Mob.: 7620233395
Prof. Ankur Kambale, Mob.:9067493289
Prof. Shital Waghmare, Mob.:7219788981

Bollywood, Hollywood, Tollywood
(Singing, Stand up comedy, Fishpond, Costume Presentation)

Date:06/04/2023

Parthav Kharat (TY B.Tech.CSE)
Mob.: 9834370002
Sakshi Chinchkar (TY B.Tech.CSE)
Mob.: 9322314956

Prof. Shital Waghmare, Mob.: 7219788981

Twins Day & Funky Day
(Quiz competition, Mimicry)

Date:05/04/2023

Kajal Galve (TY B.Tech.Mech)
Mob.: 9922877057
Sakshi Shinde (TY, Mech)
Mob.: 9373738131

Prof. Ankur Kambale, Mob.:9067493289
Prof. Nikhil Ghadage, Mob.: 7620233395

Tie Blazer, Saree Day & Rose Day
(Fishpond, Mr & Miss AGCE)

Date:06/04/2023

Rohit Kadam (TY B.Tech.Elect.)
Mob.: 7219774101
Mayuri Pawar (TY B.Tech.Elect.)
Mob.: 8767931853

Prof.Ashlesha Mali, Mob.: 7063743002

School Dress Day & Food Stall
(Games Stall, Flash Mob)

Date:07/04/2023

Sahil Chavan (TY B.Tech.Civil)
Mob.: 7972206508
Shrikant Salunkhe (FY B.Tech.Mech)
Mob.: 8530790050

Prof.Pooja Bhosale, Mob.: 9309895537
Prof. Rakesh Salunkhe, Mob.: 9881539785

Dr. Vilas Pharande
(Principal)

Hon. Mr.Nishant Gavali
Secretary

Hon. Mr.Arvind Gavali
Chairman

Fig.9.7.d:Annual Cultural Event “TARUNAI”



Fig.9.7.f: Shivjayanti Celebration

National Service Scheme (NSS):

As per the guidelines of DBATU, Lonere, the Institute has formed a NSS unit of students and staff. The NSS unit in the college provides a platform for various socially relevant services such as:

- Providing guidance to students studying in the rural areas
- Creating awareness about the natural disasters such as flood, earthquakes in the student community
- Arranging and Participating in Swatchhata Awareness Rally and Swatchhata Camps in Villages.
- Organizing Camps in Villages for delivering services to society and creating social awareness among students
- Spreading awareness about traffic rules and safety measures among staff members and students
- Having discussions regarding the various challenges faced by the youth.

The NSS wing of the college encourages the students in community development activities which motivate the students for Social Service. The college NSS team regularly visits surrounding areas and villages where people are made aware about various social, moral and ethical issues.

NSS Activities

TableNo.9.7.d: Year wise list of NSS activities

Sr.No	Academic Year	Date	Event Name
1	2018-19	14/1/2019 To 19/1/2019	NSS Camp At Bhaleghar, Sanpane, Satara
2		21/07/2018	Tree Plantation
3		02/10/2018	“Swatchhata Awareness Ralley”
4		25/01/2019	“National Voters’ Day”
5		06/02/2019	Road Safety Guest Lecture
6		22/02/2019	“Swatchhata Camp”
7		23/02/2019	Blood Donation Camp
8	2019-20	22/07/2019	“Jal Divas” Celebration
9		12/08/2019	Activity for helping People of flood Affected Areas
10		2/10/2019	“Swatchata Hi Seva” Activity
11		17/01/2020	“Road Safety Week” (Session for Guidance on Road Safety and Rules by Mrs. Afreen Mulani (RTO Officer Satara)
12		26/01/2020	Participated and Guided regarding the “UNNAT BHARAT ABHIYAN” in GRAMSABHAs of 5 Villages (Panchwad, Kudal, Panmalewadi, Varye, Bhujinj)
13	2020-21	2/2/2020 To 8/2/2020	NSS Camp at Anewadi, Satara
14		15/08/2020	Arsenic Album Distribution Activity
15	2021-22	21/03/2021	Tree Plantation
16		4/03/2022	Food Donation at Villages
17		4/03/2022	Swatchhata Abhiyan
18			Health Checkup Camp
19		5/3/2022	Blood Donation Camp
20			Tree plantation
21		6/03/2022	Dustbin Donation Activity
22	20/06/2022	No Vehicle Day	
23	2022-23	15/8/2022	Independence Day
24		14/11/2022	Children Day
25		8/12/2022	Lek Ladki Abhiyan
26		12/1/2023	Jijau jyanti,Swami Vivekananda Jayanti
27		26/1/2023	Republic Day
28		19/2/2023	Shivjayanti
29		23/2/2023	Blood Donation
30		8/3/2023	Women’s Day



Fig.9.7.f: NSS CAMP at Jalgaon,Koregaon, Satara



Fig.9.7.g: NSS CAMP at at Jalgaon,Koregaon, Satara



Fig.9.7.h: Arsenic Album Tablets Distribution

Unnat Bharat Abhiyan (Contribution in Rural Development)

Unnat Bharat Abhiyan (UBA) is a flagship programme of Ministry of Human Resource Development (MHRD), Govt. of India. The Institute is participating in Unnat Bharat Abhiyan and adopted villages for their development in collaboration with district administration. Institute has adopted following villages:

1. Panmalewadi
2. Varye
3. Bhuinj
4. Panchwad
5. Bamnoli T. Kudal

उन्नत भारत अभियान
UNNAT BHARAT ABHIYAN

शिक्षित भारत- सक्षम भारत- स्वच्छ भारत-स्वावलम्बी भारत-संपन्न भारत
सभी को मिलकर गांवों के विकास के लिए
Convergence of Knowledge/ Experience/ Resources for Rural Development

Organic Farming Water Management Artisans, Industries & Livelihood Basic Amenities Sustainable Energy

Invitation to Participate/ Contribute in Rural Development

- Unnat Bharat Abhiyan (UBA), a flagship programme of Ministry of Human Resource Development (MHRD), Govt. of India.
- Higher educational institutions (HEIs) of the country adopt villages for their development.
- Faculty and students to be involved in village development plan in collaboration with district administration.
- ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA is participating in UBA and adopted following villages for their development in collaboration with district administration.

1. PANMALEWADI 2. VARYE 3. BHUINJ 4. PANCHWAD 5. BAMBOLI T. KUDAL

ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA UBA cell invites all faculty and students to join UBA to bring for transformational change in the villages. For participation in UBA activities, please contact coordinator mentioned below.

Name: Mr. Barkade Vijay Tukaram
(Coordinator UBA cell)
Phone: 7276774615
Email: barkade.vijay@gmail.com

National Coordinator UBA
Prof. Virendra Kumar Vijay
Web: www.unnatbharatabhiyan.gov.in
Email: unnatbharatabhiyanind@gmail.com
☎ :01126596451, 01126591157



Fig. 9.7.i: Unnat Bharat Abhiyan

Fig. 9.7.j: Guidance in GramSabhas under UBA

Co-curricular Activities:

Students are motivated to participate in National level Competitions related to Project Presentation, Paper/Poster Presentation, Debate, and Idea Presentation. Every year students are encouraged and guided to participate **Smart India Hackathone**, **AVISHKAR**, **DiPEX**. Because of such initiatives a competitive spirit and passion towards innovations are developed among the students.

TableNo.9.7.e Project and other national level Competition participant data

Sr. No.	AcademicYear	Name of the Competition	Number of students participated
1	2022-23	KJSIT-IET-INTECH-2K23 Poster cum Project Competition	15
2		ROTRAX 2023	02
3		DIGIT-2K23	02
4		Yasho-Tech- Fest- 2023	06
5		Tech-Fest 2k23 By Kisanveer College, Wai	01
6		PHN Advanced Technology Online Workshop on Android Development	04
7		TECHNOVATION-2023	03
8		Java Training by Besant Technology	02
9		Brain-it-On 1.0	03
10		DCODE 2k23	01
11		Technical Project Competition	12
12		Kurukshetra 2K23	02
13		MATPO Aptitude Idol-2023	35
14		AVISHKAR 2022	12

Sr. No.	AcademicYear	Name of the Competition	Number Of Students Participated
15	2021-22	National Level Project Competition (by KJ Somaiya Institute of Engineering and Information Technology Sion,Mumbai)16/04/2022	04
16		National Level Project Competition (by BharatiVidyapeeth College of Engineering Pune)21/05/2022	01
17		National Level Project Competition (by Yashodha Technical Campus Satara 9/05/2022)	05
18		Internal Hackthon of Smart India Hackthon 2022) 28/04/2022	06
19		Smart India Hackthon Finale at Bhilai Institute of Tech, Durg, Chhattisgarh. (26/08/2022)	06
20		Impact Lecture Session under KAPILA on Intellectual property , literacy and awareness campaign (24/6/2022)	05
21		Impact Lecture Session on Intellectual Property Rights and Startups (29/6/2022)	06
22		Impact Lecture Sessions sponsored by MoE's Innovation Cell, AICTE on Inception of a Startup. (28/7/2022)	05
23		TEQIP III Sponsored Two Days Online FDP on "Medical Imaging: Special Topics in	04

		Magnetic Resonance Imaging ” (24/9/2021)	
24	2020-21	Five Days online FDP on “Recent Advances in Health 5.0 In-line with NEP 2020” (22/3/2021)	04
25		DiPEX (Project Presentation By Tantra shikshanVidyarthiKarya,Kolapur Division and Dipex) 20- 23/05/2021	03
26	2019-20	AVISHKAR 2019-2020 Zonal Level Competition by DBATU	04
27		AVISHKAR Intercollegiate Poster Presentation Competition	80
28		PROTECH 2020 at Symbiosis International University, Pune	02



Fig.9.7.k: National Level Project Competition CRETECHNOVA 2k23 College of Engineering, Malegaon, Baramati



Fig.9.7.l: MATPO Aptitude Idol Participation

Student Chapter Formed:

Indian Geotechnical Society:

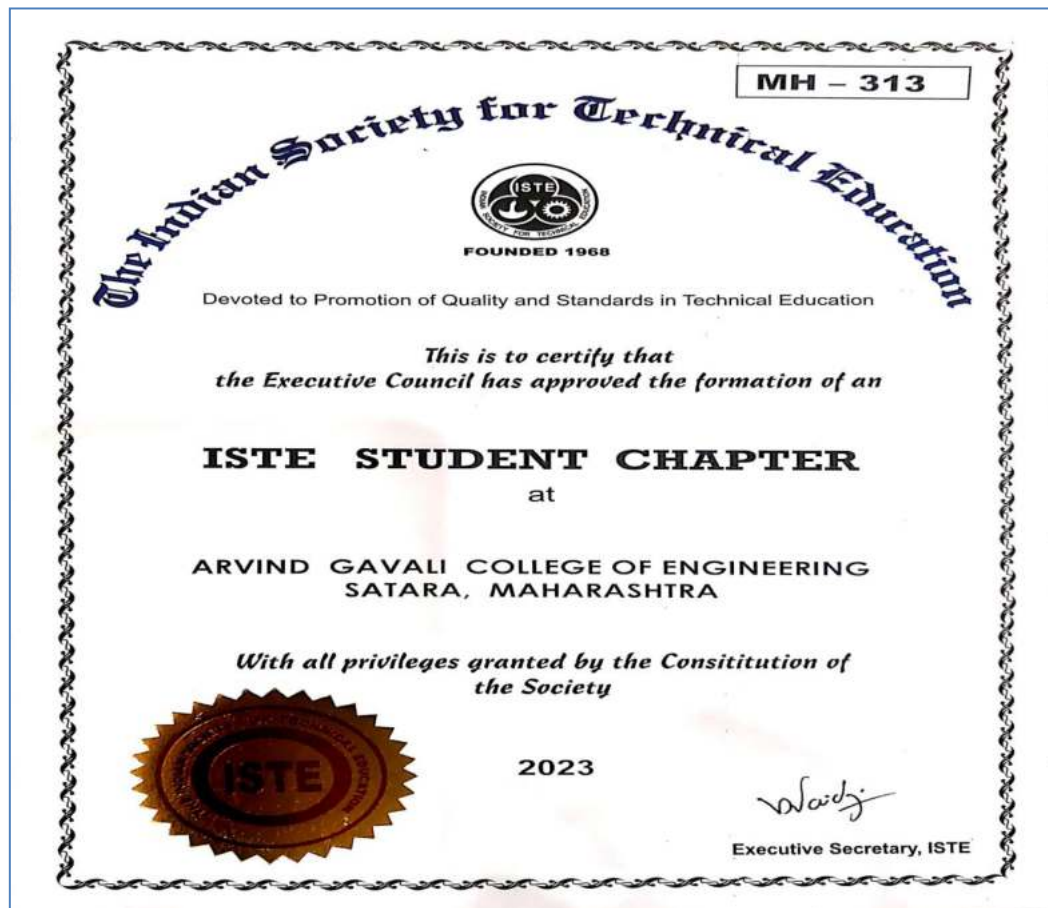
Student Chapter is formed under Indian Geotechnical Society (I.G.S.), Pune by Department of Civil Engineering. Under the chapter, guest/expert Lectures Geotechnical Field, industrial visits, workshops are supposed to be conducted. This chapter helps students to explore different aspects of geotechnical Field. This chapter promotes activities to inculcate passion towards geotechnical field and guides career opportunities in geotechnical field.



Fig.9.7.m: Inauguration of Indian Geotechnical Society-Pune Chapter

Institutional Member of Indian Society for Technical Education (ISTE):

The main goal of this membership is to provide the technical opportunity for students to broaden their knowledge of engineering and to interact with eminent faculties of the organization. An Institutional membership can allow students to cultivate their interest in engineering. It can introduce students to possibility of future study or employment in engineering.



9.7.n: ISTE student Chapter Formed

International Society for Research and Development, London Students chapter

The kinds of activities a student chapter can undertake are endless, depending on the creativity and interest of each group. But here are a few examples of academic, social, and professional activities that may be of interest to your group. Distinguished Speakers Program/ Lectures, posters, make a Website, Communication Workshop etc.

Manufacturers Association of Satara

The Institute has opted for MAS Membership in order to bridge the gap between institute and Industry. MAS have been playing a significant role in accelerating the industrial development of Satara region for more than three decades now. The major activity of MAS is arranging seminars & workshops for Students and members. Arrange & facilitate expert consultation to members. Try to promote industry friendly atmosphere in Satara region.

Photography Club:

Institute had formed Photography Club to encourage the students to showcase their photography skills and view towards the things around them. The Club is arranging the Photography Competition to promote the skills of students and develop their ability to participate and compete others. The Photography competition was conducted 10th September 2019. Students have participated with the photos they have taken and explained their views/opinion on the same.



Fig. 9.7.1: Photography Competition organized by Photography Club

IoT Club:

Institute had formed IoT (Internet of Things Club) to explore the opportunities in the Internet of Things domain. The students from all department can participate in the activities related to Internet of Things. IoT Club had arranged industrial visit to C.O.E., Pune's BHAU Institute. During visit hours students were guided regarding the IoT, A.I.,M.L. by Mr. Nikhil Bhaskaran, and Ms. Sejal Gupta. Also IoT club guides and helps students regarding internet of Things projects.



9.7.o: Visit to BHAU institute At C.O.E. Pune.

Robotics and Automation Club: This club is formed to inculcate passion towards the Automation, Robot Making, PCB Designing among the students. The objective of this club is to aware the students about future of Industrial Automation by Robotics. Under this club workshop is conducted to help students gain knowledge related to industrial automation. In this workshop students are learnt to operate and Program the Kuka Robots, PLC Programming.

SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA
OFFERING **SQUARE WAVE**
INDUSTRY ORIENTED PROFESSIONAL
CERTIFIED TRAINING PROGRAM FOR ENGINEERING ATTRIBUTES
 In Association With
SQUARE WAVE AUTOMATION TECHNOLOGIES Pvt. Ltd.
 Under
Robotics and Automation Club

Course Name:
Robotics and Automation Engineering

Train Yourself for Successful Future

What is Robotics Engineering?
 Robotics Engineering is a field that involves designing, testing, building and operating automated systems that perform specific actions to assist humans.

Objectives:
 The objective of the training is to get the new professional skills through hands on practical on "Kuka Robot" so that students can face the interviews successfully for getting a job in Robotics and Automation sector.

Duration of Training:
 The duration of training will be 90 days (6 Hours every day, from Monday to Saturday between 10:00 AM to 05:00 PM).

Course Structure:
 •PLC Ladder Logic Programming with Siemens, Mitsubishi and Delta PLC kits.
 •SCADA and HMI Systems.
 •Some Automation using Microcontroller.
 •Control Panel Designing.
 •Hands on practical on Physical "Kuka Robot".
 •Raspberry-pi with Python Language.
 •Arduino Programming

JOB OPPORTUNITIES:
 79000+ Robotics Engineer Jobs in India (9200 open)
Major Recruiters of Robotic Engineers
ISRO, DRDO, BHEL, TATA, ABB, SIEMENS, BOSCH, CUMMINS

Top 6 Career Options After Completing Robotics Engineering
 • Electromechanical Technicians
 • Robotics Programmers
 • Aerospace Robotics Engineers
 • Computer Scientists
 • Mechanical Engineers
 • Robot Design Engineer

Coordinator
 Mr. Somesh Naik S R
 Mob : 9663553985

Co-coordinator
 Mr. Shyagashri Patil
 Mob : 8552017444

9.7.p : Training Program offered in association with .

Cloud Computing Club: The major objective of our group is to raise technical awareness of cloud and devops on our campus. We are an interdisciplinary cloud club, so rather than concentrating on just one cloud provider like AWS or GCP, we will cover a wide range of providers including IBM, Alibaba, and many more. Instead of offering more theoretical lectures, we will concentrate on bringing practical events. We make an effort to give our trainees practical, industrial experience.

Competitive Exam Club:

This club helps students to get all information regarding the competitive examinations such as U.P.S.C., M.P.S.C., RRB, I.B.P.S., M.S.E.B.. Guest lecturers from Experts are conducted to guide the students regarding the preparation and prerequisites of the examinations.

Special Batch:

This club is formed to encourage the students to prepare and pursue career in Arm Forces (Army, Navy, Air Force). Motivational sessions are conducted to bring patriotism among the students. Students are guided about various exams like Technical Graduate Entry, University Entrance Scheme, Short Service Commission. Students are trained for these examinations under the guidance of Dr. S.P.Lavand (Ex. Navy Officer).



Fig.9.7.q : Students visited 22MAH BN NCC Camp at Mahagaon, Satara

Electro Club:

This club is formed to inculcate passion towards the Automation, Robot Making, PCB Designing among the students. This club arranges the sessions to guide the students to develop skills required for Industrial Automation, Robot making. This club arranges the training and competitions for providing the platform to showcase their skills and hard work.

Foreign Language Club:

Institute has taken initiative for promoting students to understand the importance of foreign languages and opportunities after learning them. Institute has started the German Language Training program for students. Here students are guided regarding the learning curve of the languages by organizing training sessions, guest lectures.

3D Printing Club:

The objective of this club is to aware students about 3D printing. This club is taking initiatives to help students understand how the designer's role has evolved over time and how it is likely to change as we move toward mass customization. Activities under 3D Printing club aware students to use the principles of Design and Identify opportunities to apply 3D printing technology for time and cost savings



9.7.r : Demonstration of 3D model creation

Lek Ladki Abhiyan:

The Institute is proud to be associated with LEK LADKI ABHIYAN - A NGO working for development of Women. The “LEK LADKI ABHIYAN” under the leadership of Advocate Varsha Deshpande is organizing the events to develop awareness among the women. Institute is participating in all the program organized under LEK LADKI ABHIYAN such as LAGHUPAT MAHOTSAV.



9.7.s :Participation in LAGHUPAT MAHOTSAV related to Woman Awareness

Table No.9.7.f: List of activities conducted

Sr. No.	Academic Year	Activities	Date
1	2022-23	Recent Trends and Opportunities in IT By Mr. Shivraj Gaikwad (Papportsoft Consultancy & Technology, Pune)	19/05/2023
2		IT Career in Digital Marketing by Mr. Ajinkya Pawar (AJDM India, Satara)	10/03/2023
3		Campaigning against violence about women	8/12/2023
4		Opportunities in IT Industry and Japan (Mr. Bipin Kadam, Thinksmart Soft, Tokyo, Japan)	03/05/2023
5		Workshop on Industrial Robotics and Automation	14/08/2023
6		Five days Hands-on Workshop on Web Designing and Development using HTML, CSS, PHP, JavaScript and MySQL	14/06/2023 to 19/06/2023
7	2021-22	Visit to NCC Camp at Mahagaon for Seminar	2/06/2022
8		Guidance on Competitive Examination by Mr. Akshay Jadhav (Infinity Academy, Pune)	6/04/2022
9		Awareness program about Girl Child.	3/01/2022
10		One day python programming workshop By Mrs. Snehal Kasurde	20/11/2021

Sr. No.	Academic Year	Activities	Date
11	2021-22	One day Network security workshop By Mr. Prashant Patil	16/12/2021

12		Hands on data analytics using Tableau workshop by Ms. PimpalkarShilpa	27/12/2021
13		3D Printer installation	09/7/07/2021
14	2020-21	Career in Software Testing, Prerequisites and Opportunities by Mr. Sushant Sankpal	09/05/2021
15	2019-20	Resume Building and Interview Technique workshop By Mr. N.S. Juvekar	23/03/2020
16		Guest Lecture onIntroduction to CareerOpportunities in SystemNetworking by Mr.AjitSutar	11/09/2019

Fig.9.7.t: Master KishorGhadge from Mechanical got opportunity to study in Germany

Fig.9.7.u: Master UtkarshPustake from Mechanical got opportunity to study in Germany

CRITERION 10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120
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10.1 Organization, Governance and Transparency (40)**10.1.1 State the Vision and Mission of the Institute (05)**

- A. Availability of the Vision & Mission statements of the Institute (02)
- B. Appropriateness/Relevance of the Statements (03)

A. Vision & Mission statements of the Institute

Vision:

To be an institute of excellence, developing skilled engineers to serve the industry and society.

Mission:

Our Mission is to

- M1: To provide quality education through effective teaching learning process.
- M2: To develop professional skills and promote innovation among students by providing a conducive atmosphere.
- M3: To inculcate ethical values, respect for the environment, and social responsibility.

B. Appropriateness/Relevance of the Statements (03)***Vision:***

To be an institute of excellence, developing skilled engineers to serve the industry and society.

Through excellence in key terms and strategy, the institute informs development while also articulating its purpose to stakeholders. The aims and objectives are used to measure the institute's success. Excellence in engineering education system towards greater cause of society through the implementation of projects to address societal issues and commitment to readiness of industry-oriented skill to serve in industry as a professional engineer by incorporating expert lecture series through industrial experts and internships in line with National Education Policy 2023.

Mission:

M1: To provide quality education through effective teaching learning process.

We choose to offer students a top-notch education by embracing ICT technologies and project-based learning. We have been able to develop a variety of learning experiences through industrial expertise, real-world settings, and inquiry-based learning thanks to the use of innovative teaching techniques.

M2: To develop professional skills & promote innovation among students by providing conducive atmosphere.

The institute fosters an environment where students can develop their technical and soft skills through project competitions, creative ideas for "AVISHKAR," patent filing, NPTEL registration, expert-led soft skill workshops, execution of training and placement activities, internships, etc.

M3: To inculcate ethical values, respect for environment and social responsibility.

The institute has organized a workshop on ethical values to outline ethical workplace principles such as adhering to institute policies and procedures, effective communication, accepting responsibility, professionalism, mutual respect, and trust. The institute has also planned and taken part in environmental and socially conscious events, such as tree planting, cleanliness campaigns, geo-tagging, no car days, distribution of dustbins, mask and tablet donations, vaccination camps, and self-defense workshops.

10.1.2 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

- A. List the Governing Body Composition, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; participation details of external members and attendance therein (4)
- B. The published service rules, policies and procedures with year of publication (3)
- C. Minutes of the meetings and action-taken reports (3)

A. Administrative bodies

Governance of the institution is reflective and in tune with the vision and mission of the institute. The decentralisation of authorities and responsibilities is carried out through different committees which will be ensured by committee members of various committees under the governing body.

ROLE OF GOVERNING BODY

The Board of Governors is the governing body for the institution, collectively responsible for framing the policies, implementing the institution's activities, determining its future direction, fostering an environment in which the institutional mission is achieved according the developmental plan.

PRIMARY ACCOUNTABILITIES

- To approve the mission and strategic vision of the institution.
- To ensure the establishment and monitoring of proper effective and efficient systems of control and accountability.
- Monitor Institutional performance and quality assurance arrangements.
- To put in suitable arrangements for monitoring the Head of the institution's performance.

Governing Body of Institute**Table 10.1.2a Members of Governing Body of Institute**

Sr. No	Name of the person	Designation
1	Mr. Gavali Nishant Arvind Hon. Secretary, Samarth Educational Trust, Satara	Chairman
2	Shri. Gavali Arvind Kondiram Hon. Chairman, Samarth Educational Trust, Satara	Secretary
3	Shri Shanbhag Ramesh Shamrao Member of Trustee, Samarth Educational Trust, Satara	Member
4	Dr. Sou. Shete Mahananda Vishveshwar Member of Trustee, Samarth Educational Trust, Satara	Member
5	Mr. Gavali Dilip Kondiram Member of Trustee, Samarth Educational Trust, Satara	Member
6	Mr. Ramesh Unnikrishnan AICTE Western Regional Officer, Mumbai	Member
7	Dr. Nandanwar D.R. Joint Director, DTERO, Pune	Member
8	Mr. Narkar K.M. D.Y. Patil Engineering College Kasaba Bavada, Kolhapur	Member
9	Dr. Chitlange M.R. Joint Secretary, MSBTE RO, Pune	Member
10	Mr. Mali Milindkumar S. Associate Professor Singhad College of Engineering, Pune	Member
11	Mr. Waikar Omkar Supreme Siliconesans Trinity Enterprises Pune	Member
12	Mr. Bidwai Shailesh P. Chairman S.P. Packaging LTD	Member
13	Mr. Godbole Ashutosh Chartered Accountant	Member
14	Col Mr. Kanase Pramod A. Ex. Serviceman & Professor	Member
15	Prof. Hingmire Vishal Sharad Assistant Professor Arvind Gavali College of Engineering, Satara	Member
16	Mr. Pathak Pranav Avinash Assistant Professor Arvind Gavali College of Engineering, Satara	Member
17	Dr. Pharande Vilas Arjun Principal, Arvind Gavali College of Engineering, Satara	Member

Role and Functions of Governing Body

Good governance of the technical institution plays an important role in the growth and development of the Institution. Governing body acts professionally and approves the ultimate goal of the Institution. The governing body is unambiguously and collectively responsible for overseeing the institution's activities, determining its future direction and fostering an environment in which the institutional mission is achieved. The body meets twice a year and proceedings of the meetings should be maintained properly. The college is governed by the Governing body, which is constituted as per AICTE and trust norms. A governing body should perform all four types of functions, i.e. managerial, administrative, academic and financial. A governing body should perform the following functions in each category:

A) Managerial:

- **Provide Vision:** Governing body should initiate the process of crafting the vision statement and preparing vision documents of the institution.
- **Inculcate Values:** Governing body encourages the establishment of a value system to achieve vision, missions, and goals of the Institution.
- **Act as a buffer:** Governing body serves as a bridge and buffer between the institution and stakeholders.
- **Support the head of the Institution:** Governing body should support the head of the Institution to carry out the business of the Institution. There should be a good relationship between the head of the Institution and the governing body.
- **Oversee the functioning of the Institution:** Governing body should monitor and evaluate the Performance of the Institution on a regular basis against set goals.

B) Administrative:

- **Approval:** Governing body should approve annual reports of the Institute.
- **Approval of Policies:** Governing body should approve a recruitment policy. It should approve and review procedures for the selection, recruitment and transfer of faculty and staff members. It should approve service conditions, emoluments and travelling allowances for teaching and non-teaching staff of the Institute. It should approve the policy of appointing a consultant, visiting faculty, experts and other people based on need.

Evaluate the performance of head of the institution: Select, support and evaluate the performance of head of the Institution. The governing body manages the institution and its performance through the head of the institution. The head of the Institution should possess abilities to manage the institution according to the wish of the governing body.

C) Academic:

- **Approval:** Governing body should approve the new program of studies leading to a diploma, post-diploma, undergraduate, postgraduate and Ph.D.
- **Utilization of academic resources:** Governing body should ensure full use of the academic potential of the institution in various academic activities.

D) Financial:

- **Approval:** Governing body should approve the annual budget & expenditure.
- **Audit:** Governing body should appoint a qualified auditor every year to conduct the audit. Consider the issues raised by the auditors for improvement in finance utilization.
- **Financial health:** Governing body should ensure the good financial position of the institution through proper planning and utilization of funds.

C. College Development Committee of the Institute (formerly known as Local Managing Committee)

Table 10.1.2b Members of College Development Committee of Institute

Sr. No	Name of the person	Designation
1	Mr. Gavali Nishant Arvind	Chairman
2	Mr. Hingmire Vishal Sharad	Member
3	Mr. Patil Suhas Prakashrao	Member
4	Dr. NayakMeghya Banoth	Member
5	Dr. Thombare Vijay Ramchandra	Member
6	Adv. Ayachit Arundhati Sanman	Member
7	Sou. Mandhare Rajani Mahendra	Member
8	Sou. Kamble Rupali Ravi	Member
9	Mr. Kanase Nitin Uttam	Member
10	Mr. Patwardhan Amey Dipak	Member
11	Dr. Pharande Vilas Arjun	Secretary

Role and Functions of College Development Committee

As per the Maharashtra University Act, separate Local Managing Committee is constituted for the day to day functioning of the college. This committee should meet two times a year and proceedings of the meetings are maintained properly. Members elected or nominated shall have a term of five years. The committee comprises of the Chairman of the management, Secretary of the management, three local members nominated by the management, three teachers elected by the institution, one non-teaching employee and Principal- Member Secretary.

The frequency of meeting: Twice in a year

The duties of the local managing committee are:

- Prepare the budget and forward it to the governing body.
- Determine the program of instruction and internal evaluation and to discuss the progress of studies in the college.
- Monitor the academic function of the college and extracurricular and co-curricular activities.
- Make recommendations to the management for the improvement of the standard of teaching in the college.
- Formulate proposals of new expenditure not provided for in the college budget if any.

Internal Quality Assurance Cell (IQAC)

To ensure quality in the teaching-learning process and maintain academic up gradation IQAC is formed. IQAC works towards the realization of the goals of quality enhancement and sustenance. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of institutions.

Table 10.1.2c Members of Internal Quality Assurance Cell (IQAC)

Sr. No.	Name	Designation	Organization
1	Dr. Vilas Pharande	Chairman	Principal, AGCE, Satara
2	Mr. Vishal Hingmire	Coordinator	Assistant Professor, AGCE,
3	Mr. Nitin Kanse	Member	Registrar, AGCE, Satara

4	Mr. Chetan Nalawade	Member	MD, Shuddha Milk and Milk Products, Satara
5	Mr. Samadhan Jadhav	Member	MD, Satara Engineering Work, Satara
6	Mrs. Shakuntala Pawar	Member	HR Head, Mutha Foundry,
7	Mr. Omkar Waikar	Member	CEO, Supreme Silicones & Trinity Enterprises, Pune
8	Mr. Abhay Khanaure	Member	MD, Meretech, Pune
9	Mr. Sushant Gaikwad	Member	Social worker & Coordinator at Mhada, Pani Foundation
10	Mr. Rohit Bhole	Member	MD, 3 Star IT Solution, Satara
11	Mr. Abhay Gujar	Member	Assistant Professor, AGCE,
12	Mr. Suhas Patil	Member	Assistant Professor, AGCE,
13	Mr. Somesh N.S.R	Member	Assistant Professor, AGCE,
14	Ms. Ashwini Kasture	Member	Assistant Professor, AGCE,
15	Ms. Shital Ghate	Member	Assistant Professor, AGCE,
16	Mrs. Rajani Mandhare	Member	Assistant Professor, AGCE,

Role and Functions of Internal Quality Assurance Cell

- Development and application of quality benchmarks/parameters for the various academic and administrative activities of the Colleges.
- Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- Dissemination of information on the various quality parameters of higher education.
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles.
- Documentation of the various programmes/activities of the College, leading to quality improvement Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of good practices.
- Development of the Annual Quality Assurance Report (AQAR) of the College based on the quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA, AB) in the prescribed format.

Above administrative bodies meetings are conducted minimum two times in year. Minutes of meetings are maintained in respective registers.

Table 10.1.2d Frequency of Administrative bodies meetings

Name of Committee	Frequency of Meeting	2018-19		2019-20		2020-21	
		Date of Meeting	No of Present Members	Date of Meeting	No of Present Members	Date of Meeting	No of Present Members
Governing Body	2	2/06/2018	11	15/08/2019	10	15/06/2020	11
		26/01/2019	10	26/01/2020	10	15/06/2021	11
College Development Committee	2	2/06/2018	07	14/06/2019	07	17/05/2021	11
		2/01/2019	07	16/05/2020	11	NA	NA
Internal Quality Assurance Cell	2	11/09/2018	10	26/01/2020	14	15/06/2020	14
		15/11/2019	16	NA	NA	23/02/2021	15

Name of		2021-22	2022-23
---------	--	---------	---------

Committee	Frequency of Meeting	Date of Meeting	No of Present Members	Date of Meeting	No of Present Members
Governing Body	2	15/06/2021	11	13/08/2022	12
		11/03/2022	12	04/03/2023	10
College Development Committee	2	17/05/2021	14	12/06/2023	10
		NA	NA	17/08/2023	10
Internal Quality Assurance Cell	2	14/06/2021	14	12/08/2022	14
		03/03/2022	13	03/03/2023	14

dbatu.ac.in/academic-council/

7 September 2023 | Skip to Main Content | Screen Reader Access | Select Language | Font Resize: AA

Dr. Babasaheb Ambedkar Technological University
 डॉ. बाबासाहेब आंबेडकर तंत्रज्ञान विद्यापीठ
 Lonere-402103 Tal- Mangaon, Dist- Raigad (M.S.) India.

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University Governance Examination Academics Affiliation Student Corner Research IQAC More Get In Touch

Academic Council

Academic Council

Sr. No.	Name & Address	Designation
01	Professor (Dr.) Karbhari V. Kale Vice-Chancellor, Dr. Babasaheb Ambedkar Technological University, Lonere	Chairman
02	Dr. S.L. Nalbalwar Dean (FoET)	Member
03	Dr. S.M. Pore Dean (R&D)	Member
04	Dr. H.N. Warhalkar Head, Department of Mechanical Engineering	Member
05	Dr. A.W. Kivdekar Head, Department of Computer Engineering	Member
06	Dr. Sangita Dahotre Head, Department of Physics	Member
07	Dr. S.M. Jadhav Head, Department of Information Technology	Member
08	Dr. A.R. Chavan Head, Department of Chemical Engineering	Member
09	Dr. Sangita Melkar Head, Department of Petrochemical Engineering	Member
10	Dr. A.P. Shesh Head, Department of English	Member
11	Dr. MFAR Satarkar Head, Department of Electrical Engineering	Member
12	Dr. H.A. Mujawar Head, Department of Chemistry	Member
13	Dr. Vilas Pharande Principal, Arvind Gavali College of Engineering, Pune	Member

National Education Policy 2020

Quick Links

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- AICTE EOA/LQA
- NISP Action Plan Dr. BATU Lonere
- National Innovation and Start Up Policy
- Governance
 - The Chancellor



10.1.2f Staff member Mr. Arjun Kadam is university level Avishkar event coordinator

Administrative Setup

The key components of the organizational structure of the Institute are Secretary, Principal, HODs, Teaching, and Nonteaching staff. Various committees with well-defined functions give academic and administrative leadership to the Institution. Organizational Structure of institute depicted in figure below.

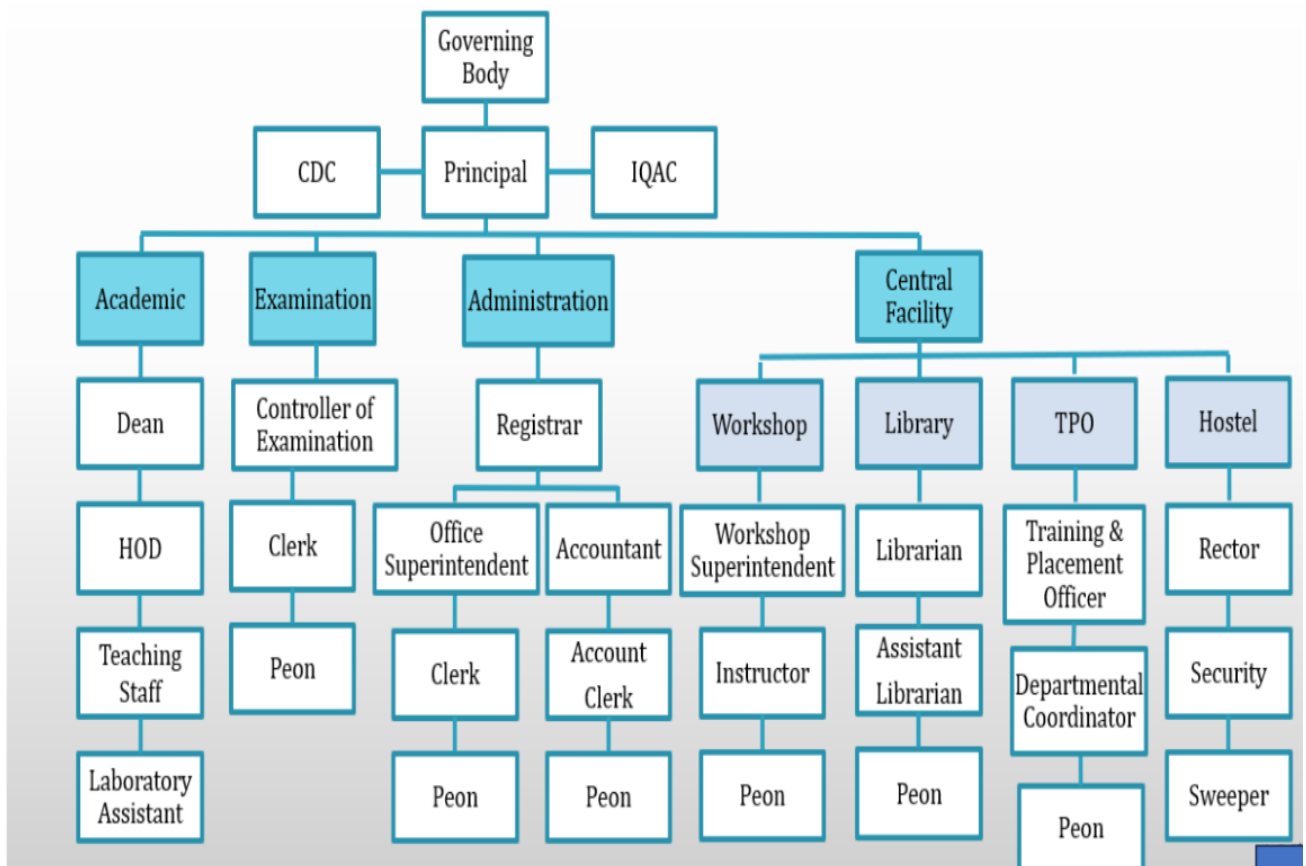


Fig 10.1.2g Organizational Structure

Duties & Responsibilities:

Each employee in the institute has some responsibilities and the employees should carry all the tasks assigned to him with the full of his ability.

1) Principal: As the head of the institute, the Principal should have the vision and leadership ability to keep a college developing.

- ✓ To monitor and conduct academic activities of the institute under the guidance of the management and assistance of the Deans and Head of Departments.
- ✓ To promote industry institution interaction and research & development activity.
- ✓ To conduct the periodical meetings of the faculties for the effective administration of the college.
- ✓ To make the employee and students aware of the rules, policies, and procedures laid down by the college and see to it that they are enforced.
- ✓ To sanction the leave of the staff as per the norms.
- ✓ To communicate with University, Directorate of Technical Education, All India Council for Technical Education and University Grants Commission for compliance.
- ✓ Organize meetings of Governing Body and Local Managing Committees and maintain minutes of the meeting.
- ✓ To execute any other work assigned by the management.
- ✓ To monitor and promote technical and non-technical, co-curricular and extracurricular activities like seminars, workshops, cultural and sports events with the assistance of Dean & HOD.

2) Dean - Academics

- ✓ Responsible for preparing a timetable and Smooth execution of it in all departments with the help of Head of the Departments.
- ✓ To prepare the Institute academic calendar
- ✓ To maintain academic records as per the requirement under rules.
- ✓ To execute all Internal Examinations and declare their results.
- ✓ Communicating with parents and students about their academic progress and problems.
- ✓ To execute any other work assigned by the Principal and management.

3) Dean – R & D

- ✓ To formulate policy and facilitate the consultancy work in the institution.
- ✓ To encourage Industry Institute Linkages, Collaborative Research programs, and the formation of new incubation centers.
- ✓ To monitor Research projects on a periodical basis and effective utilization of grants of research projects and timely completion of these projects.
- ✓ To apply for intellectual properties generated from research at college and to market these into patents in the industry.
- ✓ To execute any other work assigned by the Principal and management related to IIPC.

4) Dean-Quality Assurance

- ✓ Development of Quality Culture in the institution and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- ✓ Development and implementation of quality benchmarks/parameters for various academic and administrative activities of the institution.
- ✓ Development of Quality Culture in the institution and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- ✓ Conducting internal Academic as well as Administrative Audits.
- ✓ Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes.
- ✓ Dissemination of information on various quality parameters of higher education.
- ✓ Organization of inter and intra institutional workshops, seminars on quality related themes.
- ✓ Documentation of the various programmes /activities leading to quality improvement and maintenance of institutional database for the purpose of maintaining /enhancing the institutional quality.
- ✓ Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to NAAC.

5) Dean Training and Placement

- ✓ To maintain complete information regarding students appearing for placement activities.
- ✓ To conduct placement activities smoothly.
- ✓ To decide and arrange for personal development programs for student.
- ✓ To update and maintain the contact details of companies interested in recruitment activities.

- ✓ To send an invitation to industry and company for campus recruitment, to notify the students about the events and take necessary action.
- ✓ To take feedback from the industry about the students recruited.

6) Dean Student Activities

- ✓ Responsible for maintaining the student's discipline within college premises with respect to attendance, college uniform, smoke and the alcohol-free environment with the help of Head of Departments.
- ✓ To assist students for effective organization of extracurricular & co-curricular activities in and outside the campus.
- ✓ To keep watch on hostel and campus for ragging free environment.
- ✓ To counsel students for any issue that may arise.
- ✓ To assist the Principal in all students related issues.
- ✓ To execute any other work assigned by principal & management.

7) Controller Of Examination (COE)

- ✓ All matters concerned with the conduction of examination.
- ✓ Preparation and display of final result notification (s) and sending the grade reports to students.
- ✓ Arrangement for the timely issuance/provision of the examination material, instructing the supervisory staff and holding their meetings as and when required.
- ✓ Bringing into the notice of the Principal all cases of infringement of rules of examinations with full report for disposal.
- ✓ Maintaining over all examinations record of the students.
- ✓ Ensuring and maintaining strict secrecy of all information regarding the examinations.
- ✓ To circulate & distribute magazines, literature, etc. to faculties & management and maintain records of the same.
- ✓ To execute any other work given by management.

8) Registrar

- ✓ To provide secretarial support to the Executive Director
- ✓ To handle day-to-day office activity smoothly.
- ✓ To execute the admission process and University Examination process of students.
- ✓ To handle student grievances and taking remedial action.
- ✓ To execute any other work given by management.

9) Librarian

- ✓ To implement all library rules as defined by the management.
- ✓ Responsible for the overall functioning of the library.
- ✓ Responsible for the procurement of recommended books, daily newspapers, journals, magazines, videos, CDs, audio cassettes, e-books, online resources, etc. and renewal of books/magazines.
- ✓ To display all technical articles, literature and new arrivals.
- ✓ To circulate & distribute magazines, literature, etc. to faculties & management and maintain records of the same.
- ✓ To execute any other work given by management.

10) Head of the Department

- ✓ To monitor and conduct academic activities of the department under the guidance of the Dean Academics.
- ✓ To take department and faculty feedback and accordingly take the remedial actions.
- ✓ To plan and take the necessary actions for the improvement of department results and academic performance.
- ✓ To coordinate term work assessment and conduction of practical /oral examinations as laid down by DBATU
- ✓ To maintain discipline and enforce rules as laid down by the institute, in the department.
- ✓ To monitor the day-to-day activities of the department.
- ✓ To plan for the semester and academic year, in terms of activities, guest lectures, workshops, etc. for the benefit of the student and faculty.
- ✓ To conduct regular meetings with teaching and non-teaching staff as well as the Class Representatives along with Class Teacher to sort out any issue and queries related to academics.

- ✓ To execute any other work assigned by the Principal and management.
- ✓ To prepare the department requirements and budget needed.
- ✓ To oversee the purchase and deployment of any resource allotted for the department.

11) Computer Centre

- ✓ Maintain Computer Centre
- ✓ To administer and maintain servers, firewalls, routers, manageable switches UPS and batteries.
- ✓ To initiate the purchasing of equipment.
- ✓ To provide support for various software servers.
- ✓ To ensure continuous internet during assigned hours.
- ✓ To give support to the On-line exam, Seminar, Workshop, technical training program.
- ✓ To update and maintain the institute website with institute data

12) Central Workshop

- ✓ Arranges all the machines/equipment required in the workshops.
- ✓ Responsible for repair and maintenance of all the machines and equipment in the workshops.
- ✓ Makes schedule for different groups of students for practice in their respective workshops.
- ✓ Responsible for maintenance of laboratories.
- ✓ Reports to Principal/HOD regarding damage/breakdown of machines/equipment.
- ✓ Responsible for safety measures of teaching / non-teaching staff.

13) Estate office

- ✓ Must be available in the campus and be on duty for 6 days/week; discharges the duties under directions of the principal.
- ✓ Supervises, executes the works in all civil, electrical, gardening and cleaning.
- ✓ Acts as the office in-charge of the security/sanitation of the institute.
- ✓ Inspects the buildings structures, roads, etc. under his charge as often as necessary and examine their condition from safety and maintenance point of view and take/suggest necessary action.
- ✓ Prepares progress reports on on-going work and report the same to the authorities of the institute on a monthly basis.
- ✓ Ensures the successful achievement of the targets fixed for completion of each project/works

with due consideration for speed and economy of scale and/or proper maintenance of building structures, water supply channels and regular maintenance of all the electric generators and ensuring proper use of the same.

- ✓ Executes any other works assigned from time to time.

14) Accountant

- ✓ Keeps account of financial transactions such as admission fees, examination fees, hostel fees etc.
- ✓ Keeps account of all the financial transactions related to repair, maintenance, purchase etc.
- ✓ Disburses salaries for the employees of the College.
- ✓ Prepares the annual account, get it audited.
- ✓ Deals with banks and other financial institutions regarding loans etc.
- ✓ Will be responsible for filling of annual returns.

15) Office Superintendent

- ✓ To receive any letter / notice and to put his/her initials and date of receipt and to record and pass on therein instructions wherever necessary for the guidance of staff working under him.
- ✓ To exercise check and follow up of letters received from the Government of India/Chancellor/State Government/U.G.C./ AICTE/ Office of the Director of Education/Universities etc.
- ✓ To supervise the work of subordinate staff in the form of periodic check of the work carried out by the staff.
- ✓ To inspect the racks and tables of assistants/and/or senior assistants working under him and satisfy himself that no papers of files have been overlooked and that there are no odd receipts or bills lying indisposed off.
- ✓ To attend to such other work as may be given to him with the approval of the Principal/Registrar/Head of the Department.
- ✓ To supply other relevant facts and figures and also papers pertaining to previous decisions or policy.
- ✓ Any other work assigned from time to time, with the approval of the Principal/Registrar.

16) Teaching Faculty

- ✓ All the Faculty Members are expected to follow the rules and regulations of the Institution as prevalent from time to time.
- ✓ The work load of all the staff shall be fixed by the Head of Department. The work load of the teacher should not be less than average 40 hours a week, of which teaching-contact hours shall be at least as per AICTE norms.
- ✓ Faculty Members are expected to update their knowledge by attending seminars/workshops/conference, with due permission from the HOD/Principal.
- ✓ Faculty Members should attempt to publish text books, research papers in reputed International / National Journals/Conferences.
- ✓ The Faculty Member must prepare him/ herself academically to meet all the challenges and requirements in the methodology of teaching so that the input may be useful for the student community at large. Every Faculty Member is expected to extend his/her beneficial influence in building up the personality of students and he/she should associate himself/herself actively with such extra-curricular activities which he / she is interested in or assigned to him/her from time to time.

17) Lab Assistant

- ✓ To maintain the Dead Stock Register and Consumable Registers.
- ✓ To find out the requirements for consumables for the laboratory and procure the same, before the start of every term.
- ✓ To plan for the procurement of equipment for the next term well in advance as per guidelines from university, by contacting teachers who are teaching or have taught similar subjects in our college or subject experts nominated by university, by considering syllabus revision etc.
- ✓ Requisition of consumables shall be submitted to the HOD, who in turn shall verify the same and forward to the Principal for necessary action.
- ✓ To see that the infrastructure facilities in the labs are adequate so that each batch has ample opportunity to complete practical satisfactorily.
- ✓ To organize the laboratory for oral and practical examinations.
- ✓ To take corrective action for any breakage / loss etc.
- ✓ To ensure the safety and cleanliness of the laboratory and switch off all equipments after use.
- ✓ The Lab Assistants are required to assist the respective laboratory in-Charge for smooth

functioning of the laboratories.

- ✓ All the Lab Assistants are required to report matters like maintenance/repairing requirement, theft, damage etc. within the respective labs, to the HOD through faculty in charge of lab.
- ✓ Lab Assistants in coordination with Lab In-charge should display (i) List of Equipment's/software with cost (ii) List of Experiments (iii) Lab Time Table (iv) Names of Lab In-charge / Lab Assistants etc. on the laboratory Notice board.
- ✓ All laboratory in charges are responsible for maintaining the laboratory utilization record
Laboratory theft/damage prevention

18) Lab Attendant

- ✓ To open all the classrooms, laboratories, and staff rooms before starting time of classes.
- ✓ To close and lock all the classrooms, laboratories, and staff rooms after working hours with due checking of lights, fans, equipment's.
- ✓ To clean classrooms, laboratories, and staff rooms on every day.
- ✓ To clean benches in classroom and laboratory, equipment's in laboratory and staff tables.
- ✓ To clean a particular classroom, laboratory, or staff room if required on urgent basis.
- ✓ To assist the laboratory assistant while performing practical if required.
- ✓ To shift the equipment in/out of the laboratory whenever required.
- ✓ To circulate required documents to staff for signatures.
- ✓ To get the documents photocopies as required by HOD office/staff.
- ✓ To make arrangements of tables, chairs during the examination/functions in the department.
- ✓ To perform examination duties during internal as well DBATU examinations.
- ✓ To attend HOD office and perform duties assigned by HOD and staff from time to time.

B. Service rules

As institute is affiliated Dr. Babasaheb Ambedkar Technological University. In pipeline with the service rules framed by university, institute have prepared **PROCESS HANDBOOK** which contains service rules, policies, and procedures for the institution are in place and documented. Since 2019, the **PROCESS HANDBOOK** is made available in the departments and is available on the institute website. They are also made known to all newly recruited staff members through a HOD Meeting/induction program. Rules and regulations are modified as and when needed. Important information is regularly informed through circulars and during staff meetings

Procedures Recruitment

Recruitment

- Recruitment is done before commencement of Academic Year, and payment will be made as per AICTE scale.
- Recommendations of the selection committee comprising of Chairman, Administrator, Principal/Designated Authority, and respective HOD will be placed before the AGCE Governing council, along with details of sanctioned posts, for final approval.
- At the time of joining all appointees should submit original certificate, equivalence certificate.
- Every member of the staff shall agree to abide by all the conditions laid down by the Institution.

Promotional policies

1. All promotions shall be considered on the basis of merit- cum –seniority basis or as decided by the management from time to time
2. The Chairman shall appoint a committee for promotion, in which he shall be the Chairman, with administrator, principal and experts in the respective area.
3. The Committee shall consider promotion of teaching staff to the next higher position on the basis of the guidelines given in this chapter and as per AICTE norms, subject to the condition that there has not been any disciplinary action taken against such candidate for promotion, for any misconduct he/she has committed during the service.
4. The staff shall be considered for promotion to the next higher level position, subject however, he/she had completed the three years of service after probation in the present position and should have obtained AICTE prescribed qualification.
5. Special preference to the faculty who is undergoing PhD and completing the course work and comprehensive viva voce for PhD and on publication of 5 International Journal papers, being in the authors area of specialization for the promotion to the post of Associate professor with Minimum of 5 yrs experience in teaching/research/ industry or (Equivalence for PhD is based on publication of 5 International Journal papers, being in the authors“ area of specialization) and subjected to condition that, they fulfill the AICTE requirement within four years from the date of promotion.

6. Minimum of 10 years teaching/research/ Industrial experience of which at least 5 years should be at the level of Associate Professor and possessing a Ph.D. degree in the relevant discipline or Minimum of 13 years' experience in teaching and/or Research and/or Industry with PhD shall be eligible to be appointed and designated as Professor, subject to other conditions of academic performance as laid down by the AICTE.
7. No teacher other than those with a Ph.D. shall be promoted, appointed or designated as Professor
8. A teacher who wishes to be considered for promotion under Career Advancement Scheme (CAS) may submit his application with necessary documents to the principal office.
9. The following Educational background information is required in the CV for reappointment and promotion of candidates:
 - ≡ Academic and other relevant employment history
 - ≡ Awards and appreciation if any
 - ≡ Research and/or creative works, publications journal, conference proceeding, textbook publications etc.
 - ≡ Teaching accomplishments: List classes taught with results, List any textbooks, study guides, manuals, workbooks, or electronic media, produced for student or class use, mentor list.
10. Those who are promoted shall be fitted in the Scale of Pay applicable to that category.
11. All decisions on promotions shall be taken up from the month of April / October every year
12. All cases of promotions satisfying the above norms and those prescribed by the AICTE will be considered, subject to the requirement of the department and discretion of the Management.

C. Minutes of the meetings and action-taken reports

- Governing Body Minutes of Meeting and action taken 2022-23:
<http://103.159.152.195/moodle/mod/folder/view.php?id=10184>
- IQAC Minutes of Meeting and action taken 2022-23:
<http://103.159.152.195/moodle/mod/folder/view.php?id=10185>
- College Development Committee and action taken 2022-23:
<http://103.159.152.195/moodle/mod/folder/view.php?id=10187>

10.1.3 Decentralization in working and grievance redressal mechanism (10)

- A. List the names of the faculty members who have been delegated powers for taking administrative decisions (1)
- B. Specify the mechanism and composition of grievance redressal cell (2)
- C. Action taken report as per 'B' above (7)

A. Decentralization in working:

Arvind Gavali College of Engineering, Satara follows decentralized mechanism of working. Principal is the academic head of the institute; many of the powers are delegated to the core committees for effective functioning that comprises of Deans and Head of Departments.

Table 10.1.3.a Responsibilities

Sr. No	Name	Responsibility
1	Mr. Suhas Patil	Dean Academics
2	Dr. Hingmire Vishal	Dean IQAC
3	Dr. Mirajkar Gayatri	Dean R& D
4	Dr. Avinash Khadtare	HoD Dept of Mechanical Engineering
5	Dr. Bamane Prashant Ramesh	HoD Dept of Civil Engineering
6	Dr. Nayak Meghay Banoth	HoD Dept of Electrical Engineering
7	Dr. Hingmire Vishal	HoD Dept of Electronics & Telecommunication Engineering
8	Dr. Varsha Bhosale	HoD Dept of Computer Science & Engineering
9	Mr. Tushar Shende	Training & Placement
10	Mrs. Yewale Vaishali	Librarian
11	Mr. Kamble Ankur	Director of Physical Education Coordinator NSS
12	Dr. Nayak Meghay Banoth	Coordinator Alumni Association
13	Mr. Kanase Nitin	Registrar

Involvement of each and everyone in the decision making at their respective levels is ensured through decentralization and delegation of powers. Hence there are various institutional

committees consisting of faculty and staff members. Transparency associated therein also forms an important feature of the work culture.

Students have active representation on various academic and administrative bodies and committees of the Institute.

Students are given exposure to involve themselves in administrative, co-curricular and extracurricular activities as members of the committees. They actively participate in committee meetings. The following is the list of Committees having student representation and engagement.

Institute Level Committees:

1. Academic Monitoring
2. IQAC
3. Examination Committee
4. University/AICTE/DTE Committee
5. Promotional Activity Committee
6. Training & Placement Committee
7. Alumni Committee
8. R & D and IPR
9. Infra administration & Maintenance
10. ICT Committee
11. Anti ragging Committee
12. Reservation Committee
13. Internal complaints Committee
14. Extracurricular Activities Committee

15. Grievance & Redressal

16. Library

1. Academic Monitoring

In-line with DBATU academic calendar, Institute prepared its academic calendar and also respective departments prepared its calendar. Based on the Institute's academic calendar, every department carried out their work load distribution based on their domain of expertise and prepared the respective Time table and got it approved from AMC and the Head of Institute. As per the University guidelines lectures and practical were commenced. Internal academic monitoring was carried out and necessary action taken.

Guardian faculty mentoring system is implemented in the Institute wherein 15 to 20 students are assigned to a faculty member who acts as their mentor for the entire program. Mentor

regularly interacts with the students and monitors their academic performance and attendance. Students are counselled by the mentors, class coordinator, faculty and HOD for improving their academic performance and attendance. Mentors and Class Advisors counsel the students regarding their performance and schedule additional lectures/practical. The students are given guidance for academic, career, and also on personal issues. The mentors discuss with each and every student on an individual basis and support them in all the possible ways to improve their academic performance. The mentors always keep a check on the attendance of the student, the marks/grades obtained in the internal and external examinations.

Sr. No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal, Arvind Gavali College of Engineering Satara
2	Mr. Ghadage Suraj	Coordinator	Assistant Professor, Mechanical Engineering
3	Dr. Nayak Meghya Banoth	Coordinator	Assistant Professor, Electrical Engineering
4	Mrs. Kasture Ashwini	Coordinator	HOD, Core Science Engineering
5	Mr. Somesha N.S.R	Member	Assistant Professor, Electrical Engineering
6	Mrs. Ghate shital	Member	Assistant Professor, Civil Engineering
7	Mr. Naik Somesha	Member	Assistant Professor, Electrical Engineering
8	Ms. Mulla Samina	Member	Assistant Professor, Computer Science & Engineering
9	Ms. Nalawade Sanskruti	Member	Assistant Professor, E&TC Engineering

2. IQAC

The IQAC Committee includes all stakeholders of the Institute, i.e. students, alumni, all department and Section Heads, including the Library, Sports, Students Hostel, Examination & Evaluation, Co-curricular and Extra-curricular activity members, Management, Local community and Industry experts.

Sr. No.	Name	Designation	Designation Organization
1	Dr. Vilas Pharande	Chairman	Principal, Arvind Gavali College of Engineering Satara
2	Mr. Vishal Hingmire	Coordinator	Assistant Professor, E& TC Engineering
3	Mr. Nitin Kanse	Member	Registrar, AGCE, Satara
4	Mr. Chetan Nalawade	Member	MD, Shuddha Milk and Milk Products, Satara
5	Mr. Samadhan Jadhav	Member	MD, Satara Engineering Work, Satara
6	Mrs. Shakuntala Pawar	Member	HR Head, Mutha Foundry, Satara
7	Mr. Omkar Waikar	Member	CEO, Supreme Silicones & Trinity Enterprises, Pune
8	Mr. Abhay Khanaure	Member	MD, Meretech, Pune
9	Mr. Sushant Gaikwad	Member	Social worker & Coordinator at Mhada, Pani Foundation
10	Mr. Rohit Bhole	Member	MD, 3 Star IT Solution, Satara
11	Mr. Abhay Gujar	Member	Assistant Professor, AGCE, Satara
12	Mr. Suhas Patil	Member	Assistant Professor, AGCE, Satara
13	Mr. Somesh N.S.R	Member	Assistant Professor, AGCE, Satara
14	Ms. Ashwini Kasture	Member	Assistant Professor, AGCE, Satara
15	Ms. Shital Ghate	Member	Assistant Professor, AGCE, Satara
16	Mrs. Rajani Mandhare	Member	Assistant Professor, AGCE, Satara

2. Examination Committee

The Institute has a college level Exam committee. This committee works under the supervision of Head of the Institute. The Institute exam committee responsible for the preparation of Timetable, setting of question papers, evaluating the answer sheets, preparing the results and declaration of the same. The evaluated answer sheets are shown to the students for any grievances. The grievances of the students are considered and looked into. The main reforms initiated by the Exam Cell Committee are the timely declaration of results and moderation of the question papers. For continuous evaluation process, internal tests, assignments, quiz, presentations, lab work, seminars etc are taken into consideration. Term work marks are given to the student depending on the performance in the internal assessment. The rubrics for each practical and tutorial are based on the parameter which takes into consideration: the performance, lab ethics, self-learning initiative, conceptual understanding, punctuality and attendance. And also the Institute, Controller of Examination conduct the end semester examination in line with the time table received from University.

Sr. No.	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Kadam Arjun	Coordinator	Assistant Professor, Mechanical Engineering
3	Mrs. Mandhare Rajani	Coordinator	Assistant Professor, CS & Engineering
4	Mr. Nikam Vikas	Member	Assistant Professor, Civil Engineering
5	Ms. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
6	Mr. Kadam Vijay	Member	Assistant Professor, E&TC Engineering
7	Ms. Pooja Bhosale	Member	Assistant Professor, Core Science Engineering

4. University/AICTE/DTE

This committee ensures University affiliation, Extension Of Approval (EOA) from AICTE, facilitation centre for centralised admission process from DTE.

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mrs. Mandhare Rajani	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Kanase Nitin	Coordinator	Registrar, Office
4	Mrs. Alatkhar Manisha	Member	Assistant Professor, Mechanical Engineering
5	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
6	Dr. Nayak Meghya Banoth	Member	Assistant Professor, Electrical Engineering
7	Ms. Mandhare Rajani	Member	Assistant Professor, CS & Engineering
8	Mr. Hingmire Vishal	Member	Assistant Professor, E&TC Engineering
9	Ms. Kuthe Priya	Member	Assistant Professor, Core Science Engineering

5. Promotional Activity Committee

Parents and students are not aware of the various educational opportunities available in rural areas. We at AGCE, have a well developed mechanism where faculty members make it a point to meet the parents, students and also various schools and colleges to make them aware of the educational facilities we impart and also of the admission process. Due to this, all the people are made aware not only of the presence of our Institute but also of the different career opportunities. As per the DTE process School connect program is conducted by faculty members visiting different schools and students. Faculty members give information about various scholarships, transport facilities and also the accommodation facility made available to the students including girl's hostel.

Table 10.1.3.f Promotional Activity Committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Hingmire Vishal	Coordinator	Assistant Professor, E&TC Engineering
3	Mr. Shinde Mahesh	Coordinator	Clerk, Office
4	Mr. Kamble Ankur	Member	Assistant Professor, Mechanical Engineering
5	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
6	Dr. Nayak Meghya Banoth	Member	Assistant Professor, Electrical Engineering
7	Ms. Waghmare Shital	Member	Assistant Professor, CS & Engineering
9	Mrs. Kasture Ashwini	Member	Assistant Professor, Core Science Engineering

6. Training and Placement Committee

The Institute Provides Skill Improvement Program for Placements. That gives personal and career counselling to achieve desirable improvement in students. One of the major objectives is to help students to obtain internships and placement in companies across various industrial sectors. The students are encouraged to present technical papers at seminars in other Institutes with a view to improving their research and presentation skills. Faculty members from each department are co-opted as members of the Placement Cell.

Table 10.1.3.g Training & Placement committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Pathak Pranav	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Kadam Arjun	Member	Assistant Professor, Mechanical Engineering
4	Mr. Sapkal Rajendra	Member	Assistant Professor, Civil Engineering
5	Mr. Chavan Santosh	Member	Assistant Professor, E&TC Engineering
6	Ms. Kuthe Priya	Member	Assistant Professor, Core Science Engineering

7. Alumni Committee

Alumni Cell, the single point of contact between Alumni and Institute, offers our alumni a host of services that enables them keep in touch with their batch mates and also of the different activities conducted in the Institute.

Table 10.1.3.h Alumni Committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Chavan Santosh.	Coordinator	Assistant Professor, E&TC Engineering
3	Dr. Nayak Meghya Banoth	Coordinator	Assistant Professor, Electrical Engineering

4	Mr. Kamble Ravi	Member	Assistant Professor, Mechanical Engineering,
5	Mr. Sapkal Rajendra	Member	Assistant Professor, Civil Engineering
6	Mrs. Kadam Anuradha	Member	Assistant Professor, CS & Engineering
7	Ms. Kuthe Priya	Member	Assistant Professor, Core Science Engineering

8. R & D and IPR

Research and Development cell designs annual research activity plan for all the departments, establish liaison with near and far industries and identify the technological challenges being faced by them. These problems of the industry are taken up as projects for finding solutions through R&D which are assigned to both faculty members and students. To initiate and promote MoUs with Industries for consultancy, collaborative research, sponsored projects, Industry and Institute interactions etc. To motivate students for presenting papers in National and International conferences, Demonstrate projects in various competitions.

Table 10.1.3.h R & D and IPR committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Mirajkar Gayatri	Coordinator	Assistant Professor, E&TC Engineering
3	Dr. Salman Waremani	Member	Assistant Professor, Mechanical Engineering
4	Mr.Shinde Suraj	Member	Assistant Professor, Civil Engineering
5	Mr. Gujar Vijay	Member	Assistant Professor, CS & Engineering
6	Mr. Chavan Santosh	Member	Assistant Professor, E&TC Engineering

7	Ms. Bhilare Nikita	Member	Assistant Professor, Core Science Engineering
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9. Infra administration & Maintenance

The Committee a setup to look and take care of the maintenance of the overall infrastructure of the Institute. The Institute has well equipped infrastructural facilities for the efficient conduction various examinations.

Table 10.1.3.i Infra administration & Maintenance committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Ms. Mulla Samina	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Nikam Vikas	Coordinator	Assistant Professor, Civil Engineering
4	Mr. Naik Somesha	Coordinator	Assistant Professor, Electrical Engineering
5	Mrs. Alatkhar Manisha	Member	Assistant Professor, Mechanical Engineering
6	Dr. Nayak Meghay Banoth	Member	Assistant Professor, Electrical Engineering
7	Mrs. Kandarkar Sucharita	Member	Assistant Professor, E&TC Engineering
8	Ms. Shinde Swapnali	Member	Assistant Professor, Core Science Engineering

10. ICT Committee

ICT Committee is actively involved in the proper maintenance of the various digital working tools like an ICT panel which includes 3-Smart boards, 6-Overhead projectors, well equipped computer labs. For any maintenance the committee looks into the same and the problem is rectified.

The committee also encourages maximum students participation in various online programs available under NPTEL/MOOCs, for their overall development.

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Ms. Mulla Samina	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Nikam Vikas	Coordinator	Assistant Professor, Civil Engineering
4	Mr. Naik Somesha	Coordinator	Assistant Professor, Electrical Engineering
5	Mrs. Alatkhar Manisha	Member	Assistant Professor, Mechanical Engineering
6	Dr. Nayak Meghay Banoth	Member	Assistant Professor, Electrical Engineering
7	Mrs. Kandarkar Sucharita	Member	Assistant Professor, E&TC Engineering
8	Ms.Shinde Swapnali	Member	Assistant Professor, Core Science Engineering

11. Anti ragging Committee

These committees ensure that at least one faculty member will be present at any particular time at all the locations to curb ragging. Instructions are given to student volunteers to take precautionary measures to avoid ragging at locations like Canteen, bus stops and canvass about anti-ragging through the use of Flexes, Posters and Boards in the Institute premises and surrounding areas where there is a chance of ragging. Fresher's and parents are guided and counselled against ragging and affidavits duly signed the students and parents, against ragging are taken at the time of admission.

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal

2	Mr. Jagtap Dayanand	Coordinator	HOD E&TC Engineering
3	Miss. Bhosale Raupali H	Member	Social Worker
4	Adv. Dixit D.C.	Member	Advocate
5	Mr. Barge Abhijeet	Member	Local Media
6	Mr. Patil Suhas	Member	Assistant Professor Mechanical Engineering
7	Mr. Nayak Banoth Meghya	Member	HOD Electrical Engineering
8	Mrs.Sawant Ashwini	Member	CSE Department Engineering
9	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
10	Mr. Shinde Chandrashekhar	Member	Office Superintendent
11	Mr. Kadam Vijay	Member	Assistant Professor E & TC Engineering
12	Mr. Khairmode Omkar	Member	Assistant Professor Mechanical Engineering
13	Mr. Bhoite Aryan	Member	Student E&TC Engineering
14	Mr. Roman Aniket	Member	Student Civil Engineering
15	Mr. Chavan Aditya	Member	Student Electrical Engineering
16	Mr. Shinde Suyog	Member	Student Mechanical Engineering
17	Miss. Gawade Priti	Member	Student CSE Engineering
18	Ms.Kadam Dhanashree	Member	Student Core Science & Engineering

12. Reservation Committee

Reservation committee monitors awarding of scholarships to students belonging to various categories viz. Open, OBC, NT, SC and also guide the students of the various facilities available to them from State and Central government for their maximum benefit.

Table 10.1.3.1 Reservation committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Thombare Vijay	Coordinator	HOD Civil Engineering
3	Mr. Jagtap Dayanand	Coordinator	Assistant Professor, E&TC Engineering
4	Mrs. Alatkhar Manisha	Coordinator	Assistant Professor, Mechanical Engineering
5	Mr. Patil Suhas	Member	Assistant Professor, Mechanical Engineering
6	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
7	Mrs. Ghate Shital	Member	Assistant Professor, Civil Engineering
8	Dr. Nayak Meghay Banoth	Member	Assistant Professor, Electrical Engineering
9	Ms. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
10	Mrs. Sawant Ashwini	Member	Assistant Professor, CS & Engineering
11	Ms. Waghmare Shital	Member	Assistant Professor, CS & Engineering
12	Ms. Sawashe Ketaki	Member	Assistant Professor, E&TC Engineering

13	Mrs. Bhosale Rohini	Member	Assistant Professor, Core Science Engineering
----	---------------------	--------	---

13. Internal complaints Committee

Women's Grievance Cell is guided by Principles of natural justice while redressing the grievances. The cell will consider grievances concerned with sexual harassment and other acts related to gender-based discrimination.

Sr. No.	Names of committee members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Mirajkar Gayatri	Coordinator	Professor, E&TC Engineering
3	Dr. Thombare Vijay	Member	Professor, Civil Engineering
4	Mrs. Alatkhar Manisha	Member	Assistant Professor, Mechanical Engineering
5	Mr. Patil Suhas	Member	Assistant Professor, Mechanical Engineering
6	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
7	Mrs. Ghate Shital	Member	Assistant Professor, Civil Engineering
8	Miss. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
9	Mrs. Sawant Ashwini	Member	Assistant Professor, Computer Science & Engineering
10	Mrs. Pawar Snehal	Member	Assistant Professor, Core Science Engineering
11	Mrs. Ghadge Rupali	Member	Clerk
12	Mrs. Shinde Jayashri	Member	Assistant Librarian

13	Miss. Lalge Prajka	Member	Student, Mechanical Engineering
14	Miss. Jadhav Akanksha	Member	Student, Electrical Engineering
15	Miss. Yadav Bhagyashri	Member	Student, CSE Engineering
16	Miss. Pawar Akanksha	Member	Student, E&TC Engineering
17	Mr. Shelke Siddheshwar	Member	Student, Civil Engineering
18	Miss. Chavan Nikita	Member	Student, First Year Engineering
19	Miss. Jadhav Vrunda	Member	Student, Polytechnic Engineering

14. Extracurricular Activities Committee:

Students have strong representations in all cultural and sports committees. They help in organization and management of different events. Major events include annual Sports Competition and Cultural event. Organize intra-college competitions at the Institute level. Assist and encourage the students to participate actively in organizing and conducting various indoor, outdoor sporting games. Maintain records of the sporting events attended by students held in the Institute. Submit annual report of the sports/ events conducted, budget allocations and expenditure incurred during the year. Encouraging students to participate in the intra or inter-collegiate events. Students are part of organizing committees all the engineering activities at departmental/Institute level. Some of these activities include conferences, coding, project contests, technical events, quiz competitions, student club activities etc.

Table 10.1.3.m Extracurricular Activities Committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Ghadge Nikhil	Coordinator	Assistant Professor, Mechanical Engineering
3	Mr. Kamble Ankur	Coordinator	Assistant Professor, Mechanical Engineering
4	Ms. Waghmare Shital	Coordinator	Assistant Professor, CS & Engineering

5	Mr. Salunkhe Rakesh	Member	Assistant Professor, Civil Engineering
6	Ms. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
7	Ms. Nalawade Sanskriti.	Member	Assistant Professor, E&TC Engineering
8	Ms. Bhosale Pooja	Member	Assistant Professor, Core Science Engineering,

15. Grievances Redressal Committee

A grievance cell is established in this Institute to resolve any types of disputes among the students. Grievance boxes are made available in the Institute. Stakeholders can drop the grievances mentioned on the paper in the box provided. Resolve grievances which develop in Institute premises, maintaining confidentiality, impartiality, transparency. Establish grievance free Institute environment. To resolve the disputes and any other issues arising amongst the students. To create a professional environment for sustainable development. Encourage the students to show responsible approach. To enhance effective communication to state the grievance verbally or through the use of grievance box. Encourage the students to practice courteous communication behaviour which will be useful in their entire life.

Table 10.1.3. Grievance Redressal Cell committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr Suhas Patil	Coordinator	Assistant Professor, Mechanical Engineering
3	Mr. Jagtap Dayanand Bajirao	Coordinator	HOD E&TC Engineering
4	Mrs. Alatkar Manisha Nilkanth	Coordinator	Assistant Professor, Mechanical Engineering
5	Mr. Kanse Nitin	Member	Registrar

6	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
7	Ms. Waghmare Shital	Member	Assistant Professor, Computer Science Engineering
8	Ms.Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
9	Mrs. Mandhare Rajani	Member	Assistant Professor, Computer Science Engineering
10	Miss. Pawar Snehal	Member	Assistant Professor, Core Science & Engineering
11	Mr. Gaikawd Sushant	Member	Student Civil Engineering
12	Mr. Sawant Prajwal	Member	Student Computer Science & Engineering
13	Mr. Karavale Chetan	Member	Student Core Science Engineering
14	Mr. Kadam Rohit	Member	Student Electrical Engineering
15	Miss. Pawar Akaksha	Member	Student E&TC Engineering
16	Mr. Masal Dadasaheb	Member	Student Mechanical Engineering

16. Library Committee

Library committee is involved in collecting the requirements of the text books, reference books, journals and ensuring adequate number of copies are made available in the library. Planning and implementing the library automation, procedures, digital library development and usage. Finalizing the list of books, journals, magazines and equipment in the central library as well as departmental libraries and propose budgetary estimates to the administrative department and also conducting verification of annual stock. The Institute library has a vast collection of texts books and general books, International and National journals, online databases to cater to the needs of both UG and PG students. Separate sections for General, Reference books, Journals and Periodicals, Magazines are provided along with free Net browsing (DelNet).

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mrs. Yewale Vaishali	Coordinator	Librarian, Central Library
3	Mr. Salunkhe Sushant	Member	Assistant Professor, Mechanical Engineering
4	Mr. Salunkhe Rakesh	Member	Assistant Professor, Civil Engineering
5	Mr. Naik Somesha	Member	Assistant Professor, Electrical Engineering
6	Mr. Gujar Vijay	Member	Assistant Professor, CS & Engineering
7	Mr. Hingmire Vishal	Member	Assistant Professor, E&TC Engineering
8	Mrs. More Sonali	Member	Assistant Professor, Core Science Engineering

B. Grievances Redressal Mechanism

Grievances are taken through following committees. Suggestion boxes are kept for the students

Grievances Redressal Committee

Internal Complaint Committee

Anti-ragging Committee

Grievance Redressal Mechanism: -

The institute has constituted Grievance Redressal cell (GRC), Internal Complaints Committee (ICC) and Antiragging Committee as per the guidelines by the competent authority. Online Grievance Redressal system is purchased and installed.

1.0 Grievance Redressal cell (GRC): - Dr. Thombare Vijay Ramchandra

Grievance Redressal Cell is formed to provide a safe, fair and harmonious learning and work environment, for handling day-to-day grievances related to students, parents and employees. Grievance Redressal Cell facilitates the resolution of grievances in a fair and impartial manner maintaining necessary confidentiality.

Objectives of Grievance Redressal Cell:

- To ensure a fair, impartial and consistent mechanism for Redressal of varied issues faced by the students, parents and employees. To promote cordial Student-Student relationship, Student-teacher relationship, teacher-teacher relationship.
- To develop a responsive and accountable attitude amongst all to maintain a harmonious environment in the college campus. To ensure that grievances are resolved timely with complete confidentiality

Table 10.1.3p Grievance Redressal Cell


Grievance Redressal Cell committee			
Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr Suhas Patil	Coordinator	Assistant Professor, Mechanical Engineering
3	Mr. Jagtap Dayanand Bajirao	Coordinator	HOD E&TC Engineering
4	Mrs. Alatkhar Manisha Nilkanth	Coordinator	Assistant Professor, Mechanical Engineering
5	Mr. Kanse Nitin	Member	Registrar
6	Mr. Patil Suhas Prakash	Member	Assistant Professor, Mechanical Engineering
7	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
8	Ms. Waghmare Shital	Member	Assistant Professor, Computer Science Engineering

9	Ms.Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
11	Mrs. Mandhare Rajani	Member	Assistant Professor, Computer Science Engineering
12	Miss. Pawar Snehal	Member	Assistant Professor, Core Science & Engineering
13	Mr. Gaikawd Sushant	Member	Student Civil Engineering
14	Mr. Sawant Prajwal	Member	Student Computer Science & Engineering
15	Mr. Karavale Chetan	Member	Student Core Science Engineering
16	Mr. Kadam Rohit	Member	Student Electrical Engineering
17	Miss. Pawar Akaksha	Member	Student E&TC Engineering
18	Mr. Masal Dadasaheb	Member	Student Mechanical Engineering

Standard Operating Procedure (SOP):

- Any student or parent or staff member who want to initiate a grievance may in the first instance bring the issue to the notice of the Head of the respective department, who will address the issue and try to resolve.
- If there is no response within the stipulated time from the respective department or grievant is dissatisfied with response/resolution to his/her grievance, then the grievant is free to represent his/her grievance to the College Grievance Redressal Cell in formal manner.
- Scrutiny: Grievance Redressal Cell will make a thorough review of the Redressal process.
- Call for hearing: If the Grievance Redressal Cell is not satisfied with the resolution provided by the respective department /individual or upon the grievant written request, the committee shall fix a date for hearing and intimate the same to the respective department /individual as well as the grievant.
- Investigation: If a resolution is not achieved through hearing, then it will take necessary steps to conduct an investigation of the facts. Grievance Redressal Cell will have the right to interview witnesses, if it is required. On the basis of investigation by Grievance Redressal Cell, report will be submitted to the Head of Institution. The grievance Redressal cell shall use its best efforts to work out resolutions of the issue.

Sample of Grievance Redressal mechanism:




SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING
 Estd. - 2010 - AGET - Accredited by HAAC
 Approved by AICTE, New Delhi. Recognized by Govt of Maharashtra DTE Mumbai & Affiliated to Shivaji University Kolhapur & BAUJ Lonere


To,
 Mr. Mane Yashraj Deepak,
 SY B.Tech,
 Department of Civil Engineering,
 AGCE Satara


Subject: Regarding Suspension letter

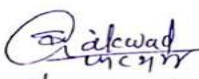
We have observed that you have disobeyed the rules and regulations laid down by the institute. Considering your career, one opportunity is being given to you. We are issuing you a show cause notice for the incident which occurred in the Institute campus on 25th May 2022. Also misbehavior in CA-I exam & mid sem exam in the examination hall with staff members & students. It is observed that misbehavior with students & other departmental staff in canteen, Sports activity & cultural activity. Subsequently, you have been served with suspension w.e.f. 26th May 2022. Your attendance is 0%.


So, submit your apology letter stating that such an incidence will not be repeated again; otherwise you will be responsible for your academic loss.


 Class coordinator


 HOD (Civil)
 Head Engineering Civil Department
 ARVIND GAVALI COLLEGE OF ENGINEERING, Satara
 Panmalawadi (Varve)


 Principal
 Dr. Vilas Pharande
 Principal
 Arvind Gavali College Of Engineering
 Panmalawadi, Satara


 Dt 26/22/18.20
 पोलीस स्टेशन ऑफिसर
 सातारा तालुका पोलीस स्टेशन



Mr. Baqwan Saheb
 7743885761

2.0 Internal Complaints Committee (ICC) - Women's Grievance Cell – Sexual Harassment Committee

The institution believes in gender equality & gender justice in all of its practices. Organizational environment is free from discrimination & harassment with a particular focus on sexual harassment. For this Women's Grievance Cell is established in the college. The cell is responsible for looking into any complaints filed by students & staff about woman grievances at the college.

Objectives of ICC:

- To full fill the directives of the Hon. Supreme court of India (Guide lines of Vishakha Judgment) and concerns expressed by the University grand commission about ensuring safe environment for women student & employees. To promote an environment free of sexual harassment & other acts of gender-based discrimination at the institution that ensures gender equality & equal opportunities.
- To prevent sexual harassment and to promote the general well-being of female
- Students and employees.

Internal Complaints Committee:

Women's Grievance Cell is guided by Principles of natural justice while redressing the grievances. The cell will consider grievances concerned with sexual harassment and other acts related to gender-based discrimination.

Table 10.1.3q Internal Complaints Committee (ICC) / Women's Grievance Cell

Internal Complaints Committee (ICC) / Women's Grievance Cell			
Sr. No.	Names of committee members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Mirajkar Gayatri	Coordinator	Professor, E&TC Engineering
3	Dr. Thombare Vijay	Member	Professor, Civil Engineering
4	Mrs. Alatkar Manisha	Member	Assistant Professor, Mechanical Engineering
5	Mr. Patil Suhas	Member	Assistant Professor, Mechanical Engineering
6	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
7	Mrs. Ghate Shital	Member	Assistant Professor, Civil Engineering

8	Miss. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
9	Mrs. Sawant Ashwini	Member	Assistant Professor ,Computer Science & Engineering
10	Mrs. Pawar Snehal	Member	Assistant Professor, Core Science Engineering
11	Mrs. Ghadge Rupali	Member	Clerk
12	Mrs. Shinde Jayashri	Member	Assistant Librarian
13	Miss. Lalge Prajkta	Member	Student, Mechanical Engineering
14	Miss. Jadhav Akanksha	Member	Student, Electrical Engineering
15	Miss. Yadav Bhagyashri	Member	Student, CSE Engineering
16	Miss. Pawar Akanksha	Member	Student, E&TC Engineering
17	Mr. Shelke Siddheshwar	Member	Student, Civil Engineering
18	Miss. Chavan Nikita	Member	Student, First Year Engineering
19	Miss. Jadhav Vrunda	Member	Student, Polytechnic Engineering

Standard Operating Procedure (SOP) of ICC:

- Any female student or employee wants to initiate a grievance may in the first instance bring the issue to the notice of the Head of the respective department, who will forward the matter to Women's Grievance Cell Scrutiny: Women's Grievance Cell will make a thorough review of the Redressal process.
- Call for hearing: Women's Grievance Cell shall fix a date for hearing and intimate the same to the grievant.
- Investigation: If a resolution is not achieved through hearing, then it will take necessary steps to conduct an investigation of the facts. Women's Grievance Cell will have the right to interview witnesses, if it is required. On the basis of investigation by Women's Grievance Cell, report will be submitted to the Head of Institution. The Women's Grievance Cell shall use its best efforts to work out resolutions of the issue.
- Communication the decision: Upon completion of proceedings, the Head of Institution and Women's Grievance Cell shall communicate the final decision to both parties.
- The proceeding concerning each grievance will be documented in a systematic manner. The information relating to the proceedings shall be treated as confidential and can be viewed only by the members of Women's Grievance Cell, for the purpose of investigation

3.0 Anti-Ragging Committee:

Ragging is a very common problem faced by students in the campus during and after college hours. The consequences of students who faced ragging are very serious and shocking. Thus, this committee was constituted to control ragging and provide relief to students who come under this shadow. The committee has the powers to take stringent action on students involving in such activities. Committee comprises of the following members.

Table 10.1.3r Anti ragging Committee

Anti ragging Committee			
Sr. No.	Names of committee members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Jagtap Dayanand	Coordinator	HOD E&TC Engineering

3	Miss. Bhosale Rupali H	Member	Social Worker
4	Adv. Dixit D.C.	Member	Advocate
5	Mr. Barge Abhijeet	Member	Local Media
6	Mr. Patil Suhas	Member	Assistant Professor Mechanical Engineering
7	Mr. Nayak Banoth Meghya	Member	HOD Electrical Engineering
8	Mrs.Sawant Ashwini	Member	CSE Department Engineering
9	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
10	Mr. Shinde Chandrashekhar	Member	Office Superintendent
11	Mr. Kadam Vijay	Member	Assistant Professor E & TC Engineering
12	Mr. Khairmode Omkar	Member	Assistant Professor Mechanical Engineering
13	Mr. Bhoite Aryan	Member	Student E&TC Engineering
14	Mr. Roman Aniket	Member	Student Civil Engineering
15	Mr. Chavan Aditya	Member	Student Electrical Engineering
16	Mr. Shinde Suyog	Member	Student Mechanical Engineering
17	Miss. Gawade Priti	Member	Student CSE Engineering
18	Ms.Kadam Dhanashree	Member	Student Core Science & Engineering

10.1.4 Delegation of financial powers (10)

A. Financial powers delegated to the Principal, Heads of Departments and relevant in-charges (3)

B. Demonstrate the utilization of financial powers for each of the assessment years (7)

In order to discharge the day-to-day functions and activities of the Institute in smooth manner, the financial powers are delegated of the Principal, HODs and Deans by the Management. HODs and Deans also prepare budget of the Department and their relevant functional committees. Total budget of the college is prepared by Administrative Office under guidelines of Principal and Management.

Table 10.1.4a Delegation of Financial Power

Sr. No.	Designation	Financial Power
1	Principal	Authorized to sanction up to Rs. 50,000/-
2	HODs and Deans	Authorized to sanction up to Rs. 5,000/-

Following are the some examples where financial powers are delegated of the Principal & staff members

To
Principal
AGCE

Date
6/09/2022

Sub: Lab for New computer
Lab Development

We develop new computer
Lab, for this we required some new
material. New material list attach
with this application. So full fill
this requirement

Yours faithfully
Arundha

Rs. 17150/-

Approx.
Need Lab development.
Discused with Hon-Secretary sir
regarding location & working
installation.
VAT

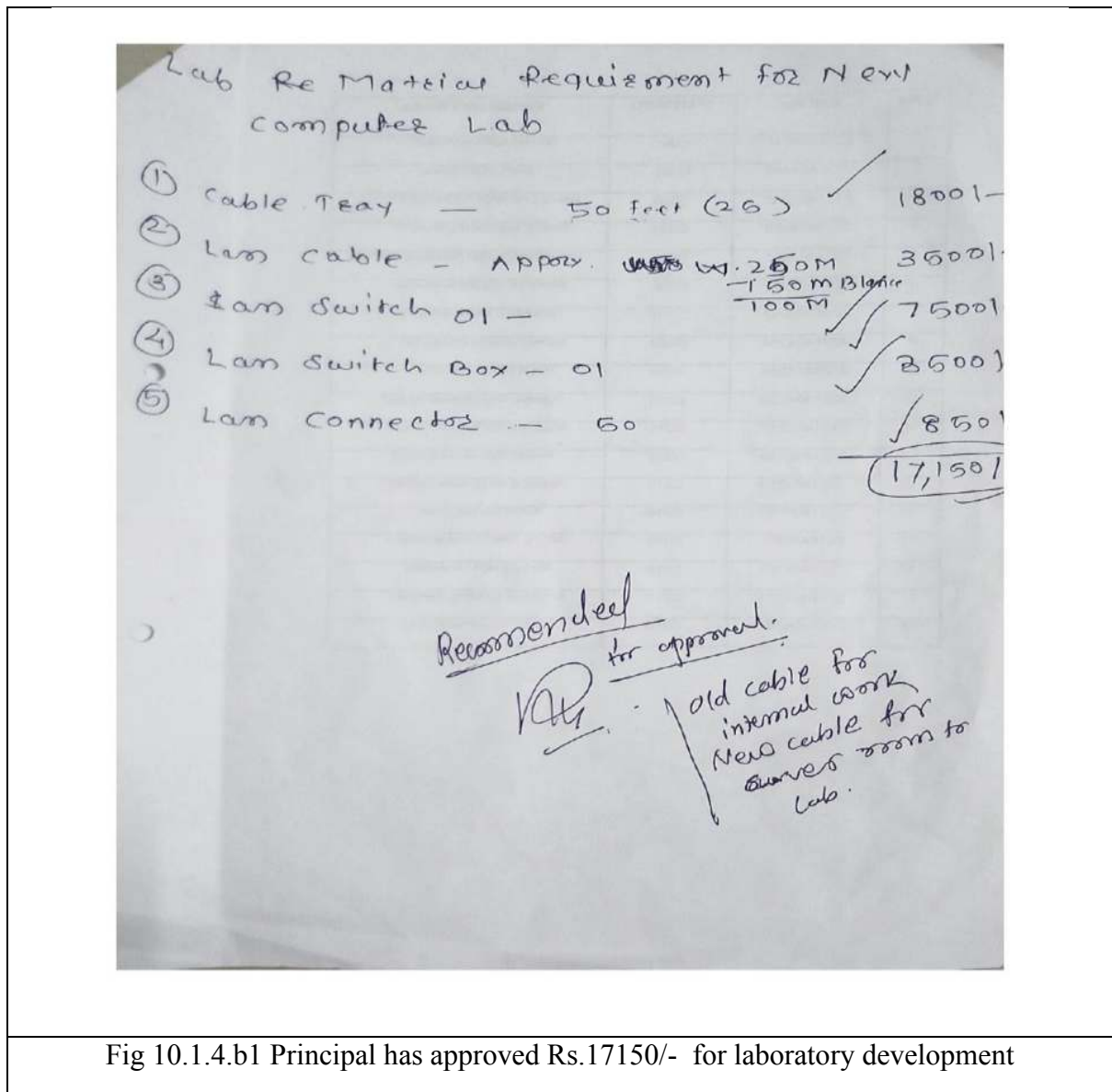


Fig 10.1.4.b1 Principal has approved Rs.17150/- for laboratory development

Date: 18/07/2022

To
The Principal
AGCE satara

Sub : Regarding requirement of solar panel structure working in workshop
Respected sir,

Detail of consumable given in the following table

Sr no	Material	Quantity (in numbers)	Price
1	square pipe (35*35*20)	06	4900
2	rectangular pipe (03*01)	01	2295
3	square pipe (3*3)	01	900
4	Bearing & casing 25	02	1500
5	Shaft 25*3	01	1500
6	Hydraulic	04	8000
7	fasnar	20	500
8	Square plate (4*4*5)	01	100
9	Square plate (6*6*5)	01	400
10	consumable	--	2000
11	universal joint	01	1450
12	Transport	--	500
TOTAL			23985/-

Please sanction above amount.

15,756/- cash. 11/8/2022
8,226/-

Account.
Under sponsored
category.
VAP

~~A. Kadam~~
Thanks & Regards

Mr. Kadam Akshaykumar B.
(Work shop incharge)

Satara

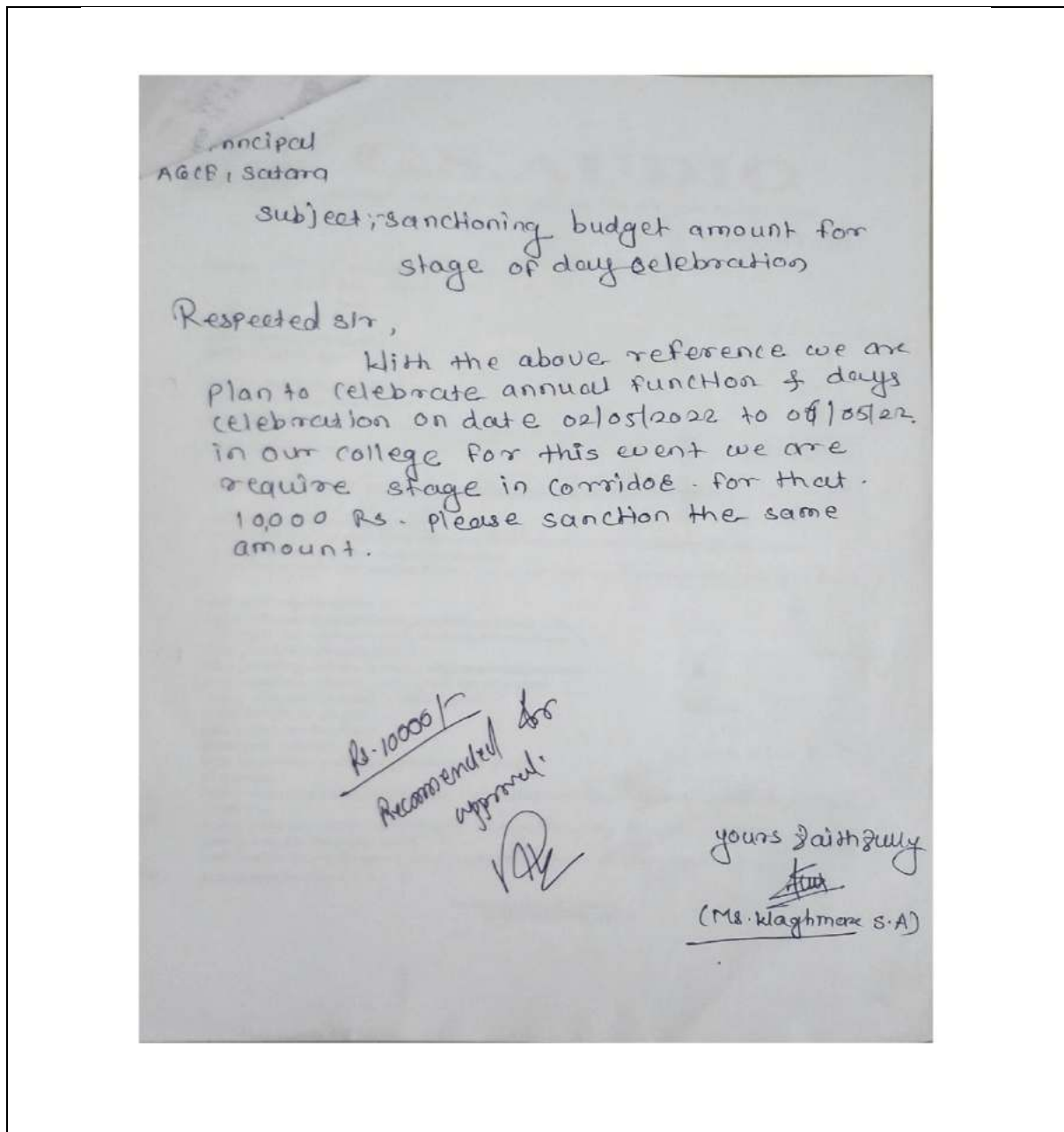


Fig 10.1.4.b2 Principal has approved Rs.10000/- for extracurricular activities

To,
The principal
AGCE Satara.

Subject: Regarding maintenance of surveying lab

Respected Sir,

Maintenance is required for 3 theodolites & 1 dumpy level in surveying lab. We have taken its quotation from Microf instruments Nashik. I want permission to handover the instruments to microf instruments for maintenance.

Kindly give permission for the same. The revised quotation after inspection of instruments is attached with this application.

As per revised quotation total amount of maintenance is as follows:

Instrument	Instr No.	amount
Theodolite	05/11 TDL	4275/-
	01/10 TDL	4350/-
	03/11 TDL	3375/-
Dumpy level	01/10	2100/-
		<u>15,300 + 18% GST (on instrument parts)</u>

2) 11000 service charges.
1) 4000 + GST Bill 18%

Instrument handover date: 15/10/2019
Maintenance upto dated: 05/11/2019

(Signature)
(Ms. Tadhav R. D.)
Lab In-charge

(Signature)
Pharande S. B.
HoD, Civil Engg. Dept.

(Signature)
T. J. Jadhav
T. J. Jadhav

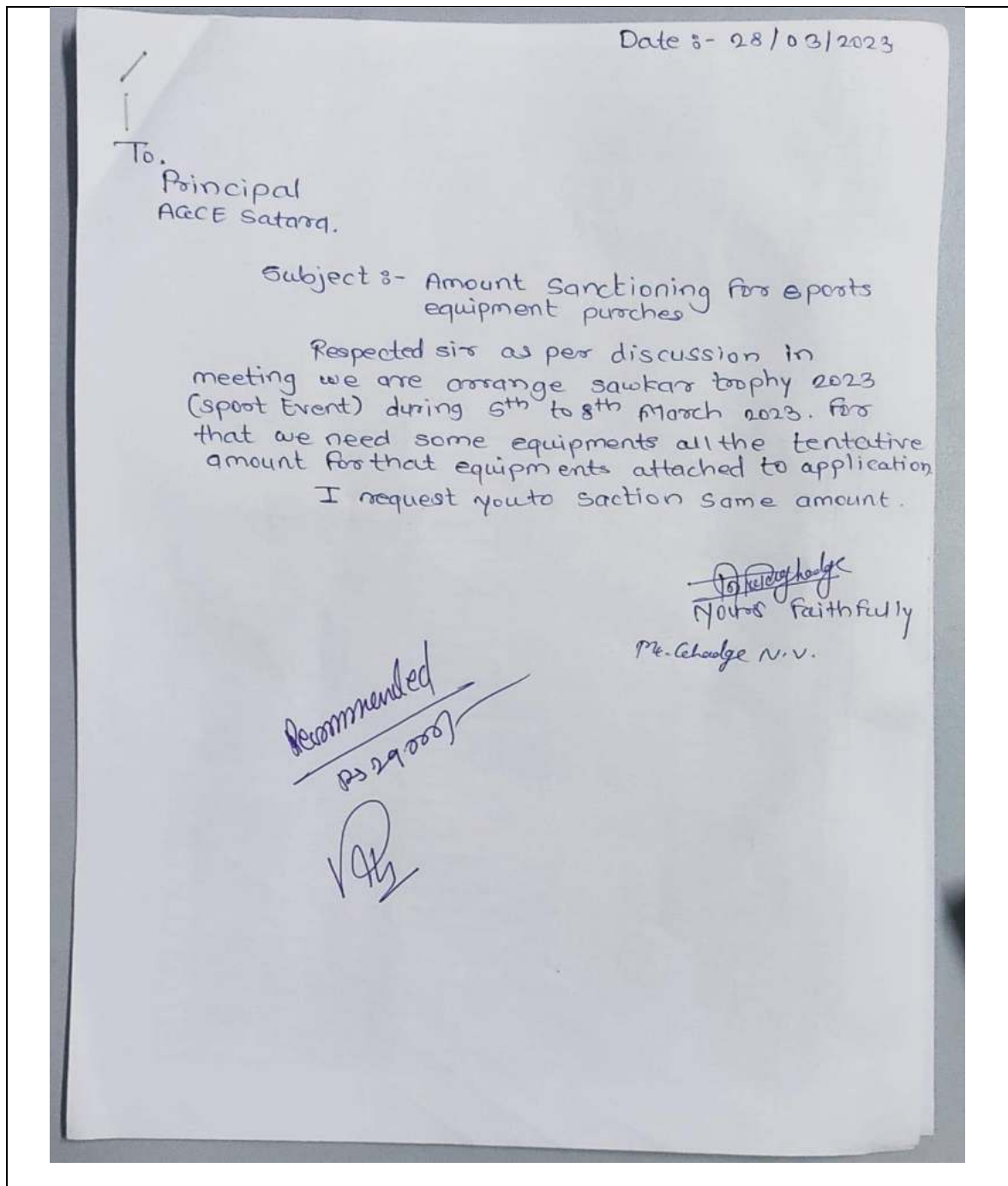



Fig 10.1.4.b3 Principal has approved Rs.15000/- for Sports activities



Tax Invoice/Bill of Supply/Cash Memo
(Original for Recipient)

Sold By :
Payal Enterprises
* 4658 A / 21 ANSARIROAD, ANSARI ROAD
DARYA GNAJ, DELHI, 110002
IN

PAN No: AAPFP4704K
GST Registration No: NotApplicable

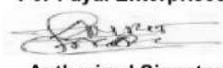
Order Number: 402-0209171-6497171
Order Date: 27.03.2023

Billing Address :
Arvind Gavali College of Engineering
Gat no. 247, Panamalewadi
SATARA, MAHARASHTRA, 415015
IN
State/UT Code: 27

Shipping Address :
Arvind Gavali College of Engineering
Arvind Gavali College of Engineering
Gat no. 247, Panamalewadi
SATARA, MAHARASHTRA, 415015
IN
State/UT Code: 27
Place of supply: MAHARASHTRA
Place of delivery: MAHARASHTRA
Invoice Number : IN-16968
Invoice Details : DL-141916061-2223
Invoice Date : 27.03.2023

Sl. No	Description	Unit Price	Qty	Net Amount	Tax Rate	Tax Type	Tax Amount	Total Amount
1	Embedded Microcomputer System Real Time Interfacing 8131516326 (9788131516324)	₹608.00	1	₹608.00	0%	IGST	₹0.00	₹608.00
	Shipping Charges	₹100.00		₹100.00	0%	IGST	₹0.00	₹100.00
					0%	IGST	₹0.00	
					0%	None	₹0.00	
TOTAL:							₹0.00	₹708.00

Amount in Words:
Seven Hundred Eight only

For Payal Enterprises:

Authorized Signatory

Whether tax is payable under reverse charge - No

*ASPL-Amazon Seller Services Pvt. Ltd., ARPL-Amazon Retail India Pvt. Ltd. (only where Amazon Retail India Pvt. Ltd. fulfillment center is co-located)
Customers desirous of availing input GST credit are requested to create a Business account and purchase on Amazon.in/business from Business eligible offers
Please note that this invoice is not a demand for payment

Page 1 of 1

Fig 10.1.4.b4 Staff member has purchase book from their account for library

10.1.5 Transparency and availability of correct/unambiguous information in public domain.

- a. Information on the policies, rules, process is to be made available on website
- b. Dissemination of the information about students, faculty and staff.

The college maintains transparency in all its operations and working. At the beginning of every academic year, the college brings out a calendar, which contains all the information, required by a student and faculty to carry out his/her studies in the college. Information such as internal marks scored by students, shortage of attendance, if any, availability of scholarships, opportunities for students, etc. are promptly displayed on notice boards. Information about every activity in the college is sent to all staff and students through circulars. The institute has its own website: <https://agce.edu.in/>, which is updated as and when required. The institute and Program-specific information are made available to all stakeholders through the website.

All the required information on policies, rules, and processes are mention in Process Handbook and is made available on the college website for proper dissemination of this information to stakeholders.

Link: <https://agce.edu.in/processhandbook>

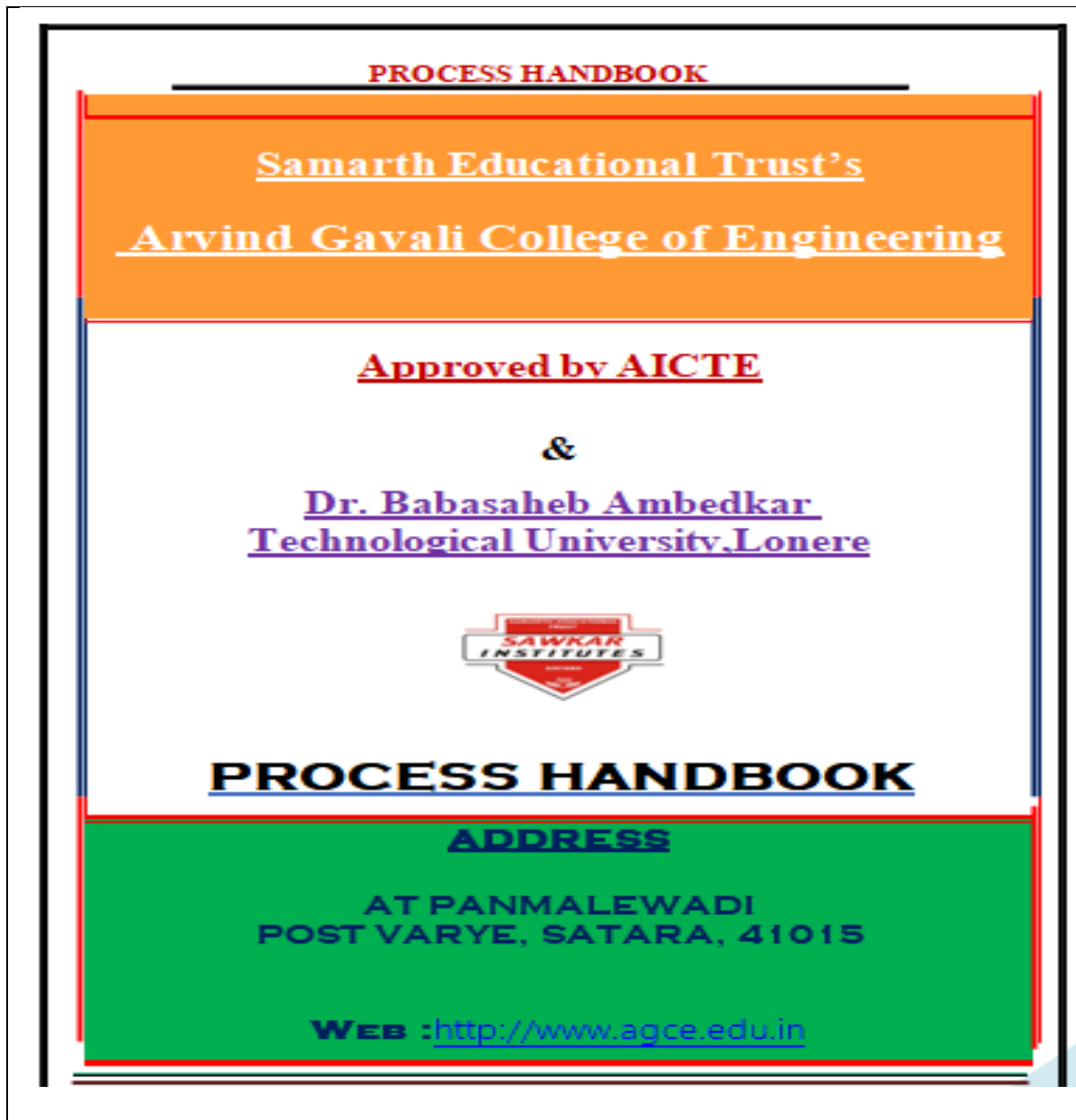


Fig 10.1.5 a Screen shot of Process Handbook first page

b. Dissemination of the information about students, faculty and staff.

Institute disseminate information through promotional activities, website, social media and print media.

i) Promotional Activities

Every year institute propagates information through faculty members in society through various promotional activities.



Fig 10.1.5 b1 Promotion activity to SSC Students

ii) Website

All necessary information including intake, latest news, events and update are made available on institute website.

The screenshot shows a web browser displaying the AGCE website. A prominent advertisement for Sawkar Institutes Satara is overlaid on the page. The ad is for the Arvind Gavali College of Engineering, which is NAAC Accredited and approved by AICTE. It lists various engineering programs including B.Tech (Mechanical, E&TC, Computer Science & Engg, Electrical, Civil), M.Tech (Heat Power Engineering), and B.Voc (Mechanical, Data Science, Industrial Automation, Software Development, Industrial Tool Manufacturing). The ad also mentions eligibility criteria, accreditation (SMTU, NAAC, AICTE-CII), and contact information for the admission office.

AGCE Homepage - Arvind Gavali X +

← → ↻ agce.edu.in 🔍 📄 ☆ 🏠

HOME ABOUT ACADEMICS ADMISSIONS SCHOLARSHIPS PLACEMENTS ACHIEVEMENTS & EVENTS CONTACT ENROLL

Saturday, 24 September, 2022 Latest News Walk In Int...

SAWKAR INSTITUTES Satara
Website: www.sets.edu.in

ARVIND GAVALI COLLEGE OF ENGINEERING
NAAC Accredited Website: www.agce.edu.in

Approved by AICTE, New Delhi & Govt. of Maharashtra & Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, Varye, Satara
Principal: Dr. Vites Pharsande
Institute Code: 6545
Mob: Engg: 9857100100 Poly: 9869700100

B.Tech.
Mechanical Engg.
E&TC Engg.
Computer Science & Engg.
Electrical Engg.
Civil Engg.

POLYTECHNIC
Mechanical Engg.
E&TC Engg.
Computer Science & Engg.
Computer Engg.
Civil Engg.

M.Tech. Heat Power Engineering (Mechanical)

Industry Oriented Skill Based B.Vocational Degree Program
Start your Professional Career after 12th or H.S.C

B.Voc Programs

- Data Science
- Industrial Automation
- Software Development
- Industrial Tool Manufacturing

Eligibility

- 10+2 pass in any stream with minimum 50% marks
- ITI / Diploma

No CET/JEE Entrance Examination

SAWKAR SCIENCE COLLEGE
Std. 11th & 12th Science
Computer Science (200 Marks)
Crop Science (200 Marks)

Admission Office
427, Shanivar Path, Behind Sawkar Transport Office, Satara ■ Ph : (02162) 230100 ■ Mob : 8975456700

Samarth Educational Trust est quality education to students Medical, Pharmacy and Engin areas in Western Maharash Integrated campus is strategic The trust endeavors to comit knowledge and skills to becom

Arvind Gavali College of E maintain an utmost academic of discipline, thereby achievin of results. We are committed

Technocrat and Responsible Citizen who will contribute in Development and Prosperity of India as well as Native place he/she

K. Gavali
Chairman, Samarth Educational Trust

Type here to search

Fig 10.1.5 b2 Information about Admission ans intake on website

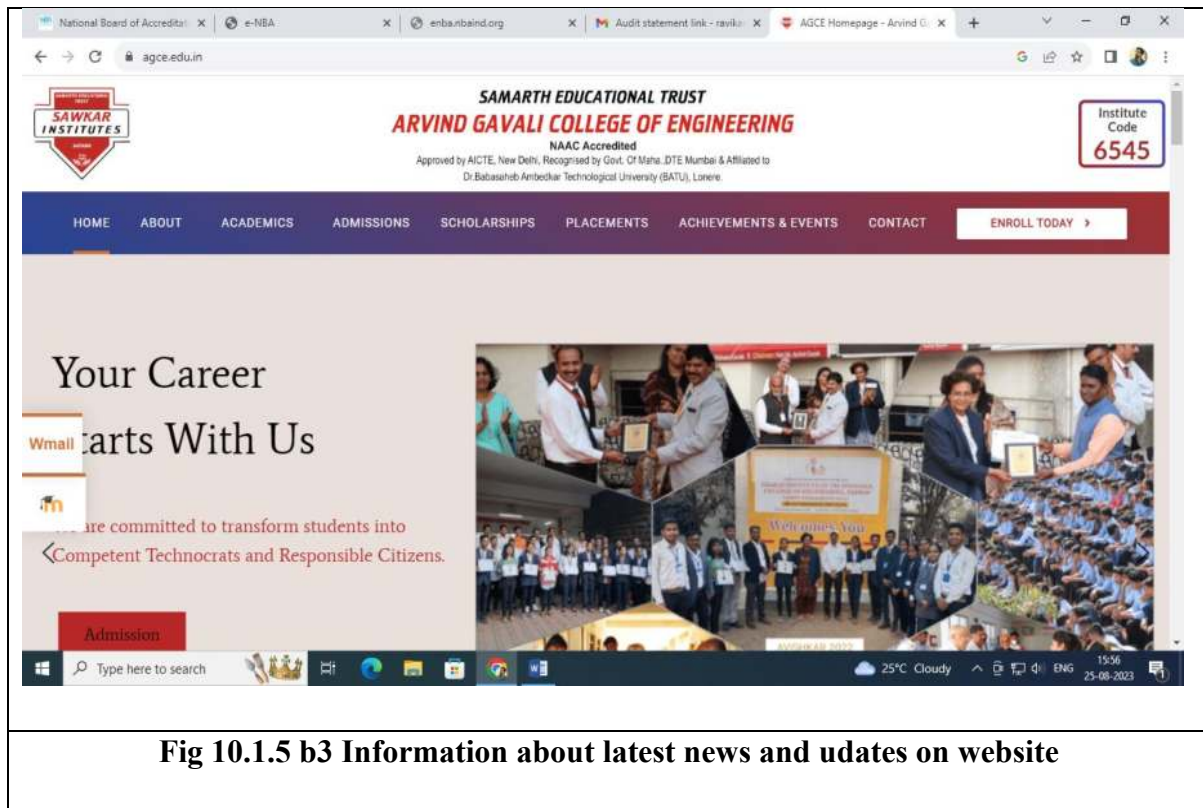


Fig 10.1.5 b3 Information about latest news and updates on website

iii) Social media

Institute disseminate information through social media like Facebook, Instagram among the stakeholders.

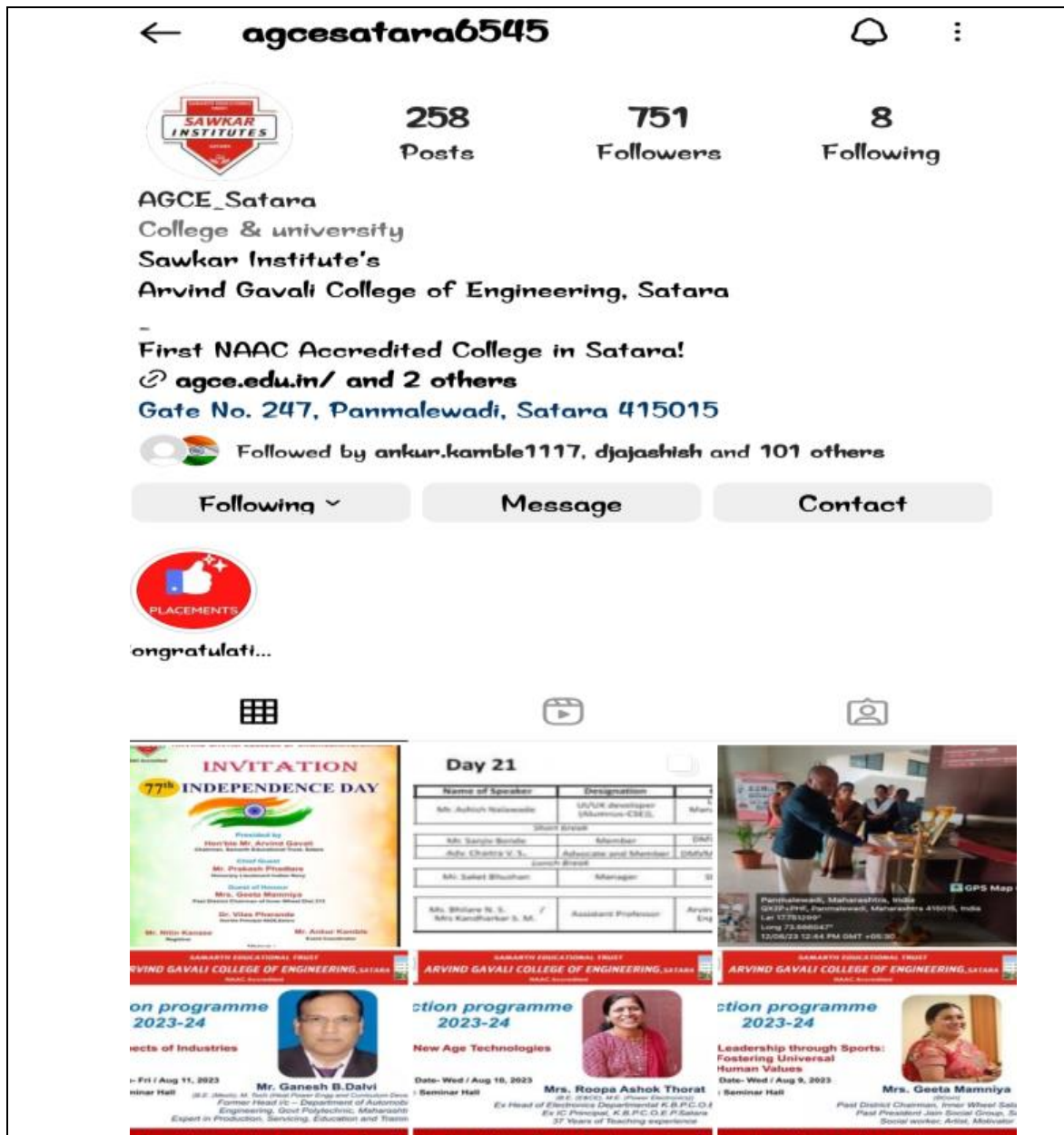


Fig 10.1.5 b4 Instagram page of Institute

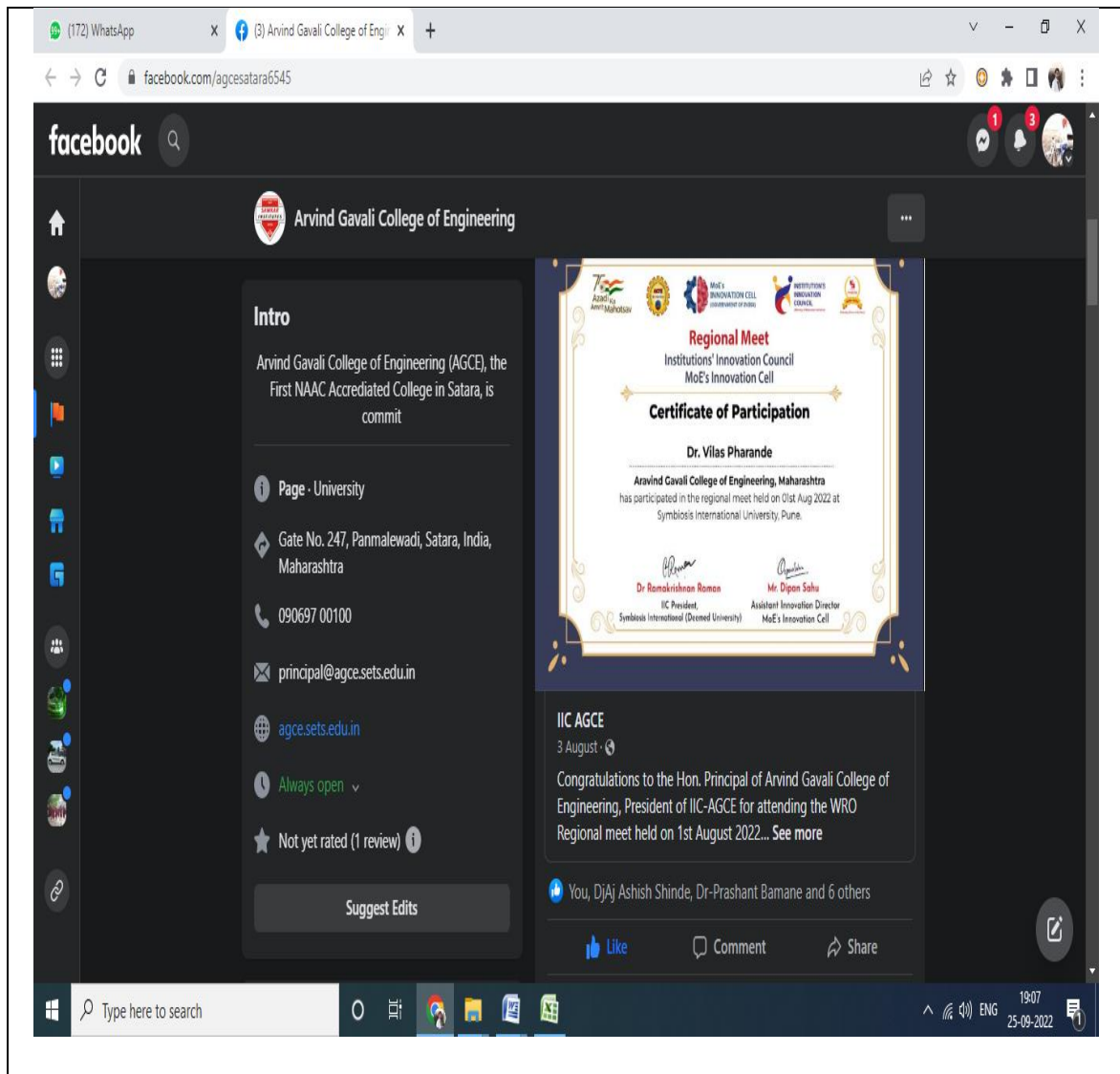


Fig 10.1.5 b5 Facebook page of Institute

iv) Print media

Every year institute publish Admission information diary that includes all institute information like intake, admission process, documents required, faculty members, activities, placement etc.



SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

Approved by AICTE, New Delhi & Govt. of Maharashtra & Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere
 Website : www.agce.sets.edu.in | Email : agcenggsatara@gmail.com
 Phone : (02162) 200100 , 261122



IIT Bombay Remote Center only in AGCE Satara

10 वी, 12 वी नंतरची
तंत्रशिक्षण प्रवेश मार्गदर्शिका

1st NAAC Accredited Engineering College in Satara District

INSTITUTE CODE: 6545



- **ENGINEERING** (B.Tech. / M.Tech.)
- **POLYTECHNIC** (Diploma)

विद्यार्थी दत्तक योजने अंतर्गत
फी मध्ये सवलत

D.T.E. Online Application & Option Form Facility available

- Panmalewadi, Varye , Tal.& Dist.-Satara, Pin.-415 015
- 'Rajathadri' Compound, Near Dainik Sakal Shivaji Circle, Powai Naka, Satara.
- Near S.T.Stand Wai, Dist.-Satara.

Free

Admission Counselor Contact No.:
 Engineering : 8975456700 , 7769050100 , 9069700100
 BHMS : 9850111012 | B.Pharm : 9423863353 | Pharmacy : 9423320538

Fig 10.1.5 b6 Admission information diary

PERSONAL DETAILS

Name: _____
Roll No.: _____

AUTHORIZED FACULTY CENTER

Tyebroad College of Engineering (T.Ye.C.E.)
Pimpri-Chinchwad, Maharashtra-411004
Mob: Engr. 9827101100, Poly-6667101000

Zareen Gaud College of Pharmacy (Z.G.C.P.)
Jalgaon, Maharashtra-414004
Mob: 7796000100

Tyebroad College of Pharmacy (T.Ye.C.P.)
Jalgaon, Maharashtra-414004
Mob: 7796000100

Tyebroad College of Pharmacy (T.Ye.C.P.)
Jalgaon, Maharashtra-414004
Mob: 7796000100

प्रवेश प्रक्रिया

विद्यार्थी पाठ्याची प्रवेश प्रक्रिया पूर्ण करिताना यादीचे महत्वाचे आहे.

1) या प्रवेश प्रक्रिया पूर्ण करा, यादी भरून घ्यावी व तिथीची मर्यादा पाळून घ्यावी. यादी भरण्याची मर्यादा 15/05/2023 पर्यंत आहे. यादी भरल्यानंतर यादी भरण्याची मर्यादा 15/05/2023 पर्यंत आहे. यादी भरल्यानंतर यादी भरण्याची मर्यादा 15/05/2023 पर्यंत आहे.

2) यादी भरण्याची मर्यादा 15/05/2023 पर्यंत आहे. यादी भरल्यानंतर यादी भरण्याची मर्यादा 15/05/2023 पर्यंत आहे. यादी भरल्यानंतर यादी भरण्याची मर्यादा 15/05/2023 पर्यंत आहे.

Admission Flowchart (Steps)

1. Photo Application Submission & Confirmation
2. Document Verification
3. Fee Payment
4. Admission Process (Phase I, II, III)

प्रवेशाची पात्रता

ENGG (ENGINEERING)

1. 10th Year Engineering - 100% examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry, Metallurgy, Biology / Technical Education.

2. 10th Year Engineering - 100% examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry, Metallurgy, Biology / Technical Education.

महाविद्यालयाची शाखांचा माग

1. B.Tech. (Mechanical Engineering)
2. B.Tech. (Automotive Engineering)
3. B.Tech. (Aeronautical Engineering)
4. B.Tech. (Production Engineering)
5. B.Tech. (Industrial Engineering)
6. B.Tech. (Information Technology)
7. B.Tech. (Computer Science Engineering)
8. B.Tech. (Software Engineering)
9. B.Tech. (Electronics Engineering)
10. B.Tech. (Electrical Engineering)
11. B.Tech. (Civil Engineering)
12. B.Tech. (Chemical Engineering)
13. B.Tech. (Food Engineering)
14. B.Tech. (Textile Engineering)
15. B.Tech. (Leather Engineering)
16. B.Tech. (Polymer Engineering)
17. B.Tech. (Metallurgical Engineering)
18. B.Tech. (Biotechnology)
19. B.Tech. (Environmental Engineering)
20. B.Tech. (Energy Engineering)

सामान्य विद्यार्थ्यांचा विविध कोर्सेज

1. English Language Proficiency Course
2. Leadership & Team Building Course
3. Entrepreneurship Development Course
4. Career Guidance Course
5. Soft Skills Course
6. Industrial Training Course
7. Internship Course
8. Research Project Course
9. Seminar Course
10. Guest Lecture Course
11. Workshop Course
12. Field Visit Course
13. Conclave Course
14. Conference Course
15. Exhibition Course
16. Quiz Course
17. Debate Course
18. Mock Test Course
19. Interview Course
20. Personality Development Course

विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना

1. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
2. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
3. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
4. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
5. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
6. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
7. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
8. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
9. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना
10. विद्यार्थी आणि पालकांसाठी महत्वाचे सूचना

महाविद्यालयाची वैशिष्ट्ये

1. MAC Accreditation
2. ISO 9001:2015 Certified
3. ISO 14001:2015 Certified
4. ISO 27001:2013 Certified
5. ISO 45001:2018 Certified
6. ISO 50001:2015 Certified
7. ISO 9000:2015 Certified
8. ISO 9001:2015 Certified
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17. ISO 9001:2015 Certified
18. ISO 9001:2015 Certified
19. ISO 9001:2015 Certified
20. ISO 9001:2015 Certified

महाविद्यालयाची यशायोग्यता

1. 100% Placement Rate
2. 100% Student Satisfaction
3. 100% Faculty Satisfaction
4. 100% Infrastructure Development
5. 100% Research & Innovation
6. 100% Social Responsibility
7. 100% Environmental Sustainability
8. 100% Financial Stability
9. 100% Academic Excellence
10. 100% Industry Collaboration
11. 100% Government Recognition
12. 100% International Accreditation
13. 100% Quality Assurance
14. 100% Continuous Improvement
15. 100% Innovation & Creativity
16. 100% Leadership & Governance
17. 100% Transparency & Accountability
18. 100% Risk Management
19. 100% Crisis Management
20. 100% Disaster Preparedness

SELECTED IN THE PRESTIGIOUS NURTURING BRILLIANCE CUMMINS SCHOLARSHIP PROGRAM 2022

1. Ananya Patil
2. Adarsh Patil
3. Aditya Patil
4. Adithyan Patil
5. Adithyan Patil
6. Adithyan Patil
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19. Adithyan Patil
20. Adithyan Patil

ENGINEERING - EN 6545

1. Ananya Patil
2. Adarsh Patil
3. Aditya Patil
4. Adithyan Patil
5. Adithyan Patil
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19. Adithyan Patil
20. Adithyan Patil

B.Voc Degree Program

Start Your Professional Career at ITC HSC

1. Data Science
2. Business Analytics
3. Digital Marketing
4. E-commerce Development
5. Web Development
6. Mobile App Development
7. Cloud Computing
8. Cyber Security
9. Artificial Intelligence
10. Blockchain Technology
11. Big Data Analytics
12. Internet of Things (IoT)
13. Augmented Reality (AR)
14. Virtual Reality (VR)
15. Robotics
16. Drones
17. 3D Printing
18. Nanotechnology
19. Quantum Computing
20. Space Technology

HOMOEOPATHIC - 4115

1. Homeopathic Medicine
2. Homeopathic Pharmacy
3. Homeopathic Therapeutics
4. Homeopathic Diagnosis
5. Homeopathic Case Taking
6. Homeopathic Prescription
7. Homeopathic Remedies
8. Homeopathic Materia Medica
9. Homeopathic Pharmacology
10. Homeopathic Toxicology
11. Homeopathic Pathology
12. Homeopathic Microbiology
13. Homeopathic Immunology
14. Homeopathic Biochemistry
15. Homeopathic Histology
16. Homeopathic Anatomy
17. Homeopathic Physiology
18. Homeopathic Pathophysiology
19. Homeopathic Pharmacokinetics
20. Homeopathic Pharmacodynamics

B.PHARMACY - 6393

1. Pharmacy Practice
2. Pharmaceutical Chemistry
3. Pharmaceutical Microbiology
4. Pharmaceutical Biotechnology
5. Pharmaceutical Quality Assurance
6. Pharmaceutical Regulatory Affairs
7. Pharmaceutical Marketing
8. Pharmaceutical Economics
9. Pharmaceutical Law
10. Pharmaceutical Ethics
11. Pharmaceutical Innovation
12. Pharmaceutical Research & Development
13. Pharmaceutical Manufacturing
14. Pharmaceutical Distribution
15. Pharmaceutical Sales & Promotion
16. Pharmaceutical Clinical Research
17. Pharmaceutical Clinical Trials
18. Pharmaceutical Regulatory Compliance
19. Pharmaceutical Quality Control
20. Pharmaceutical Quality Improvement

B.PHARMACY - 6393

1. Pharmacy Practice
2. Pharmaceutical Chemistry
3. Pharmaceutical Microbiology
4. Pharmaceutical Biotechnology
5. Pharmaceutical Quality Assurance
6. Pharmaceutical Regulatory Affairs
7. Pharmaceutical Marketing
8. Pharmaceutical Economics
9. Pharmaceutical Law
10. Pharmaceutical Ethics
11. Pharmaceutical Innovation
12. Pharmaceutical Research & Development
13. Pharmaceutical Manufacturing
14. Pharmaceutical Distribution
15. Pharmaceutical Sales & Promotion
16. Pharmaceutical Clinical Research
17. Pharmaceutical Clinical Trials
18. Pharmaceutical Regulatory Compliance
19. Pharmaceutical Quality Control
20. Pharmaceutical Quality Improvement

D.PHARMACY - 6393

1. Pharmacy Practice
2. Pharmaceutical Chemistry
3. Pharmaceutical Microbiology
4. Pharmaceutical Biotechnology
5. Pharmaceutical Quality Assurance
6. Pharmaceutical Regulatory Affairs
7. Pharmaceutical Marketing
8. Pharmaceutical Economics
9. Pharmaceutical Law
10. Pharmaceutical Ethics
11. Pharmaceutical Innovation
12. Pharmaceutical Research & Development
13. Pharmaceutical Manufacturing
14. Pharmaceutical Distribution
15. Pharmaceutical Sales & Promotion
16. Pharmaceutical Clinical Research
17. Pharmaceutical Clinical Trials
18. Pharmaceutical Regulatory Compliance
19. Pharmaceutical Quality Control
20. Pharmaceutical Quality Improvement

D.PHARMACY - 6492

1. Pharmacy Practice
2. Pharmaceutical Chemistry
3. Pharmaceutical Microbiology
4. Pharmaceutical Biotechnology
5. Pharmaceutical Quality Assurance
6. Pharmaceutical Regulatory Affairs
7. Pharmaceutical Marketing
8. Pharmaceutical Economics
9. Pharmaceutical Law
10. Pharmaceutical Ethics
11. Pharmaceutical Innovation
12. Pharmaceutical Research & Development
13. Pharmaceutical Manufacturing
14. Pharmaceutical Distribution
15. Pharmaceutical Sales & Promotion
16. Pharmaceutical Clinical Research
17. Pharmaceutical Clinical Trials
18. Pharmaceutical Regulatory Compliance
19. Pharmaceutical Quality Control
20. Pharmaceutical Quality Improvement

सावकार सायन्स कॉलेज

1. Computer Science
2. Information Technology
3. Software Engineering
4. Data Science
5. Business Analytics
6. Digital Marketing
7. E-commerce Development
8. Web Development
9. Mobile App Development
10. Cloud Computing
11. Cyber Security
12. Artificial Intelligence
13. Blockchain Technology
14. Big Data Analytics
15. Internet of Things (IoT)
16. Augmented Reality (AR)
17. Virtual Reality (VR)
18. Robotics
19. Drones
20. 3D Printing

सावकार सायन्स कॉलेज

1. Crop Science
2. Horticulture
3. Fisheries
4. Poultry Science
5. Animal Husbandry
6. Veterinary Science
7. Food Science
8. Food Technology
9. Food Safety & Quality Management
10. Food Packaging Technology
11. Food Preservation Technology
12. Food Processing Technology
13. Food Quality Control
14. Food Quality Improvement
15. Food Safety & Hygiene
16. Food Safety & Inspection Service (FSIS)
17. Food Safety & Inspection Service (FSIS)
18. Food Safety & Inspection Service (FSIS)
19. Food Safety & Inspection Service (FSIS)
20. Food Safety & Inspection Service (FSIS)

Smarch Educational Trust Facilities

1. Smart Classrooms
2. Smart Labs
3. Smart Libraries
4. Smart Cafeterias
5. Smart Hostels
6. Smart Sports Grounds
7. Smart Transport Services
8. Smart Security Systems
9. Smart Energy Management
10. Smart Waste Management
11. Smart Water Management
12. Smart Air Quality Management
13. Smart Noise Management
14. Smart Disaster Management
15. Smart Crisis Management
16. Smart Risk Management
17. Smart Compliance Management
18. Smart Governance
19. Smart Leadership
20. Smart Innovation

SAWKAR INSTITUTE SCAMPUS

1. Smart Classrooms
2. Smart Labs
3. Smart Libraries
4. Smart Cafeterias
5. Smart Hostels
6. Smart Sports Grounds
7. Smart Transport Services
8. Smart Security Systems
9. Smart Energy Management
10. Smart Waste Management
11. Smart Water Management
12. Smart Air Quality Management
13. Smart Noise Management
14. Smart Disaster Management
15. Smart Crisis Management
16. Smart Risk Management
17. Smart Compliance Management
18. Smart Governance
19. Smart Leadership
20. Smart Innovation



SAMARTH EDUCATIONAL TRUST
SAWKAR INSTITUTES
 Satara
 Website: www.sets.edu.in

ARVIND GAVALI
COLLEGE OF ENGINEERING
 NAAC Accredited Website : www.agce.edu.in

Approved by AICTE, New Delhi & Govt. of Maharashtra
 & Affiliated to Dr.Babasaheb Ambedkar Technological University, Lonere
 Varye, Satara
 Principal : Dr.Vilas Pharande

Institute Code:
6545



Mob : 9957100100
 9069700100

B.Tech.	POLYTECHNIC
Mechanical Engg.	Mechanical Engg.
E&TC Engg.	E&TC Engg.
Computer Science & Engg.	Computer Science & Engg.
Electrical Engg.	Computer Engg.
Civil Engg.	Civil Engg.

M.Tech. Heat Power Engineering (Mechanical)

Industry Oriented Skill Based
B.Vocational Degree Program

Start your Professional Career after 12th or H.S.C

B.Voc Programs

- Data Science
- Industrial Automation
- Software Development
- Industrial Tool Manufacturing

Eligibility

- 10+2 pass in any stream with minimum 50% marks
- ITI / Diploma

No CET/JEE Entrance Examination



DBATU
Academic Excellence Award



NAAC Accredited from 2016



AICTE- CII Survey
Ranked as Platinum & Gold



EDUCATIONAL EXCELLENCE AWARDS - 2021
BANGALORE, KARNATAKA

SAWKAR SCIENCE COLLEGE

Std. 11th & 12th Science
 Computer Science (200 Marks)
 Crop Science (200 Marks)

Our Placement



Samiksha Vanjole
COGNIZANT
(Programmer Analyst)



Pratiksha Sutar
TATA Consultancy Services
(System Engineer)



Anushka Deshmukh
Infostretch Corporation India LTD.



Tanuja Chavan
WIPRO LTD, Pune
(Project Engineer)



Prajakta Nikam
INFOSYS LTD.
(Systems Engineer)



Akash Desai
TATA Communication Transformation Services

Admission Office
 427,Shaniwar Peth, Behind Sawkar Transport Office, Satara. ■ Ph : (02162) 230100 ■ Mob : 8975456700



SAMARTH EDUCATIONAL TRUST
SAWKAR INSTITUTES
 Website: www.sets.edu.in
Satara

SAWKAR HOMOEOPATHIC MEDICAL COLLEGE

Approved by CCH, New Delhi & Govt. of Maharashtra. Affiliated to MUHS, Nashik
 A.M.1/1, Additional MIDC, Degaon Road, Satara-415 004

Website : www.sawkarhmc.com **Mob : 8237913663**
Director : Dr.Ravindra Bhosale **9850111012**

Choice Code	Course Name
4115	B.H.M.S.

Eligibility

- Candidate must have passed 12th Science with PCB Group
- 50 % marks for open & 45 % marks for reserved category
- NEET compulsory
- Marks criteria as decided by Government





SAWKAR PHARMACY COLLEGE

website : www.sawkarpharmacycollege.com
 Approved by PCI, New Delhi & Govt. of Maharashtra & Affiliated to MSBTE, Mumbai

Jaitapur, Satara. **Mob : 7796000100**
 Principal : Dr.Vasant Lokhande **8275206073**

Choice Code	Course Name
6492	D.Pharm



ARVIND GAVALI COLLEGE OF PHARMACY

website : www.arvindgavalipharmacycollege.com
 Approved by PCI, New Delhi & Govt. of Maharashtra & Affiliated to Shivaji University.

Jaitapur, Satara. **Mob : 9665570772**
 Principal : Dr.P.J.Shirote **7796000100**

Choice Code	Course Name
6393	D.Pharm, B.Pharm, M.Pharm





Fig 10.1.5 b7 Admission information brochure

v) Hoardings

Institute disseminate institute information through hoardings at prominent location in the district viz. Koregaon, Karad, Wai, Rahimatpur, and Medha.



Fig 10.1.5 b8 Admission information Hoardings

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Institute has a well-defined financial policy which ensures optimal utilization of finances for academic, administrative and research activities. The Institute is being run with self sufficient funds generated from tuition fees and from Samarth Education Trust. In case of activities like expansion and renovation of the building, the management always supports by providing required finance. Financial planning is done efficiently at the beginning of the academic year and the budget is approved by the Governing Body.

Optimum utilization of funds is ensured through: -

Adequate funds are allocated for effective teaching learning practices that include Orientation Programmes, Workshops, Interdisciplinary activities, Training programmes, Refresher Courses that ensures quality education.

Budget is utilized to meet day to day operational and administrative expenses and maintenance of fixed assets. Enhancement of library facilities needs to augment learning practices and accordingly requisite funds are utilized every year.

Adequate funds are utilized for development and maintenance of infrastructure of the Institute.

Partial funds are allocated for social service activities as part of social responsibilities through NSS and NCC. Institute provides financial assistance for mini projects.

Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years

Total Income at Institute level: For

CFY, CFYm1, CFYm2 & CFYm3 CFY: (Current Financial Year),

CFYm1: (Current Financial Year minus 1),

CFYm2: (Current Financial Year minus 2) and

CFYm3: (Current Financial Year minus 3)

Table B.10.2a – CFY (2022-23)

Total Income (Amount)				Actual expenditure (till...): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
74954259	0	0	133450	75973630	12625864.8	8900	80553.08695

Table B.10.2a - CFY (2021-22)

Total Income (Amount)				Actual expenditure (till...): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
79606611	0	0	367635	68270674	10630726	78700	62982.54

Table B.10.2a - CFYm1 (2020-21)

Total Income (Amount)				Actual expenditure (till...): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
81414627	0	0	462923	61816533	10297456	74700	53197

Table B.10.2a -CFYm2(2019-20)

Total Income (Amount)				Actual expenditure (till...): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
64740364	0	0	734740	63512329	10009259	288619	63904.94

Table B.10.2a- CFYm3(2018-19)

Total Income (Amount)				Actual expenditure (till...): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
62384164	0	0	337745	57557774	14197280	151600	65132.84

Table B.10.2b

Items	Budgeted in 2022- 2023	Actual Expenses in 2022- 2023 till	Budgete d in 2021- 2022	Actual Expenses in 2021- 2022 till	Budgeted in 2020- 2021	Actual Expenses in 2020- 2021 till
Infrastructure Built-Up	11,00,000	10,28,673	3300000	3104976	0	0
Library	80,000	70,845	23000	30445	35000	13570
Laboratory equipment	11,00,000	10,60,990	1080000	1014157	655000	594030
Laboratory consumables	17,75,000	16,47,092	1120000	1023030	1055000	674170

Teaching and nonteaching staff salary	6,91,12,000	6,52,98,451	65100000	61189875	63560000	57326373
Maintenance and spares	28,75,000	27,00,109	3190000	2992063	1350000	1224440
R&D	3,50,000	3,14,190	290000	259388	90000	74700
Training and Travel	26,18,000	24,16,915	1710000	1659560	1600000	1474093
Miscellaneous expenses *(All remaining recurring exp., excl. Depreciation)	2,55,000	2,14,685	159500	148374	135000	113427
Others, specify (All remaining Capital exp.)	3,13,56,000	1,64,28,774	15177000	11686365	27540000	11287915
Total	11,06,21,000	9,11,80,725	91149500	83108233	96020000	72782718

Items	Budgeted in 2019-2020	Actual Expenses in 2019- 2020 till	Budgeted in 2018- 2019	Actual Expenses in 2018- 2019 till
Infrastructure Built-Up	0	0	0	0
Library	167000	156491	400000	138375
Laboratory equipment	850000	797104	430000	277400
Laboratory consumables	1640000	1479508	1536000	2051900
Teaching and nonteaching staff salary	63560000	57623428	69300000	50222741
Maintenance and spares	1985000	1850670	1882000	1812399
R&D	320000	288619	180000	151600
Training and Travel	1705000	1496097	1077000	2106971
Miscellaneous expenses *(All remaining recurring exp., excl. Depreciation)	91000	77900	173000	293916
Others, specify (All remaining Capital exp.)	25374000	10953838	28496520	15267127
Total	95692000	74723655	103474520	72322429

10.2.1 Adequacy of budget allocation**(10)**

During the assessment years, the institute allocated an adequate budget. Budget requirements under 'recurring' and 'non-recurring' heads are collected from all the departments and sanctions before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. The institution carefully monitors the expenses so that the necessities are met without affecting the smooth working of the institution. The management has been very efficient in doing this over the past several years.

Adequacy of budget allocation:

10.2.1 Adequate budget allocation for institute

Sr. No	Assessment Year	Allocated Budget	Adequate/ Non-Adequate
1	2022-23	11,06,21,000	Adequate
2	2021-22	9,11,49,500	Adequate
3	2020-21	9,60,20,000	Adequate
4	2019-20	9,56,92,000	Adequate
5	2018-19	10,34,74,520	Adequate

10.2.2 Utilization of allocated Funds**(15)**

Utilization of allocated Funds:

The Principal of the College allocates funds. Department Heads / Section-In charge is informed to utilize the extent of funds allocated against their proposed budget. Major works like construction, up-gradation of existing infrastructure, procurement and maintenance of common utilities, housekeeping, procurement of furniture, etc. are controlled directly by the Principal. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables, etc. are initiated from the respective departments and the funds are released on a case by case basis from the accounts office of the college on approval by the Principal. During the last three years, the budget was utilized to meet expenses such as staff salary, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel, etc.

Recurring and non-recurring expenditure is made in the following manner.-

- The requirement of purchase initiated by functional heads.
- It is further verified by the principal.
- On the basis of priority requirement quotations invited from a reputed supplier.
- Comparative statements are prepared and presented before the purchase committee.
- By considering the urgency of requirement and amount involved negotiations are called either before
management or principal.
- After negotiations purchase is initiated by placing a purchase order or work order.
- When equipment or product is received the same is verified for quality and fulfilment of the requirement. Also if training or testing is required then the same is done by the respective functional head.
- On receipt of a satisfactory remark from the respective department, it is recorded in the inward register at the central store. The same is given to the respective department.

- After that bill along with material inward note is submitted to the account section for the payment purpose.
- Account section does the scrutiny of the document and on receiving the sanction of principal or management actual payment is made.

Table 10.2.2 Utilization of allocated Funds of Institute

Sr. No	Assessment Year	Allocated Budget	Utilized Budget	Utilized Percentage
1	2022-23	11,06,21,000.00	9,11,80,725.65	82.43
2	2021-22	9,11,49,500.00	8,31,08,233.00	91.18
3	2020-21	9,60,20,000.00	7,27,82,718.00	75.80
4	2019-20	9,56,92,000.00	7,47,23,655.43	78.09
5	2018-19	10,34,74,520.00	7,23,22,429.17	69.89

Note: Difference in allocated and utilised budget is more, since the institute prepares budget by considering bank loan instalment (Principle+ interest).But, in profit & loss statement only interest amount is reflected.

10.2.3 Availability of the audited statements on the institute's website (05)

Audited statements of financial years (2022-23, 2021-22, 2020-21, 2019-20, and 2018-19) are available on institute website.

Weblinks:

Audit report 2022-23 <https://agce.edu.in/auditreport2022-23>

Audit report 2021-22 <https://agce.edu.in/auditreport2021-22>

Audit report 2020-21 <https://agce.edu.in/auditreport2020-21>

Audit report 2019-20 <https://agce.edu.in/auditreport2019-20>

Audit report 2018-19 <https://agce.edu.in/auditreport2018-19>

10.3 Program Specific Budget Allocation, Utilization (30)

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3 CFY: (Current Financial Year),

CFYm1: (Current Financial Year minus 1),

CFYm2: (Current Financial Year minus 2) and

CFYm3: (Current Financial Year minus 3)

Table B.10.3a: CFY (2022-23)

(Amount) (2233406/-)		Actual expenditure (till...): (Amount) (2078601/-)		Total No. Of Students (269)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
308128	1925278	295125	1783476	7727.14

Table B.10.3a: CFY(2021-22)

(Amount) (1775147)		Actual expenditure (till...): (Amount) (1670686)		Total No. Of Students (273)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
288561	1516586	244872	1425814	6119.73

Table B.10.3a: CFYm1(2020-21)

(Amount) (1207600)		Actual expenditure (till...): (Amount) (1032700)		Total No. Of Students (257)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
170600	1037000	150560	882140	4018.29

Table B.10.3a: CFYm2(2019-20)

(Amount) (1821500)		Actual expenditure (till...): (Amount) (1661100)		Total No. Of Students (226)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
360500	1461000	338900	1322200	7350

Table B.10.3a: CFYm3(2018-19)

(Amount) (1959700)		Actual expenditure (till...): (Amount) (1873500)		Total No. of Students (271)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
631000	1328700	113900	1759600	6913

Table B.10.3b

Items	Budgeted in 2022- 2023	Actual Expenses in 2022- 2023 till	Budgeted in 2021- 2022	Actual Expenses in 2021- 2022 till	Budgeted in 2020- 2021	Actual Expenses in 2020- 2021 till
Laboratory equipment	269000	259460	253169	237735	162000	147200
Software	19564	18340	0	0	0	0
Laboratory consumables	434068	402790	262546	239814	261000	167000
Maintenance and spares	703070	660300	747790	701390	335000	303340
R&D	85590	76830	68000	60800	22500	18500
Training and Travel	640200	591056	400850	389030	385000	365200
Miscellaneous expenses	62350	52500	37400	34780	33500	28100
Total	2213842	2061276	1769755	1663549	1199000	1029340

Items	Budgeted in 2019- 2020	Actual Expenses in 2019- 2020 till	Budgeted in 2018- 2019	Actual Expenses in 2018- 2019 till
Laboratory equipment	216000	202900	118000	76000
Software	102000	96200	403000	0
Laboratory consumables	418000	377000	421000	562800
Maintenance and spares	505000	471100	516000	497100
R&D	81000	73400	49300	41600
Training and Travel	434000	380800	295000	577500
Miscellaneous expenses	23000	20900	47400	80600
Total	1779000	1622300	1849700	1835600

10.3.1 Adequacy of budget allocation**(10)**

During the assessment years, the institute allocated an adequate budget. Budget requirements under 'recurring' and 'non-recurring' heads are collected from all the departments and sanctions before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. The institution carefully monitors the expenses so that the necessities are met without affecting the smooth working of the institution. The management has been very efficient in doing this over the past several years.

10.3.1 Adequate budget allocation Mechanical Department

Sr. No	Assessment Year	Allocated Budget	Adequate/ Non-Adequate
1	2022-23	2233406	Adequate
2	2021-22	1775147	Adequate
3	2020-21	1207600	Adequate
4	2019-20	1821500	Adequate
5	2018-19	1959700	Adequate

10.3.2 Utilization of Allocated Funds

Utilization of allocated Funds:

The Principal of the College allocates funds. Department Heads / Section-In charge is informed to utilize the extent of funds allocated against their proposed budget. Major works like construction, up-gradation of existing infrastructure, procurement and maintenance of common utilities, housekeeping, procurement of furniture, etc. are controlled directly by the Principal. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables, etc. are initiated from the respective departments and the funds are released on a case by case basis from the accounts office of the college on approval by the Principal. During the last three years, the budget was utilized to meet expenses such as staff salary, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel, etc.

Recurring and non-recurring expenditure is made in the following manner.-

- The requirement of purchase initiated by functional heads.
- It is further verified by the principal.
- On the basis of priority requirement quotations invited from a reputed supplier.
- Comparative statements are prepared and presented before the purchase committee.
- By considering the urgency of requirement and amount involved negotiations are called either before management or principal.
- After negotiations purchase is initiated by placing a purchase order or work order.
- When equipment or product is received the same is verified for quality and fulfilment of the requirement. Also if training or testing is required then the same is done by the respective functional head.
- On receipt of a satisfactory remark from the respective department, it is recorded in the inward register at the central store. The same is given to the respective department.
- After that bill along with material inward note is submitted to the account section for the payment purpose.

Account section does the scrutiny of the document and on receiving the sanction of principal or management actual payment is made.

Table 10.3.2 Utilization of allocated Funds of Mechanical Department

Sr. No	Assessment Year	Allocated Budget	Utilized Budget	Utilized Percentage
1	2022-23	2233406	2078406	93.07
2	2021-22	1775147	1670686	94.12
3	2020-21	1207600	1032700	85.52
4	2019-20	1821500	1661100	91.19
5	2018-19	1959700	1873500	95.60

10.4 Library and Internet (20)**10.4.1 Quality of learning resources (hard/soft) (10)****A. Relevance of available learning resources including e-resources**

Institute's central Library is one of the main support services of institute. The main aim of central library is to fulfil the information need of the institute community by providing them necessary information, knowledge, various services and access to e-resources. The Central Library is well equipped with unique collection of encyclopedia, handbooks, text books, reference books and journals as well as eBooks. It supports computerized operations and services. It has a collection of more than ...documents which include books and bound volumes of periodicals. The collection is mainly strong in science & technology. Following is summary of books & journal.

Table B 10.4.1.a Summary of Books and Journals

Sr. No	Branch	Titles	Volumes	National Journals	International Journals(online)
1	Computer Science & Engineering.	832	3506	16	160
2	Electronics & Telecommunication Engineering.	754	3869	13	162
3	Civil Engineering	601	3265	13	273
4	Electrical Engineering	669	3107	5	61
5	Mechanical Engineering	693	4525	16	190
6	Core Science	238	2828	3	65
	Total	3787	21100	66	911

Table B: 10.4.b Purchase records of E-Resources

Year of Purchase	Particulars
2022-23	DELNET
2021-22	DELNET
2020-21	DELNET
2019-20	DELNET
2018-19	DELNET

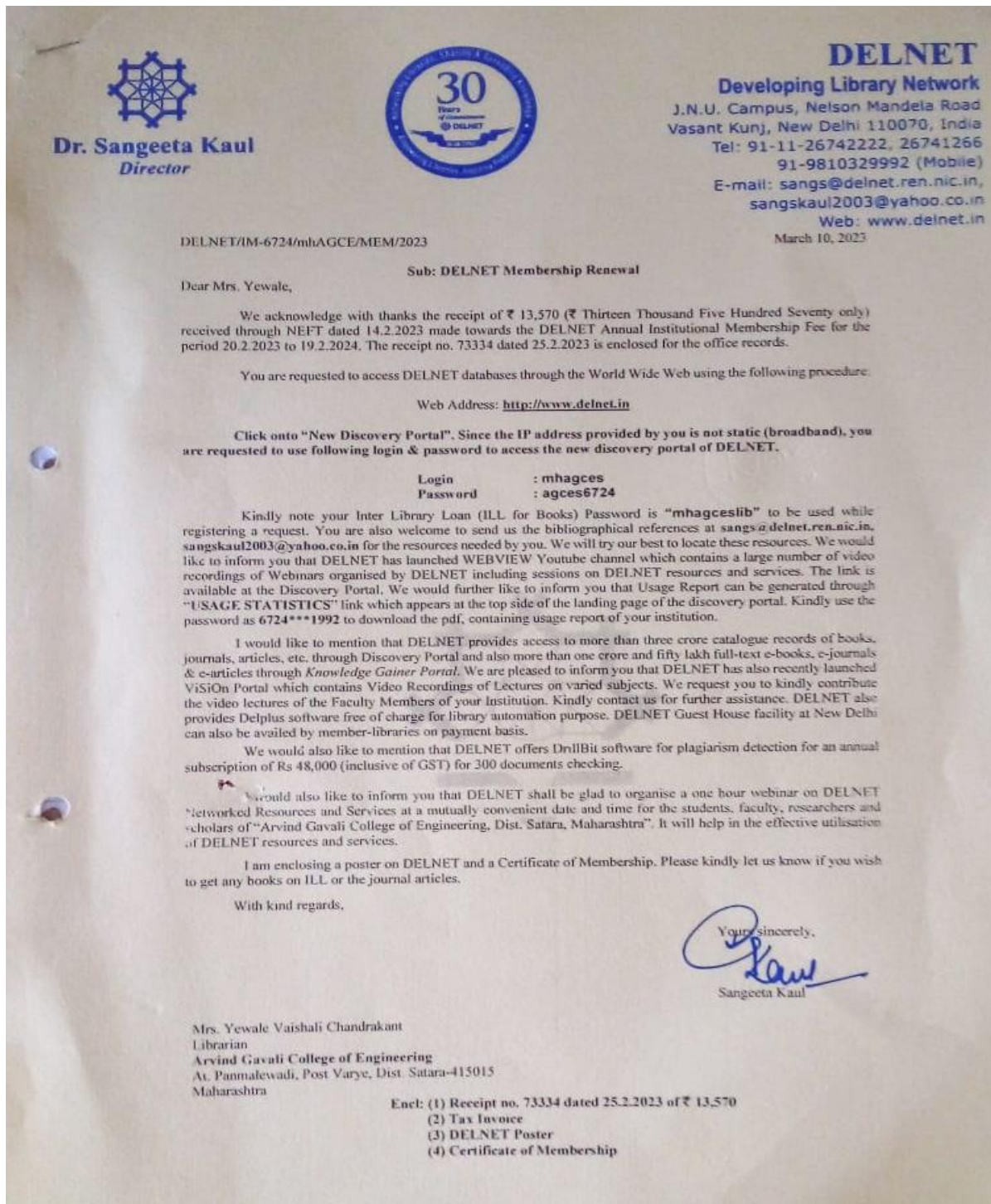


Fig 10.4a DELNET e Resource subscription 2023-24

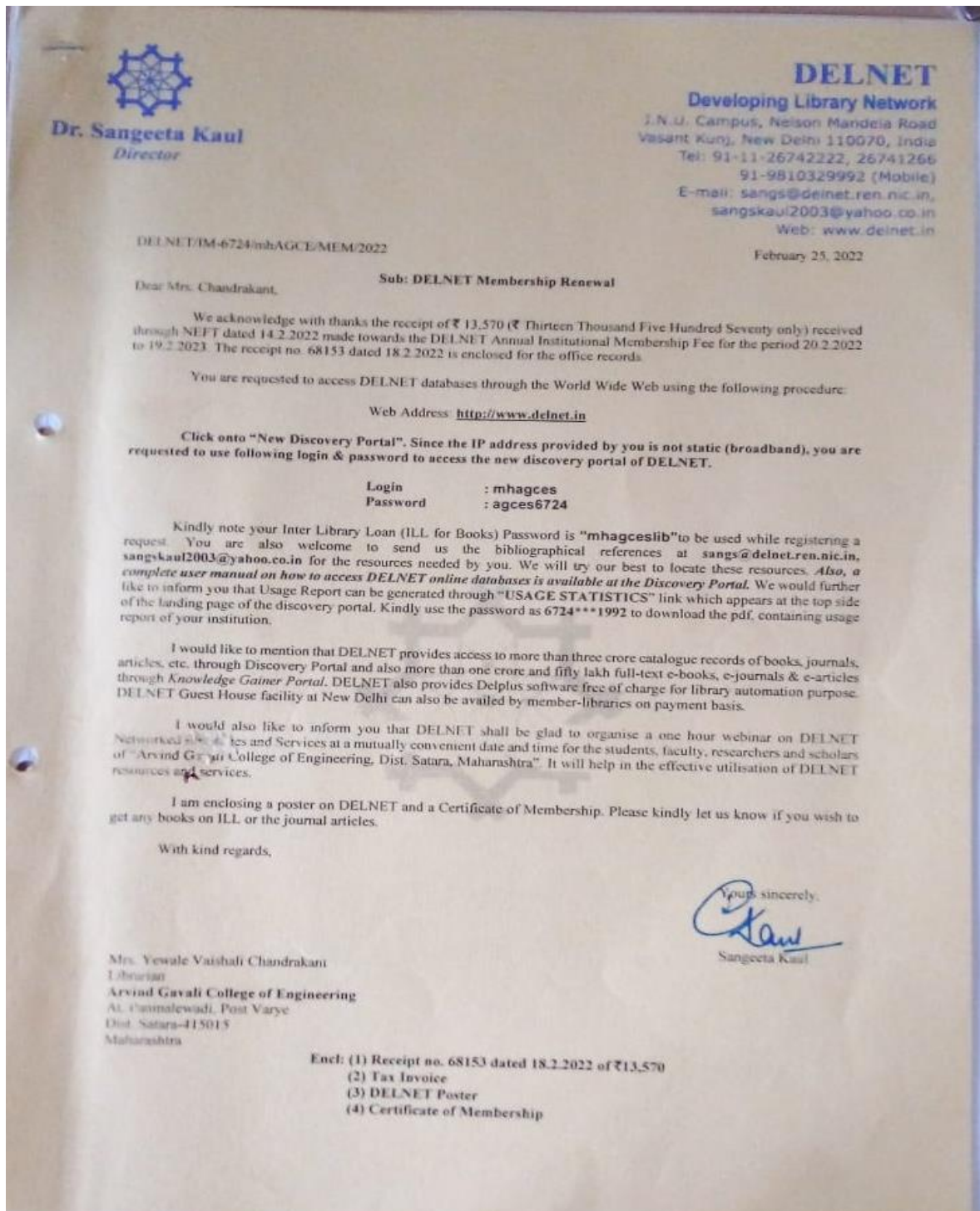


Fig 10.4b DELNET e Resource subscription 2022-23

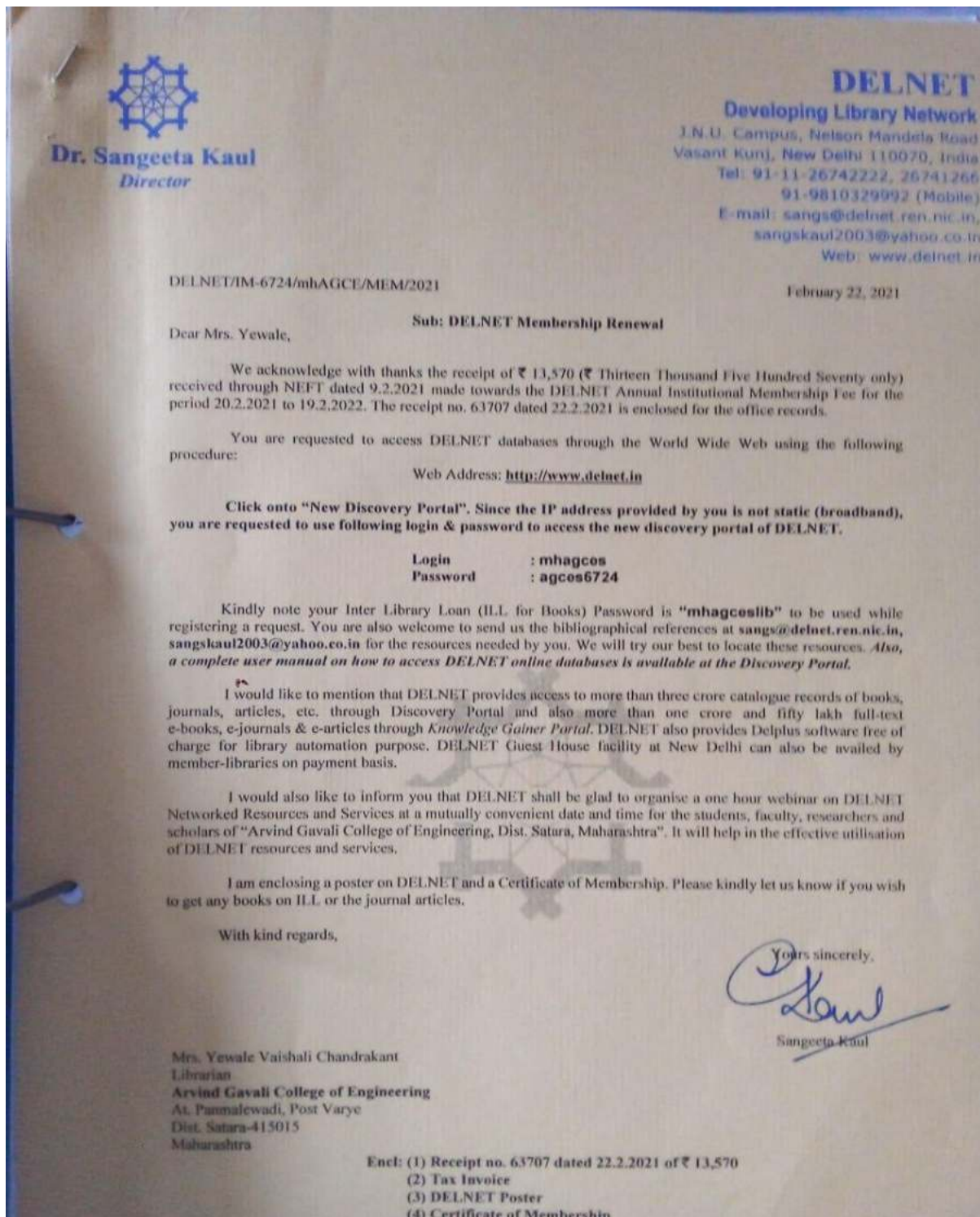




Fig 10.4c DELNET e Resource subscription 2021-22



Dr. Sangeeta Kaul
Network Manager



DELNET
Developing Library Network
J. N. U. Campus, Nelson Mandela Road
Vasant Kunj, New Delhi 110070, India
Phone : 91-11-26742222, 26741266
91-9810329992 (Mobile)
Fax : 91-11-26741122
E-mail : sangs@delnet.ren.nic.in,
sangskaul2003@yahoo.co.in
Web : www.delnet.~~in~~

February 15, 2020

DELNET/IM-6724/mhAGCE/MEM/2020

Sub: DELNET Membership Renewal

Dear Mrs. Yewale,

We acknowledge with thanks the receipt of ₹ 13,570 (₹ Thirteen Thousand Five Hundred Seventy only) received through NEFT dated 12.02.2020 made towards the DELNET Annual Institutional Membership Fee for the period 20.02.2020 to 19.02.2021. The receipt no. 60007 dated 15.02.2020 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: <http://www.delnet.in>

Click onto "New Discovery Portal". Since the IP address provided by you is not static (broadband), you are requested to use following login & password to access the new discovery portal of DELNET.

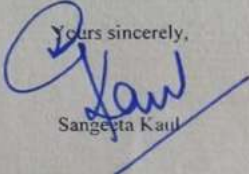
Login : mhagces
Password : agces6724

Kindly note your Inter Library Loan (ILL for Books) Password is "mhagceslib" to be used while registering a request. You are also welcome to send us the bibliographical references at sangs@delnet.ren.nic.in, sangskaul2003@yahoo.co.in for the resources needed by you. We will try our best to locate these resources. Also, a complete user manual on how to access DELNET online databases is available at the Discovery Portal.

I would like to mention that DELNET provides access to more than three crore catalogue records of books, journals, articles, etc. through Discovery Portal and also more than one crore full-text e-books, e-journals & e-articles through Knowledge Gainer Portal. DELNET also provides Delplus software free of charge for library automation purpose. DELNET Guest House facility at New Delhi can also be availed by member-libraries on payment basis.

I am enclosing a poster on DELNET and a Certificate of Membership. Please kindly let us know if you wish to get any books on ILL or the journal articles.

With kind regards,

Yours sincerely,

Sangeeta Kaul

Mrs. Yewale Vaishali Chandrakant
Librarian
Arvind Gavali College of Engineering
At. Panmalewadi, Post Varye
Dist. Satara-415015
Maharashtra

Encl: (1) Receipt no. 60007 dated 15.02.2020 of ₹ 13,570/-
(2) Tax Invoice
(3) DELNET Poster
(4) DELNET Brochure
(5) Certificate of Membership

Fig 10.4d DELNET e Resource subscription 2020-21

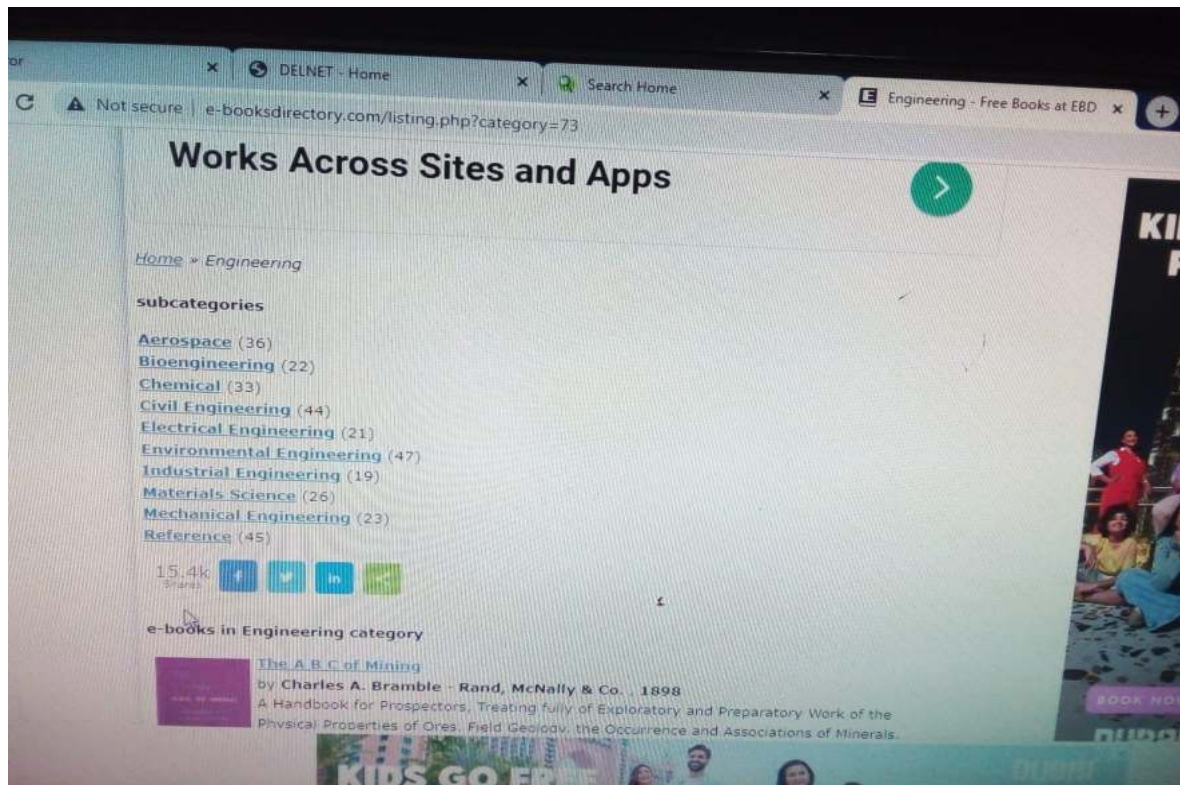


Fig 10.4e DELNET e Resource e Journal details



Fig 10.4f Students using DELNET e Resource e Journal details

Table 10.4.1. C Summary of E resources.

Sr. No.	Other E-Recourses& Particulars
1	DELNET
2	NDL
3	Spoken Tutorials
4	Swayam NPTEL Local Chapter

B. Accessibility to students:

AGCE is committed to providing equal access to library resources, services, and facilities for all library users. It is a priority for the AGCE Library staff to assist with the retrieval of books and with the use of electronic and e resources. All the students and staff members can assess their library account through KOHA Software, avail e-books through their individual ID and password provided to them, through a static IP address 103.159.152.198:8080.

Table B 10.4.1.d Library service details

Library Services	Yes
Carpet area of library (in sq. mtr)	443 sqm
Number of seats in	159
Number of users (issue book) per day	25 to 30 averages
Number of users (reading space) per day	76
Timings: On working day On holiday	8.00 am to 7.30 pm.
Number of library staff	3

Number of library staff with degree in Library Management	2
Library Management Computerization for search, indexing, issue/return records	KOHA
Bar coding used	YES
Library additional services	<p>Internet, Journals, Technical Magazine, Conference Proceedings, Newspaper, Photocopy, Printing & Scanning Soft copies of University Question papers & Syllabus shared through email</p> <p>Extended reading room facility during exam period Orientation to newly admitted students.</p> <p>Online public access catalogue.</p>

C. Support to students for self- learning activities:

AGCE library helps its students in self-learning activities in following way:

1. By providing facilities likes computers, internet and e-resources. The library has separate section where 20 computers with high speed internet are available to provide e-resources facilities to the student & faculty members. Users may access, read or download the e-resources e.g. e-books, e-journals, e-magazine, e-newspaper etc.
2. In addition to this, users may watch NPTEL video lectures of their interest here, which have been prepared by eminent professors of IITs & IISc. MIT library.
3. The SWAYAM PRABHA is a group of 32 DTH channels devoted to telecasting of high quality educational programmes on 24X7 basis using the GSAT 15 satellite. Every day, there are new content for at least (4) hours which would be repeated 5

more times in a day, allowing the students to choose the time of their convenience. The channels are uplinked from BISAG, Gandhinagar. The contents are provided by NPTEL, IITs, UGC, CEC, IGNOU, NCERT and NIOS.

4. One more important thing here is OPAC (Online Public Access Catalogue). It allows to the users to know about the library holding their account such as dues on his/her account, due date for returning material etc. The users may also access institutional repository. In this centre where they can found project report, old question papers, institute magazines/ journals, syllabus, and many more institute publications.

In addition to above, users can access the NDL (National Digital Library of India), which is very useful for students, faculty members and researchers. Here, they can search e-books, article, audio lecture video lecture, question paper and many more materials.

10.4.2 Internet**(10)****Table 10.4.2 Internet information of institute**

Name of the Internet provider	Neha Infonet, Satara
Available band width	300 Mbps
Wi-Fi availability	Yes, All College Campus & Hostel Bill and Specification is attached
Internet access in labs, classrooms, library and offices of all Departments	Yes, Internet access is available in every laboratory and department Network diagram is attached
Security arrangements (Firewall)	Microtec layer 3 Manageable Switch is used to control every Internet user

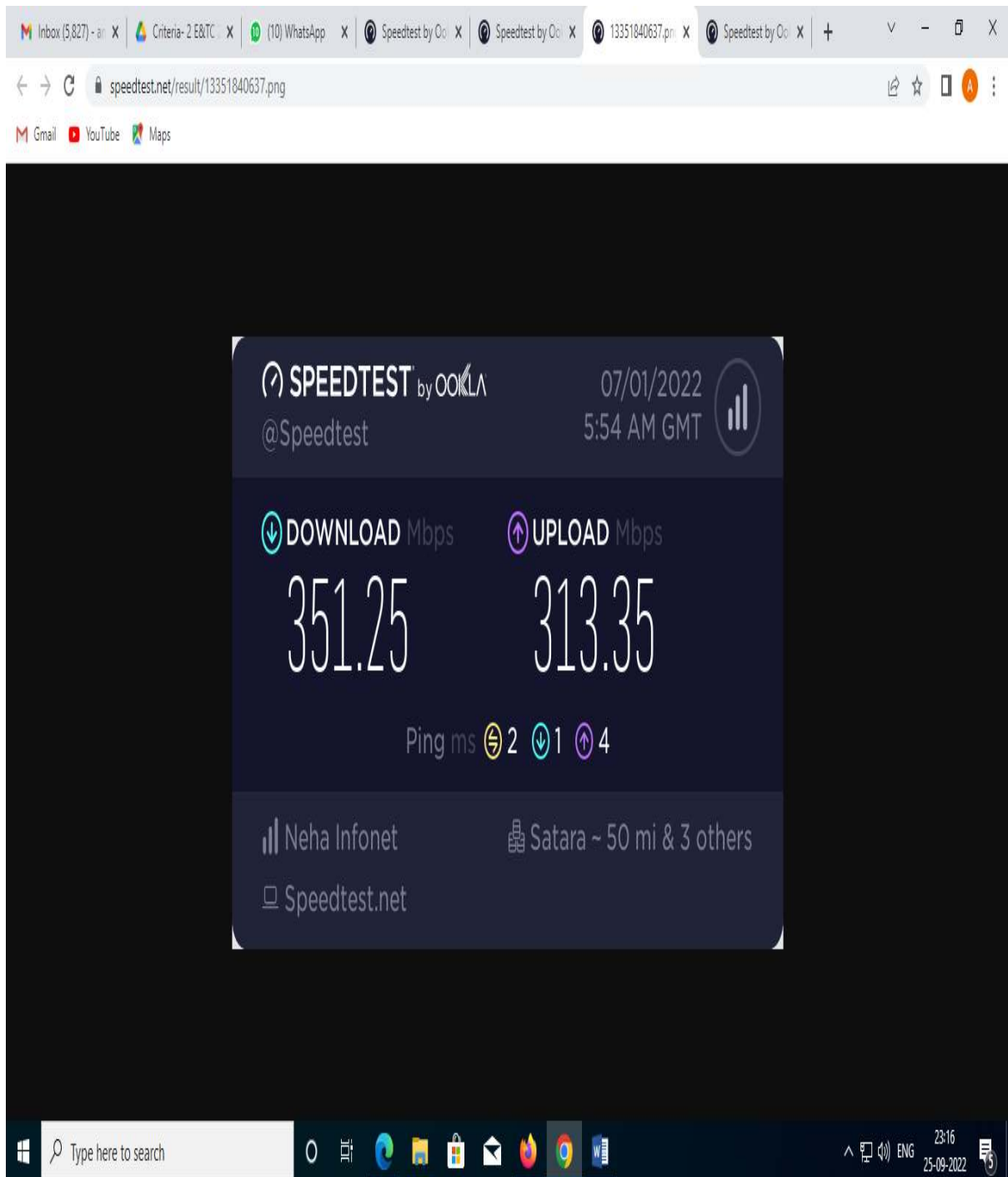


Fig 10.4.2.a Available band width: Speed Test 300 MBPS

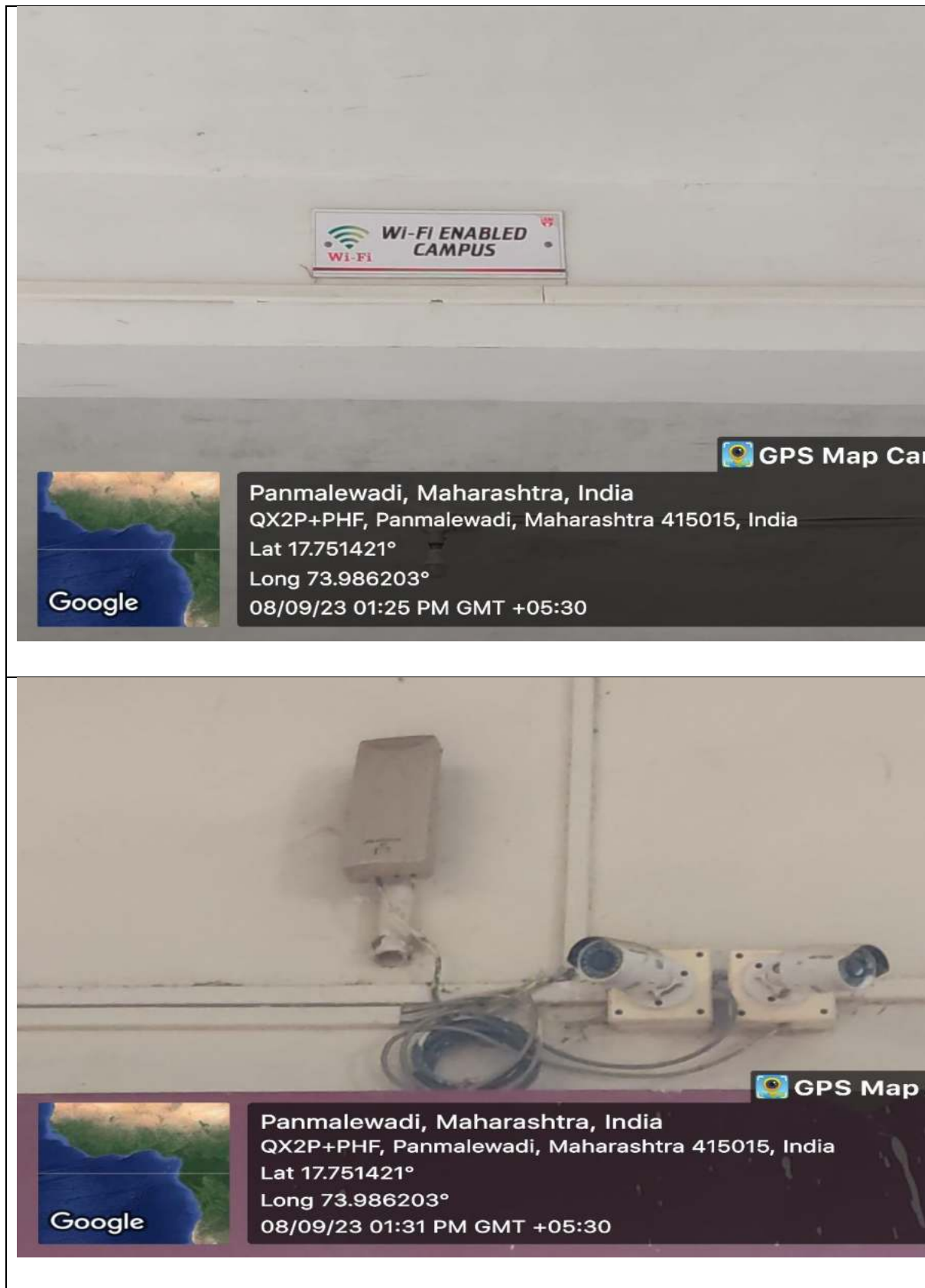


Fig 10.4.2.b Wi-fi facility available at institute

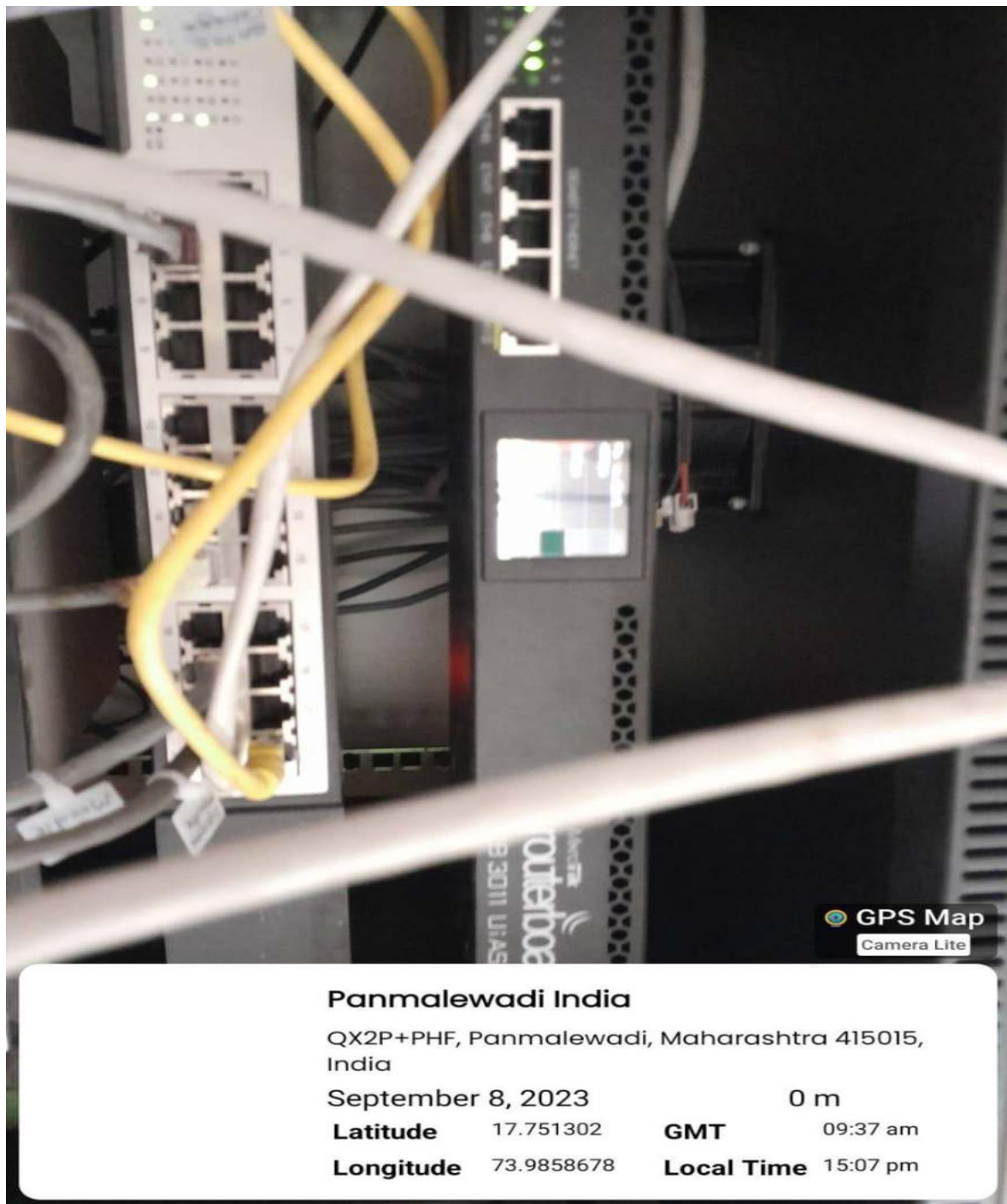


Fig 10.4.2.c Microtec layer 3 Manageable Switch