



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 Civil Engineering

| CRITERION | Vision, Mission and Program Educational | 60 |
|-----------|---|----|
| 01 | Objectives | |
| | | |

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 and educate value based knowledge in civil engineering to meet the global challenges for overall development

MISSION of Department

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.

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 solve civil engineering problems by applying basic knowledge of science and technology

PEO 2: The graduates will be able to develop solutions using modern engineering tools and techniques in civil engineering to solve industry and society based problems.

PEO 3: The graduates will be able to pursue lifelong learning to maintain the pace with developments in technology.

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 takes extensive efforts to publish and disseminate vision, mission of the department and PEOs of the program to all internal and external stake holders through various media such as digital, print through student progress record, vinyl records and interaction through meetings in offline and online mode as well.

Table: 1.1 shows details of publication and dissemination of statements

Table 1.1: Stakeholders of the Program

| Stakeholder | Туре | Purpose/relevance | Mode of Publication and dissemination |
|------------------------------|----------|--|---|
| Management | Internal | Defining development plan and road map, Providing physical, human and financial resources and Formulation of policies. | 1. Display boards at meeting/interaction locations for all the visiting and working stake holders. (Department Entrance, HOD Office, Faculty rooms, Laboratories, Classrooms, Department meeting room/Library) |
| Faculty and Support Staff | Internal | Implementer (Contributor) of Policies Key contributor in developing/implementing growth plan, Responsible for producing competent graduates/product from the Institution | 2. Department Newsletter, Course Manuals and Laboratory Manuals, Faculty Course File, Information Brochures, Event& industrial visit reports, Academic diary, Internal Test Assessment book. 3. In digital form, the statements are published through Institute website, Email, social media, Screen saver, Event Presentations, CANVA platform. |
| Students | Internal | Responsible for creating institute reputation & outcome. | |

| Employers | External | Employing graduates and making an assessment on competence and employability | 4. The dissemination is observed through online/offline mode such as induction programs, counseling round, administrative and stake |
|--|----------|---|---|
| Industry | External | Employer as well as participant in curriculum development and industry – institute activities. | holders meeting. |
| Alumni | External | Able to co-relate learning and professional practice, Provides appropriate inputs to the department/program Committee | |
| Funding Agencies | External | Provides financial assistance to the Institution and interacts with the Principal Investigator/Faculty of the department /program | |
| Parents | External | Perception on the support provided by department/ program for shaping up the career of their wards | |
| Regulatory/ Accrediting Authorities/Prof essional bodies | External | Prescribes norms and standards to ensure quality assurance and enhancement | |
| Society | External | Provides intangible outcome from the Institution perspective | |

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/) | V | √ |
| 2 | Institute Moodle : https://103.159.152.195/moodle/ | V | |
| 3 | Curriculum Course File | V | |
| 4 | Academic Diary | $\sqrt{}$ | |
| 5 | Internal Test Assessment Book | V | |
| 6 | Department Notice Board | V | |
| 7 | Laboratories | $\sqrt{}$ | |
| 8 | Staff Rooms | V | |
| 9 | Class Rooms | V | |
| 10 | Department Newsletter | V | V |
| 11 | Industry Institute Interaction Meets | | ٧ |

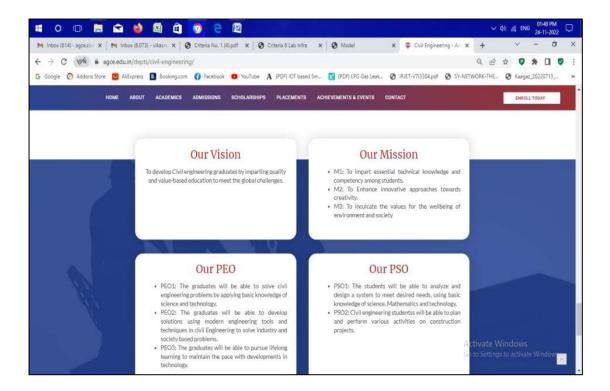


Fig.1.3 a Screenshot of Vision- Mission & PEOs disseminated on Website

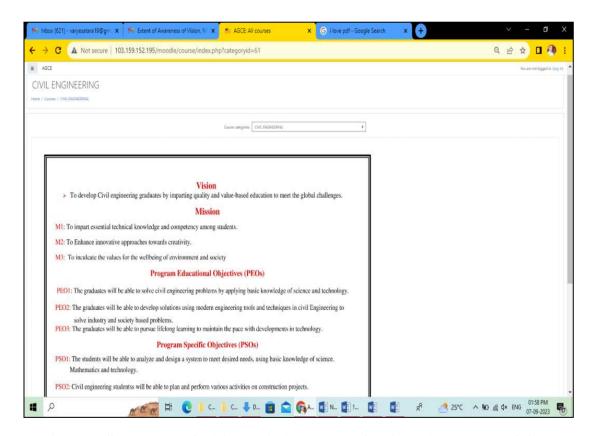


Fig.1.3 b Screenshot of Vision, Mission and PEOs disseminated on MOODLE

1.3 B: Process of Dissemination

- ➤ The dissemination of statements is observed through stakeholders' interaction, having specific relevance of vision, mission elements and PEOs in planning, delivery and execution of academic program.
- The roadmap towards successful career is explained through vision, mission elements and PEOs, during induction program.
- During the guidance and counseling round, the students are sensitized about career plan and higher studies in line with vision, mission & PEOs
- During the administrative meets, it is observed that the policies, execution and monitoring of academic plan are in line with vision, mission elements and PEOs.
- ➤ The Vision and Mission is disseminated through presentation by Head of department, Program Coordinator and Course Coordinators at commencement of the term and during sessions periodically.
- ➤ Importance of Vision and Mission along with its relevance to the Program Outcomes is presented to the students by the faculty members during sessions.
- The institute vision, mission and departmental vision, mission and program educational outcomes has been described in each and every event (technical& non-technical), meetings with DAB, parents meet etc.
- ➤ Head of Department in association with Program Coordinator educates the faculty members about importance and relevance of Vision and Mission with Program Educational Objectives and Program Outcomes.

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

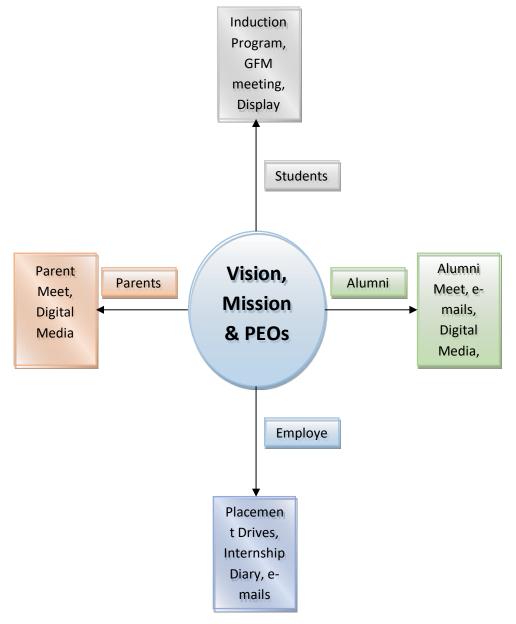


Fig.1.3 c Awareness of Vision, Mission & PEOs

The Head of Department has stated the vision, mission & PEOs in meetings with internal & external stakeholders viz. Departmental Advisory Board (DAB) meet, Parents meet, Employers meet, Alumni meet, Students meet through GFM, faculty meet, Events Inauguration etc. The importance of vision and its achievements through mission with the relevance of program educational outcomes (PEOs) have been described to internal & external stakeholders to know the continuous progress of department& outcome based education.

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

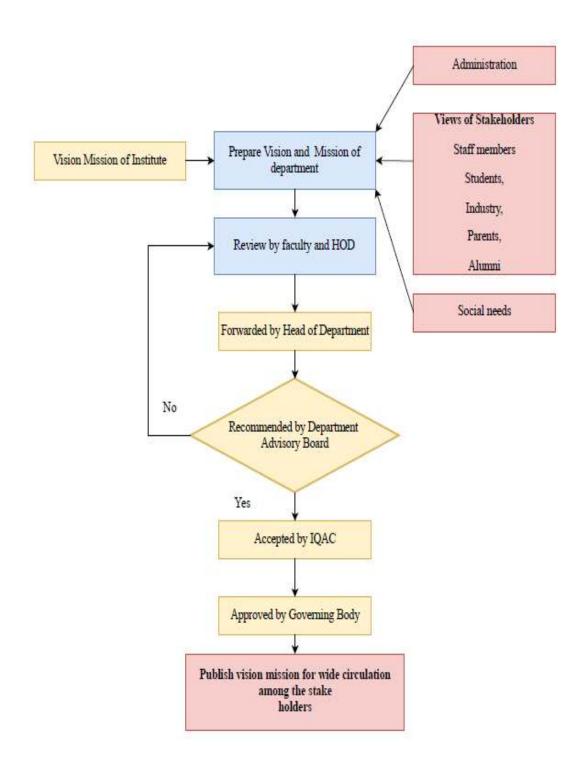


Figure 1.4 a: Process of defining the Vision & Mission of Department

• 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.

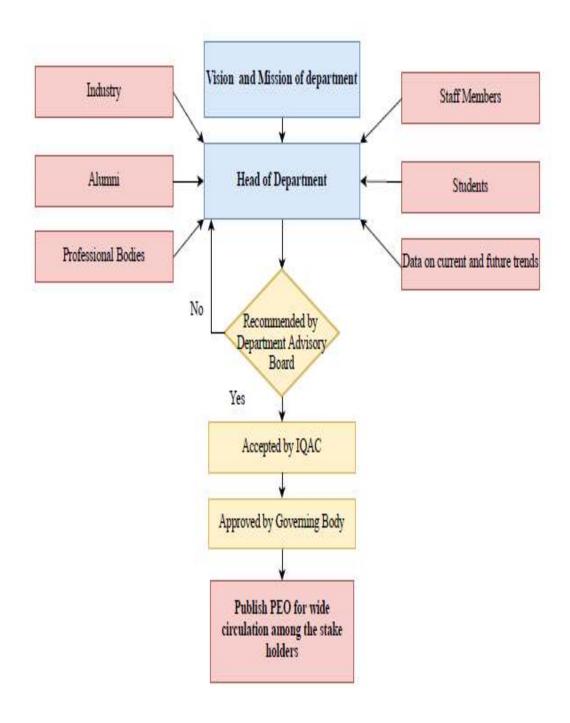


Figure 1.4 b: Process of defining the Program Educational Outcome (PEOs) of Department

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 solve civil engineering problems by applying basic knowledge of science and technology | 3 | 2 | 1 |
| The graduates will be able to develop solutions using modern engineering tools and techniques in civil engineering to solve industry and society based problems. | 2 | 3 | 2 |
| The graduates will be able to pursue lifelong learning to maintain the pace with developments in technology. | 1 | 2 | 3 |

| | M1 | M2 | M3 | |
|--|--|---|---|--|
| PEO Statements | 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 | |
| PEO1: The graduates will be able to solve civil engineering problems by applying basic knowledge of science and technology | 3 | 2 | 1 | M1 substantially correlates with PEO1 as essential technical knowledge is based on fundamental concepts in Engineering and science where students solve the technical problems through projects. |

| | | | | M2 moderately correlates with PEO1 as innovations are based on basics of science and technologies. M3 slightly correlates with PEO1 since it encourages respect towards the society and environment. MOU with various professional bodies adds certain values Hence; there are slight co-relations between PEO1 and M3. |
|---|---|---|---|---|
| PEO2: The graduates will be able to develop solutions using modern engineering tools and techniques in civil engineering to solve industry and society based problems | 2 | 3 | 2 | M1 moderately correlates with PEO2 as it emphasizes on enriching academic competency however the PEO2 focuses on applying modern engineering tools for solving real world problem. M2 substantially correlates with PEO2 as it deals with the innovation and creativity to satisfy industrial and societal requirements |

| | | | | M3 moderately correlates with PEO2 as it provides an opportunity to solve industry and society based problems by considering welfare values related to society. |
|---|---|---|---|---|
| PEO3: The graduates will be able to pursue lifelong learning to maintain the pace with developments in technology | 1 | 2 | 3 | M1 slightly correlates with PEO3 as it emphasizes on technical knowledge, as the PEO3 focuses on developments and trends in the technology during course of learning. M2 moderately correlates with PEO3 as students acquire knowledge for creation and innovations. M3 substantially correlates with PEO3 as it deals with lifelong learning and keeping pace with the day-to-day developments taking place in technology. |

| | M1 | M2 | M3 |
|--|--|--|--|
| | To impart essential technical knowledge and competency among students. | To enhance innovative approaches towards creativity. | To inculcate the values for the well-being of environment and society. |
| PEO-1 The graduates will be able to solve civil engineering problems by applying basic knowledge of science and technology | PEO- Basic Knowledge of Science & Technology M- Technical Knowledge | PEO- Solving Civil Engineering Problems M- Innovative approaches | PEO- Applying Basic Knowledge of Science M- Well Being Environment |
| PEO-2 The graduates will be able to develop solutions using modern engineering tools and techniques in civil engineering to solve industry and society based problems. | PEO- Techniques in Civil Engineering M- Technical Knowledge | PEO- Develop Solutions M- Innovative Approaches | PEO- Society Based Problems M- well-being of environment and society |
| PEO-3 The graduates will be able to pursue lifelong learning to maintain the pace with developments in technology. | PEO- Developments in Technology M- Technical Knowledge & Competency | PEO- Lifelong Learning M- Creativity | PEO- Maintain the Pace M- Inculcate the Value |

| PEOs | Mission Component |
|--|---|
| | |
| PEO-1 The graduates will be able | M1 - To impart essential technical knowledge and competency among students |
| to solve civil engineering problems by applying basic | M2 - To enhance innovative approaches towards creativity. |
| knowledge of science and technology | |
| | M3 - To inculcate the values for the well-being of environment and society. |
| PEO-2 The graduates will be able | M1 - To impart essential technical knowledge and competency among students |
| engineering tools and techniques | M2 - To enhance innovative approaches towards creativity. |
| in civil engineering to solve industry and society based | |
| problems. | M3 - To inculcate the values for the well-being of environment and society. |
| PEO-3 The graduates will be able to pursue lifelong learning to maintain the pace with | M1 - To impart essential technical knowledge and competency among students |
| maintain the pace with developments in technology. | M2 - To enhance innovative approaches towards creativity. |
| | M3 - To inculcate the values for the well-being of environment and society. |
| | M1 - To impart essential technical knowledge and competency among students |
| | M2 - To enhance innovative approaches towards creativity. |
| | |

| CRITERION | Program Curriculum & Teaching Learning | 120 |
|-----------|--|-----|
| 02 | Process | |
| | | |

2.1.1. State the process used to identify 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)

The Civil Engineering Department. Arvind Gavali College of Engineering, Satara is affiliated to Dr. Babasaheb Ambedkar Technological University (DBATU), Lonere Maharashtra. The program curriculum is provided by said universities which are a composition of Basic science, humanities, professional courses and their distribution as core and electives with specified breadth and depth of learning. The curriculum formed is formulated and reviewed once in 4 years through Board of Studies (BOS) of a Chairman.

The composition DBTU Lonere, curriculum for the B. Tech (Bachelor of Technology) in Electrical Engineering is shown in table B.2.1.1.a. The B.2.1.1.b shows extent mapping of the courses to program outcomes and table B.2.1.1.c shows the mapping of courses to program specific outcomes

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

| Sr. | Type of Courses Offered | Number of | Number of | Weightage |
|-----|--|-----------|-----------|------------|
| No. | | Subjects | Credits | in |
| | | Mapped | allotted | percentage |
| 1. | Basic Science | 07 | 22 | 13.25 |
| 2. | Engineering Science | 12 | 15 | 9.04 |
| 3 | Humanities and Social Science including Management Courses | 05 | 06 | 3.61 |
| 4 | Professional Core Subjects | 39 | 87 | 52.41 |
| 5 | Professional Elective | 04 | 12 | 7.23 |
| 6 | Open Elective | 01 | 0 | 0 |
| 7 | Mini Project /Major Projects | 03 | 19 | 11.45 |
| 8 | Seminar/ Internship/Field Training | 08 | 05 | 3.01 |
| | Total | 79 | 166 | 100 |

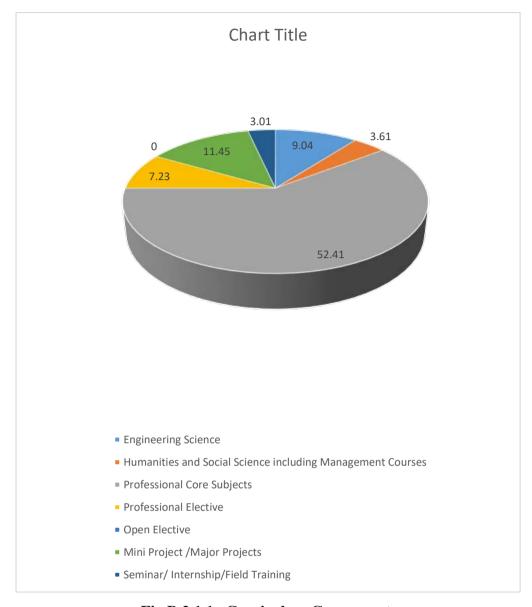


Fig B 2.1.1a Curriculum Components

The institution implements the overall curriculum break up as per DBATU which is for a period of 8 semesters. The curriculum for Bachelor of Engineering in Civil Engineering is given in Table B.2.1.1b

Table B 2.1.1 b University Curriculum Structure

Teaching and Evaluation Scheme for First Year B. Tech. (All Branches)

Group A

| | | Semester | I | | | | | | |
|-------------|---|----------|----------|-------|--------|----------|---------|-----------|---------|
| Course Code | Course Title | Teachir | ıg Schen | 1e | Evalu | uation S | cheme | ş | |
| | -74 | L | T | P | CA | MSE | ESE | Total | Credi |
| Mandatory | Induction Program | | 3-wee | ks du | ration | in the b | eginniı | ng of ser | nester. |
| BTBS101 | Engineering Mathematics- I | 3 | 1 | | 20 | 20 | 60 | 100 | 4 |
| BTBS102 | Engineering Physics | 3 | 1 | (1-) | 20 | 20 | 60 | 100 | 4 |
| BTES103 | Engineering Graphics | 2 | (0.00) | | 20 | 20 | 60 | 100 | 2 |
| BTHM104 | Communication Skills | 2 | | 0.70 | 20 | 20 | 60 | 100 | 2 |
| BTES105 | Energy and Environment Engineering | 2 | 040 | -20 | 20 | 20 | 60 | 100 | 2 |
| BTES106 | Basic Civil and Mechanical Engineering | 2 | 873 | | 50 | | | 50 | Audi |
| BTBS107L | Engineering Physics Lab | į. | 1/2 | 2 | 60 | 1/2= | 40 | 100 | 1 |
| BTES108L | Engineering Graphics Lab | | | 4 | 60 | 3 +3 | 40 | 100 | 2 |
| BTHM109L | Communication Skills Lab. | - | 5.75 | 2 | 60 | 5.00 | 40 | 100 | 1 |
| | | 14 | 2 | 8 | 330 | 100 | 420 | 850 | 18 |

| | Se | mester | П | | | | | | |
|----------|--|--------|-----|--------|-------|-------|-----|-----|--|
| BTBS201 | Engineering Mathematics-II | 3 | 1 | - | 20 | 20 | 60 | 100 | 4 |
| BTBS202 | Engineering Chemistry | 3 | 1 | - | 20 | 20 | 60 | 100 | 4 |
| BTES203 | Engineering Mechanics | 2 | 1 | - | 20 | 20 | 60 | 100 | 3 |
| BTES204 | Computer Programming in C | 3 | - | - | 20 | 20 | 60 | 100 | 3 |
| BTES205 | Workshop Practices | | | 4 | 60 | 0 | 40 | 100 | 2 |
| BTES206 | Basic Electrical and Electronics Engineering | 2 | - | - | 50 | - | - | 50 | Audit |
| BTBS207L | Engineering Chemistry Lab | | - | 2 | 60 | - | 40 | 100 | 1 |
| BTES208L | Engineering Mechanics Lab | | - | 2 | 60 | 0 | 40 | 100 | 1 |
| BTES210S | Seminar | | - | 2 | 60 | - | 40 | 100 | 1 |
| 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). | • | an- | Vieta: | • | 23.00 | 000 | 340 | Credits To be evaluate d in III Sem. |
| | | 13 | 3 | 10 | 430 | 80 | 440 | 950 | 19 |
| | ii ii | | 27 | * | 2) 7) | | | | -0 |

Dr. Babasaheb Ambedkar Technological University, Lonere Teaching & Evaluation Scheme for Second Year B. Tech. Civil Engg.

| | | Semester | - III | | | | | | | |
|------------|-------------|---|-------|----------------|----|-----|-----------|---------|-------|--------|
| Course | Course Code | Course Title | | eachi Schen | | E | Evaluatio | on Sche | me | Credit |
| Category | Course Code | Course Title | L | T | P | CA | MSE | ESE | Total | Cre |
| BSC 5 | BTBS301 | Mathematics – III | 3 | 1 | - | 20 | 20 | 60 | 100 | 4 |
| ESC 8 | BTCVES302 | Mechanics of Solids | 3 | 1 | - | 20 | 20 | 60 | 100 | 4 |
| PCC 1 | BTCVC303 | Building Construction & Drawing | 2 | 1 | - | 20 | 20 | 60 | 100 | 3 |
| PCC 2 | BTCVC304 | Hydraulics -I | 3 | 1 | - | 20 | 20 | 60 | 100 | 4 |
| PCC 3 | BTCVC305 | Surveying | 2 | 1 | - | 20 | 20 | 60 | 100 | 3 |
| HSSMC2 | BTHM306 | Soft Skill Development | 2 | - | - | 50 | - | - | 50 | Audit |
| LC 1 | BTCVL 307 | Solid Mechanics Laboratory | - | - | 2 | 20 | - | 30 | 50 | 1 |
| LC 2 | BTCVL 308 | Hydraulics-I Laboratory | - | - | 2 | 20 | - | 30 | 50 | 1 |
| LC3 | BTCVL 309 | Surveying Laboratory | - | - | 2 | 20 | - | 30 | 50 | 1 |
| Internship | BTES210P | Internship –I Evaluation (From Sem II) | - | - | - | - | - | 50 | 50 | Audit |
| | | Total | 15 | 05 | 06 | 210 | 100 | 440 | 750 | 21 |

| | | Semester | - IV | | | | | | | |
|------------|-------------|---|------|---------------|----|-----|----------|---------|-------|------------------------------------|
| Course | Course Code | Course Title | | achii chem | | E | valuatio | n Schei | me | Credit |
| Category | Course Code | Course Title | L | T | P | CA | MSE | ESE | Total | Cre |
| PCC 4 | BTCVC401 | Building Planning and Drawing | 2 | - | - | 20 | 20 | 60 | 100 | 2 |
| PCC 5 | BTCVC402 | Environmental Engineering | 2 | - | - | 20 | 20 | 60 | 100 | 2 |
| PCC 6 | BTCVC403 | Structural Mechanics - I | 2 | 1 | - | 20 | 20 | 60 | 100 | 3 |
| PCC 7 | BTCVC404 | Water Resources Engineering | 3 | - | - | 20 | 20 | 60 | 100 | 3 |
| PCC 8 | BTCVC405 | Hydraulics - II | 2 | 1 | - | 20 | 20 | 60 | 100 | 3 |
| PCC 9 | BTCVC406 | Engineering Geology | 2 | 1 | - | 20 | 20 | 60 | 100 | 3 |
| LC 4 | BTCVL407 | Building Planning and CAD Lab. | - | - | 2 | 20 | - | 30 | 50 | 1 |
| LC 5 | BTCVL408 | Environmental Engg. Lab. | - | - | 2 | 20 | - | 30 | 50 | 1 |
| LC 6 | BTCVL409 | HE-II Lab. | - | - | 2 | 20 | - | 30 | 50 | 1 |
| Internship | BTCVP410 | Field Training / Internship/Industrial Training (minimum of 4 weeks training in Summer Vacation after Semester IV and appear at examination in Semester V) | - | - | - | - | - | - | - | To be evaluat ed in V Sem |
| | | Total | 13 | 03 | 06 | 180 | 120 | 450 | 750 | 19 |

Dr. Babasaheb Ambedkar Technological University, Lonere Teaching & Evaluation Scheme for Third Year B Tech Civil Engg.

| | | Semester | - V | | | | | | | |
|------------|-----------|--|-----|--------------|------------------|-----|----------|---------|-------|--------|
| Course | Course | Course Title | | achii hem | |] | Evaluati | on Sche | me | Credit |
| Category | Code | Course Title | L | T | P | CA | MSE | ESE | Total | ئ |
| PCC 10 | BTCVC501 | Design of Steel Structures | 2 | 1 | 200 | 20 | 20 | 60 | 100 | 3 |
| PCC 11 | BTCVC502 | Geotechnical Engineering | 3 | 1 | - | 20 | 20 | 60 | 100 | 4 |
| PCC 12 | BTCVC503 | Structural Mechanics -II | 2 | 1 | s e . | 20 | 20 | 60 | 100 | 3 |
| PCC 13 | BTCVC504 | Concrete Technology | 2 | - | - | 20 | 20 | 60 | 100 | 2 |
| HSSMC3 | BTHM505 | Project Management | 3 | 82 | = | 20 | 20 | 60 | 100 | 3 |
| PEC 1 | BTCVPE506 | A. Advanced Environmental Engg. B. Applied Geology C. Hydraulic Engineering Design D. Advanced Water Resources E. Geomatics F. Town and Urban Planning G. Material, Testing and Evaluation H. Construction Economics & Finance | 3 | æ | - | 20 | 20 | 60 | 100 | 3 |
| ESC10 | BTCVES507 | Software applications in Civil Engineering | 2 | - | - | 50 | = | - 2 | 50 | Audit |
| LC 7 | BTCVL508 | SDD of Steel Structures Lab. | - | - | 2 | 20 | - 1 | 30 | 50 | 1 |
| LC 8 | BTCVL509 | Geotechnical Engineering Lab. | 123 | 32 | 2 | 20 | 12 | 30 | 50 | 1 |
| LC 9 | BTCVL510 | Concrete Technology Lab. | 3 | - | 2 | 20 | 128 | 30 | 50 | 1 |
| Internship | BTCVP410 | Internship – 2 Evaluation | 722 | - | 247 | 2) | 124 | 7722 | 323 | Audit |
| | _ | Total | 17 | 3 | 6 | 230 | 120 | 450 | 800 | 21 |

Semester- VI \$:Students should register for the CVF 705 in Semester VI to undergo training during vacation after semester VI and appear at examination in Semester VII. Result shall appear in Grade-sheet of Semester VII Contact hours Credit Sr. Subject Subject Title No. Code T BTCVC601 Design of Concrete Structures I BTCVC602 Foundation Engineering 02 Concrete Technology BTCVC603 03 04 BTCVC604 Project Management 2 05 CVE₃ Elective III 06 BTCVC606 Building Planning and Design 2 Practical / Drawing and/or Design BTCVL607 07 Concrete Technology Laboratory BTCVL608 Building Planning, Design and Drawing Laboratory 08 BTCVM609 Community Project (Mini Project) 2 09 10 BTCVS610 Seminar on Topic of Field Visit Road Construction ΑU BTCVF611 Industrial Training^S 11 Sub-Total 3 14 11 28 19 Total Elective III BTCVE605A Waste Water Treatment BTCVE605B Operations Research BTCVE605C Geographic Data Analysis and Applications Advanced Engineering Geology Advanced Soil Mechanics BTCVE605D BTCVE605E BTCVE605F Design of Masonry and Timber Structures

| Course Code | Type of Course | Course Title | Te S | Veekly achin cheme | ig e | | valuatio | | | Credits |
|-------------|--------------------|--|---------|--------------------------|---------|----|----------|-----|-------|----------------------|
| | | | L | Т | P | CA | MSE | ESE | Total | |
| BTCVC701 | Core | Design of Concrete Structures - II | 2 | 1 | | 20 | 20 | 60 | 100 | 3 |
| BTCVC702 | Core | Infrastructure Engineering | 3 | | | 20 | 20 | 60 | 100 | 3 |
| BTCVC703 | Core | Water Resources Engineering | 3 | 1 | | 20 | 20 | 60 | 100 | 4 |
| BTCVC704 | Core | Professional Practices | 2 | 1 | | 20 | 20 | 60 | 100 | 3 |
| BTCVE705A | | Construction Techniques | | | | | | | | |
| BTCVE705B | | Engineering Economics | | | | | | | | |
| BTCVE705C | Elective IV | Finite Element Method | | | | | | | | |
| BTCVE705D | | Limit State Design of Steel Structures | 3 | | | 20 | 20 | 60 | 100 | 3 |
| BTCVE705E | | Plastic Analysis and Design | | | | | | | | |
| BTCVE705F | 1 | Water Power Engineering | | | | | | | | |
| BTCVOE706A | | Advanced Structural Mechanics | | | | | | | | |
| BTCVOE706B | | Air Pollution Control | | | | | | | | |
| BTCVOE706C | | Bridge Engineering | | I | | | | | | l |
| BTCVOE706D | Open Elective V | Introduction to Earthquake Engineering | 3 | | | | | | | Audit (AU/ NP) |
| BTCVOE706E | | Town and Urban Planning | | | | | | | | |
| BTCVOE706F | | Tunneling and Underground Excavations | | | | | | | | |
| BTCVL707 | Laboratory | Design & Drawing of RC & Steel Structures | | | 2 | 30 | | 20 | 50 | 1 |
| BTCVL708 | Laboratory | Professional Practices | | | 2 | 30 | | 20 | 50 | 1 |
| BTCVT709 | Training | Field Training /Internship/Industrial | | | | | | 50 | 50 | 1 |
| BTCVS710 | BTS | Seminar | | | 2 | | | 50 | 50 | 1 |
| BTCVP711 | BTP | Project Stage-I** | | | 6 | | 50 | 50 | 100 | 3 |

| Course Code | Type of | Course Title | Week | ly Tea | ching | E | valuatio | n Scheme | e ^s | Credits |
|-------------|---------------------|---|------|--------|-------|----|----------|----------|----------------|---------|
| | Course | | L | T | P | CA | MSE | ESE | Total | |
| BTCVSS801A | | Characterization of Construction Materials | | | | | | | | |
| BTCVSS801B | (Self- Study | Geosynthetics and Reinforced Soil Structures | 03** | | | 20 | 20 | 60 | 100 | 3 |
| BTCVSS801C | Course) * | Higher Surveying | | | | | | 100000 | | |
| BTCVSS801D | 1 | Maintenance and Repair of Concrete Structures |] | | | | | | | |
| BTCESS801E | 1 | Structural Dynamics | | | | | | c | | |
| BTCESS802A | | Energy Efficiency Acoustics and Daylighting in Building | | | | | | | | |
| BTCESS802B | (Self- | Environmental Remediation of Contaminated Sites | | | | | | | | |
| BTCESS802C | Study Course) * | Remote Sensing Essentials | 03** | 1,000 | | 20 | 20 | 60 | 100 | 3 |
| BTCESS802D | | Mechanical Characterization of Bituminous Materials | | | | | | | | |
| BTCESS802E | | Soil Structure Interaction | | | | | | | | |
| BTCEP803 | Project Stage-II | In-house Project or Internship and Project in Industry* | s== | - | 30 | 50 | 100 | 100 | 150 | 15 |
| | | Total | 04 | | 30 | 90 | 40 | 220 | 350 | 21 |

The department has well defined process in implementation to achieve the Program Outcomes (PO) and Program Specific Outcomes. If some components, to attain Cos/POs are not included in the curriculum provided by DBATU, then department makes additional efforts to impart this knowledge.

Following processes are used to identify the extent of compliance for attaining the program outcomes and Program Specific Outcomes.

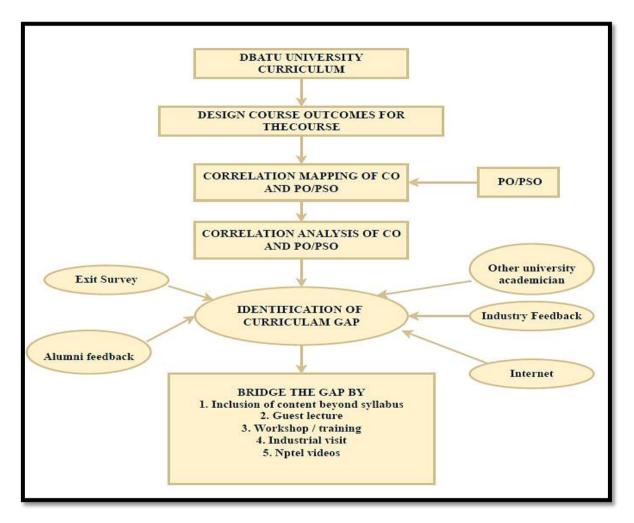


Fig. 2.1.1a Process to Identify Curriculum Gaps

- 1. The University announces curriculum annually in the month of June. The curriculum provides syllabus of each subject
- 2. Faculty members 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 department before commencement of semester. Plan is duly signed by Head of the Department. Plan ensures the coverage of complete syllabus before the end of semester

| Sr. | Subject | Name of Subject | P | P | P | P | PO | PO | PO | PO | P | PO | PO | PO | PSO | PSO |
|-----|----------|--|---|---|---|---|----|----|----|----|---|----|----|----|-----|-----|
| No | Code | | o | o | o | O | 5 | 6 | 7 | 8 | o | 10 | 11 | 12 | _ | |
| | | | 1 | 2 | 3 | 4 | | | | | 9 | | | | 1 | 2 |
| 1 | BTBS101 | Engineering Mathematics-I | Y | Y | Y | Y | | Y | | | | | Y | Y | Y | Y |
| 2 | BTBS102 | Engineering Physics | Y | Y | Y | Y | | Y | Y | | | | | Y | Y | |
| 3 | BTES103 | Engineering Graphics | Y | Y | Y | Y | Y | | | | | Y | | | Y | |
| 4 | BTHM104 | Communication Skill | Y | | | | Y | Y | | Y | | Y | | Y | | |
| 5 | BTES105 | Energy and Environment Engineering | Y | Y | Y | Y | | Y | Y | Y | | Y | Y | | Y | Y |
| 6 | BTES106 | Basic Civil and Mechanical Engineering | Y | Y | Y | Y | | Y | Y | | | Y | Y | | Y | |
| 7 | BTBS107L | Physics Lab | Y | Y | Y | | Y | Y | Y | | Y | | | Y | Y | Y |
| 8 | BTES108L | Graphics lab | Y | Y | Y | Y | | Y | | | Y | Y | | Y | Y | |
| 9 | BTBS201 | Engineering Mathematics-II | Y | Y | Y | Y | | Y | | | | | Y | Y | Y | Y |
| 10 | BTBS202 | Engineering Chemistry | Y | Y | Y | | | Y | Y | | Y | | | | Y | |
| 11 | BTES203 | Engineering Mechanics | Y | Y | Y | | | Y | | | Y | | | Y | Y | |
| 12 | BTES204 | Computer Programming in C | Y | Y | | | | | | | Y | Y | | | | |
| 13 | BTES205 | Workshop Practices | Y | | | | Y | | | | Y | Y | Y | Y | Y | |
| 14 | BTES206 | Basic Electrical and Electronics Engineering | Y | | | | | Y | Y | | | | | | Y | |
| 15 | BTBS207L | C' Programming Lab | Y | Y | Y | | | | | | Y | Y | | Y | | |
| 16 | BTES208L | Engineering Chemistry Lab | Y | Y | | | | Y | Y | | Y | | | | | |
| 17 | BTES209L | Mechanics Lab | Y | Y | Y | | | Y | Y | | Y | Y | | | Y | Y |
| 18 | BTES210P | Mini Project | Y | Y | | | Y | Y | Y | Y | Y | Y | | | Y | Y |
| 19 | BTES211P | Field Training | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 20 | BTBSC301 | Mathematics III | Y | Y | | | | Y | | | | | Y | Y | Y | |
| 21 | BTCVC302 | Mechanics of Solids | Y | Y | Y | | | Y | | | Y | | | Y | Y | |
| 22 | BTCVC303 | Hydraulics -I | Y | | Y | | | Y | Y | | | | | Y | Y | Y |
| 23 | BTCVC304 | Surveying - I | Y | Y | Y | | Y | | Y | | | | | Y | Y | Y |

| | T | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | _ | _ | 1 | | 1 | 1 |
|----|---------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | BTCVC305 | Building Construction | Y | Y | | | Y | Y | Y | | | | | Y | Y | Y |
| 25 | BTCVC306 | Engineering Geology | Y | | | | | | Y | | | | | | Y | Y |
| 26 | BTHM303 | Soft Skill Development | | | | | | | Y | Y | Y | Y | Y | | | |
| 27 | BTCVL 307 | Hydraulics-I Laboratory | Y | Y | Y | Y | | Y | Y | | | Y | | Y | Y | Y |
| 28 | BTCVL 308 | Surveying Laboratory I | Y | Y | Y | Y | Y | | Y | | | Y | | Y | Y | Y |
| 29 | BTCVC309 | Building Construction – Drawing Laboratory | Y | Y | | | | Y | Y | | | Y | | Y | Y | Y |
| 30 | BTCVC310 | Engineering Geology Lab | Y | | Y | Y | | | Y | | | Y | | Y | Y | Y |
| 31 | BTCVC311 | Semiar Topic of field Visit to foundation work | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |
| 32 | BTCVF312 | Field visit/ Internship / Industrial Evaluation (From Semester II) | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |
| 33 | BTCVC401 | Hydraulics II | Y | | Y | | | Y | Y | | | | | Y | Y | Y |
| 34 | BTCVC402 | Surveying – II | Y | Y | Y | Y | Y | | Y | | | | | Y | Y | Y |
| 35 | BTCVC403 | Structural Mechanics-I | Y | Y | Y | Y | | Y | Y | | | | | Y | Y | Y |
| 36 | BTCVE404 A | Elective I (Numerical methods in engineering) | Y | Y | | | | | | | | | | Y | Y | Y |
| 37 | BTID405 | Product Design Engineering | Y | Y | Y | Y | | | Y | | Y | | | | | |
| 38 | BTCVC406 | Engineering Management | | | | | | | Y | | | | | Y | Y | |
| 39 | BTHM3401 | Basic Human Rights | | | | | | Y | Y | | | | | | Y | |
| 40 | BTCVL407 | Hydraulics Laboratory II | Y | Y | Y | | | Y | Y | | | Y | | Y | Y | Y |
| 41 | BTCVL408 | Surveying Laboratory II | Y | Y | Y | Y | Y | | Y | | | Y | | Y | Y | Y |

| | 1 | | X 7 | * 7 | * 7 | . | 1 | 7.7 | T 7 7 | ı | 1 | . | 1 | * 7 | ** | *** |
|----|-------------------|---|------------|-----|-----|----------|---|-----|-------|---|---|----------|---|-----|----|-----|
| 42 | BTCVL409 | Mechanics of Solids Laboratory | Y | Y | Y | Y | | Y | Y | | | Y | | Y | Y | Y |
| 43 | BTCVM410 | Mini Project | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |
| 44 | | Seminar Visit | | | | | | | | | | | | | | |
| | BTCVF411 | Superstructure | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |
| 45 | BTCVC 501 | Design of Steel Structures | Y | Y | Y | Y | | Y | | | | | | Y | Y | Y |
| 46 | BTCVC 502 | Structural Mechanics-II | Y | Y | Y | Y | | | Y | | | | | Y | Y | Y |
| 47 | BTCVC 503 | Soil Mechanics | Y | Y | Y | Y | | | Y | | | | | Y | Y | Y |
| 48 | BTCVC 504 | Environmental Engineering | Y | Y | | Y | | Y | Y | | | | | | Y | Y |
| 49 | BTCVC 505 | Transportation Engineering | Y | | | | Y | Y | Y | | Y | Y | | | Y | Y |
| 50 | CV E2 | Elective II communication and presentation s | | | | | | | Y | Y | Y | Y | Y | | Y | |
| 51 | BTHM 507 | essence of Indian Traditional Knowledge | | | | | | Y | Y | Y | Y | Y | | | | |
| 52 | BTCVL 508 | Soil Mechanics Laboratory | Y | Y | Y | Y | | | Y | | | Y | | | | |
| 53 | BTCVL 509 | Environmental Engineering Laboratory | Y | Y | Y | Y | | Y | Y | | | Y | | Y | Y | Y |
| 54 | BTCVL 510 | Transportation Engineering Laboratory | Y | | Y | Y | Y | Y | Y | | Y | Y | | Y | Y | Y |
| 55 | BTCVS 511 | Seminar on Topic of Field Visit to works related to Building Services | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |
| 56 | BTCVC601 | Design of Concrete Structures I | Y | Y | Y | | | Y | | | | | | Y | Y | Y |
| 57 | BTCVC602 | Foundation Engineering | Y | Y | Y | | | | | | | | | Y | Y | Y |
| 58 | BTCVC603 | Concrete Technology | Y | Y | Y | | | Y | | | | | | Y | Y | Y |
| 59 | BTCVC604 | Project Management | Y | Y | | | | | | Y | Y | Y | Y | Y | Y | Y |
| 60 | CVE3 BTCVE605A | Elective III Waste Water treatment | Y | | | | | Y | Y | | | | | Y | Y | Y |
| 61 | BTCVC606 | Building Planning and Design | Y | | | | | Y | Y | | | | | Y | Y | Y |
| 62 | BTCVL607 | Concrete | Y | | | Y | | Y | | | | Y | | Y | Y | Y |

| | | Technology | | 1 | 1 | | | | T | | 1 | | | | | |
|----|-------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Laboratory | | | | | | | | | | | | | | |
| 63 | BTCVL 608 | Building Planning, Design | Y | | Y | Y | Y | Y | Y | | | Y | | Y | Y | Y |
| | | and Drawing Laboratory | | | | | | | | | | | | | | |
| 64 | BTCVM 609 | Community Project (Mini Project) | | | Y | Y | Y | | | Y | Y | Y | | Y | Y | Y |
| 65 | BTCVS 610 | Seminar on Topic of Field Visit Road Construction | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |
| 66 | BTCVF611 | Industrial Training | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |
| 67 | BTCVC 701 | Design of Concrete Structures II | Y | Y | Y | | | Y | | | | | | Y | Y | Y |
| 68 | BTCVC 702 | Infrastructure Engineering | Y | | | | Y | Y | Y | | Y | Y | | Y | Y | Y |
| 69 | BTCVC 703 | Water Resources Engineering | Y | | | | | | Y | | | | | Y | Y | Y |
| 70 | BTCVC 704 | Professional Practices | | | | Y | | | | Y | Y | Y | Y | Y | Y | Y |
| 71 | CVE4 BTCVE705A | Elective IV Construction Techniques | Y | | | Y | | Y | Y | | | | | Y | Y | Y |
| 72 | CVE5 BTCVOE706 | Elective V Air Pollution Control | Y | | | Y | | Y | Y | | | | | Y | Y | Y |
| 73 | BTCVC 707 | Design & Drawing of RC & Steel Structures Laboratory | Y | Y | Y | Y | | | | | | Y | | Y | Y | Y |
| 74 | BTCVC 708 | Professional Practices Laboratory | | | Y | | | | | | | Y | | Y | Y | Y |
| 75 | BTCVC 709 | Industrial Training | Y | Y | Y | Y | Y | Y | Y | Y | Y | | | Y | Y | Y |
| 76 | BTCVC 710 | Project Stage I | Y | Y | Y | Y | Y | Y | Y | | | | Y | Y | Y | Y |
| 77 | BTCVSS801 D | Maintenance and Repair of Concrete Structures | Y | Y | Y | | Y | Y | | | | | | Y | Y | |
| 78 | BTCESS80 E | Soil Structure Interaction | Y | Y | Y | | | Y | | | | | | Y | Y | |
| 79 | BTCEP803 | Project Stage -II | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | Y | Y | Y |

| , | Total | 7 1 | 5 4 | 5 2 | 40 | 27 | 54 | 54 | 19 | 31 | 41 | 12 | 61 | 71 | 58 |
|---|------------|--------|--------|--------|----|----|----|----|----|----|----|----|----|----|----|
|] | Percentage | 8 9 | 6 8 | 6 5 | 50 | 34 | 68 | 68 | 24 | 39 | 51 | 15 | 77 | 89 | 73 |

- 3. For each course or subject, a course file is prepared by the concerned faculty member. Corelation matrix of CO with PO/ PSOs is also designed and analyzed by faculty members and Head of the Department.
- 4. The feedback from the alumni, industry experts, and academicians from other Universities and students is regularly taken. Gaps are identified on the basis of the CO attainment of individual courses and feedback from different stake holders.
- 5. The data collected is then presented in front of the Program Evaluation and Review Committee. The gaps are discussed in the PERC meeting. To bridge gaps, seminars, workshops, guest lectures, industrial visits etc. are occasionally arranged by our department/institute as per the convenience and content beyond the syllabus is prepared accordingly.

Table B.2.1.1.c Mapping of the courses to Program Outcomes CAY (2022-2023)

The percentage of mapping of Courses to POs shown in table B.2.1.1.b & B.2.1.1.c, provides Curricular gaps and mapping beyond syllabus. Efforts are made to impart requisite knowledge by the way of "content enhancement beyond syllabus"

Table B 2.1.1.d Gaps in Program Outcomes of University Curriculum CAY (2022-2023)

| Sr. No. | PO's | Description |
|---------|------|------------------------------|
| | | |
| 1 | PO5 | Use of modern tools |
| 2 | PO8 | Ethics |
| 3 | PO9 | Individual and team work |
| 4 | PO11 | Project Management & Finance |

CAYm1 (2021-2022)

| Sr. No. | PO's | Description |
|---------|------|------------------------------|
| | | |
| 1 | PO5 | Use of modern tools |
| | | |
| 2 | PO8 | Ethics |
| | | |
| 3 | PO11 | Project Management & Finance |
| | | |

Following are the curriculum gap identified in:

Table B.2.1.1e Identified Curricular Gaps

CAY (2022-23):

| Sr. No | Relevant Course/Area | Curriculum Gap Identified | Relevance to PO & PSO |
|--------|--|---|-------------------------------|
| 1 | Building Construction (BTCVC305) | Hands on drawing, Planning, Modelling software should be included. Design and development of solution and modern tool ues, codal provisions and IS requirements of material testing. | PO3,PO5,PO9,PO11, PSO2 |
| 2 | Concrete Technology (BTCVC603) | Quality control in batching, mixing, transportation, placing, compaction and curing. Mix proportion and mix design. Use of advance construction techniques and materials. | PO3,PO4,PO5,PO7 |
| 3 | Soil Mechanics and Foundation Engineering (BTCVC503) | Conduct investigation of complex problems like slope stability analysis, soil reinforcing techniques, Use of modern tools. | PO5,PO6,PO8,PO9, PO10,PO11 |

| 4 | Career Opportunities for civil engineer | Corporate expectations from fresher and career opportunities in abroad | PO8,PO9,PO10,PO1 1,PO12, PSO2 |
|---|---|--|----------------------------------|
|---|---|--|----------------------------------|

CAY m1 (2021-2022)

| Sr. No | Relevant Course/Area | Curriculum Gap Identified | Relevance to PO & PSO |
|--------|---|--|----------------------------------|
| 1 | Surveying II (BTCVC402) | Use of modern tools | PO5, PO12, PSO1 |
| 2 | Soil mechanics (BTCVC503) | Actual application term used in soil mechanics. | PO1, PO12, PSO2 |
| 3 | Environmental Engineering (BTCVC504) | Actual practice of treatment methods. | PO1, PO6, PO7,PO12,PSO1 |
| 4 | Transportation Engineering (BTCVC505) | Advancement in transportation | PO1,PO3,PO5, PO12, PSO1 |
| 5 | Career Opportunities for civil engineer | Awareness about career opportunities in competitive exam after graduation. | PO8,PO9,PO10,PO 11,PO12, PSO2 |

CAYm2 (2020-21)

Table B.2.1.1f Identified Curricular Gaps

| Sr. No | Relevant Course/Area | Curriculum Gap Identified | Relevance to PO |
|--------|------------------------|-------------------------------|-----------------|
| | | | & PSO |
| 1 | Infrastructure | Awareness about new trends | PO5, PO12, PSO1 |
| | Engineering | | |
| | (BTCVC701) | | |
| 2 | Building Construction | Actual construction at site | PO1, |
| | (BTCVC305) | | PO3,PSO1,PSO2 |
| 3 | Foundation Engineering | Construction of foundation on | PO1,PO7,PO12,PS |
| | (BTCVC602) | site | O2 |

CAYm3 (2019-20)

Table B.2.1.1 g Identified Curricular Gaps

| Sr. | Relevant Course/Area | Curriculum Gap Identified | Relevance to PO |
|-----|-------------------------------|--------------------------------|-----------------|
| No | | (Content Beyond Syllabus) | & PSO |
| 1 | Engineering Geology | Awareness about new | PO5, PSO1 |
| | (BTCVC306) | techniques | |
| 2 | Advancement in Surveying | Awareness about | PO5,PO12,PSO1 |
| | | advancements in surveying | |
| 3 | Ethics | Ethical Principles | PO8, PO12,PSO2 |
| 4 | Career opportunities in Civil | Awareness about civil engineer | PO12, PSO2 |
| | engineering | career opportunities | |
| 5 | Entrepreneur Skills | Leadership Skill | PO9,PO11,PSO1, |
| | | | PSO2 |
| 6 | Soft skill & Personality | Communication Skill, | PO10, PO12 |
| | Development | Presentation Skill | PSO1, PSO2 |
| 7 | Industry Essential Skills | Industrial Culture | PO8, PSO2 |

CAYm4 (2018-19)

Table B.2.1.1 h Identified Curricular Gaps

| Sr. No | Relevant Course/Area | Curriculum Gap Identified | Relevance to PO & PSO |
|--------|--------------------------------------|---|--------------------------|
| 1 | Building Construction (BTCVC305) | New trends in construction engineering | PO1, PO3, PSO1 |
| 2 | Hydraulics II (BTCVC401) | On site working of hydraulic turbine | PO1, PO3, PO12, PSO1 |
| 3 | Structural Mechanics I (BTCVC403) | Advancement in design and analysis | PO1, PO3, PSO2 |
| 4 | Structural Mechanics II (BTCVC502) | Career opportunities in structural analysis | PO3, PO5, PSO2 |
| 5 | Environmental Engineering (BTCVC504) | Career opportunities in environmental engineering | PO6, 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):

| Sr. No. | Gap | Action Taken | Date- Month- Year | Resource Person with Designation | No of Students | Relevance to POs, PSOs |
|------------|---|--|----------------------------------|---|-------------------|------------------------------------|
| 1 | Hands on drawing, Planning, Modelling software should be included. Use of modern tools and software for planning, designing, modelling etc. | Hands on & Workshop on Auto Cad. | 2/12/202 2 & 3/12/202 2 | Ms. Shubhangi Hake Om Shree associates Architects and landscape, Pune | 30 | PO1, PSO2, PO3, PO5, PO10 |
| 2 | Conduct investigation of complex problems like slope stability analysis, soil reinforcing techniques, Use of modern tools. Use of various types of binder materials, their suitability, standard specifications, tests. Slope stability, Foundation on expansive soil, soil reinforcing techniques. | Expert lecture on "Bituminous binders for road pavements, their specifications, suitability etc. Slope stability, Foundation on expansive soil, soil reinforcing techniques. | 27/03/20 23 | Mr. Ishwar Dayal | 40 | PO2, PO3, PO4,PO8,PO 11,PSO2 |

| 3 | Quality control in batching, mixing, transportation, placing, compaction and curing. Mix proportion and mix design. Use of advance construction techniques and materials. Modern construction techniques, tools and smart processes, advance safety measures and ecofriendly construction | Visit to construction sites (Model developers and Chaitanya Residency, Satara. | 17/04/20 23 | Mr. Makrand Dhavale Mr. Ranjit A Katkar Mr.Rajendra Sakpal | 30 | PO5, PO12, PSO1 |
|---|--|--|----------------|---|----|--------------------------------|
| 4 | Design and development of solution and modern tool ues, codal provisions and IS requirements of material testing. | Visit to 'Rachana Exhibition" | 25/11/20 22 | Mr. R. N. Sakpal | 30 | PO3,PO5,PO 10,PO11,PO1 2 |
| 5 | Corporate expectations from fresher and career opportunities in abroad. Developing and strengthening CV and Resume | Webinar guest lecture on "How to create an effective resume" | 11/05/20 23 | Mr. Sharif Malik | 30 | PO8,PO9,PO 10 |

| 6 | Corporate expectations from fresher and career opportunities in abroad. Career opportunities for civil engineer | Expert lecture on 'Higher studies and work opportunities in abroad(Germany) | 20/12/20 22 | Mr. Shekhar Bhidwai | 30 | PO10,PO11 |
|---|--|---|----------------|--|----|------------|
| 7 | Corporate expectations from fresher and career opportunities in abroad. Professional Practices and Career opportunities | Webinar on Corporate expectations from fresher | 04/05/20 23 | Mr. Vinayak Bedge Prof. Gopal Krishna | 60 | PO10,PO11, |

CAY m1 (2021-22):

| Sr. No | Gap | Action Taken | Date- Month- Year | Resource Person with Designation | % of Students | Relevance to POs, PSOs |
|-----------|---|---|-------------------------|---|------------------|------------------------------|
| 1 | Actual application of Soil mechanics on site. | Expert lecture on actual application of shear stress parameters in the field. | 27/01/2022 | Dr. S.T. Shinde HOD, VIIT Pune | 24 | PO1,PO3, PSO2 |
| 2 | New development in Infrastructure engineering | Expert lecture on new developme nts and technologie s adopted in bridge and railway engineering | 27/01/2022 | Mr A.P. Bhalerao Project Manager SKB.LLP | 20 | PO1, PO3, PO12, PSO1 |
| 3 | Modern surveying techniques. | Expert lecture on application of modern surveying tools and techniques. | 28/01/2022 | Asst. Prof. H.U. Mulay MIT, Loni | 30 | PO5, PO12, PSO1 |
| 4 | Awareness about recent trends in transportation engineering | Expert lecture on recent developme nts in road constructio n | 29/01/2022 | Asst. Prof. S.S. Chavan | 30 | PO5,PO12 ,PSO1, PSO2 |
| 5 | | Expert lecture on | 01/02/2022 | Asst. Prof. Jadhav R.H. | 20 | PO1,PO5, PSO1 |

| | Use of modern tools in Structural mechanics | use of mobile application for calculation of complex structural problems | | Bharti Vidyapeeth, Pune | | |
|---|---|--|------------|--|----|-----------------------------------|
| 6 | Professional Practices | Expert lecture on professiona l process of estimation, tendering and contracting. | 02/02/2022 | Asst. Prof. Chavan A.N. DBATU Lonere | 23 | PO2,PO12 , PSO2 |
| 7 | Environmental Engineering | Expert lecture on application of wastewater treatment concepts and methods in actual practice. | 02/02/2020 | Asst. Prof. P.B. Bhagvati ADCE&T Ashta | 25 | PO1,PO3, PO12,PSO 1 PSO2 |
| 8 | Advanced Water & Wastewater Treatment | Industrial visit on sewage treatment plant at Akurdi | 24/05/2022 | Mrs. Dhanashri Deshmukh | 40 | PO1,PO3, PO6,PSO1 , PSO2 |
| | | Industrial visit on | 24/05/2022 | Mrs. Manisha Hinge | 40 | |

| | | water treatment | | | | |
|----|---|--|------------|----------------------|----|------------------|
| 9 | Science Center | Industrial visit on science center, Pimpri | 24/05/2022 | Mr. Pote Sir | 40 | PO1, PO4,PSO1 |
| 10 | Career opportunities for civil engineer | Webinar on Scope of competitive examinatio n in civil engineering | 31/05/2022 | Mr. Swapnil Patil | 30 | PO11, |

CAY m2 (2020-21):

| Sr. No. | Gap | Action Taken | Date- Month- Year | Resource Person with Designation | % of Students | Relevance to Pos, PSOs |
|------------|---|---|-------------------------|---|------------------|---------------------------|
| 1 | Recent developments in Infrastructure engineering | Guest lecture on Advancement in infrastructure engineering | 10/10/2020 | Mr. Amte R.A. JW Infra builder | 34 | PO5, PO12, PSO1 |
| 2 | Actual working at Civil engineering industries | Industrial visit on Aditi buildcon construction satara | 17/03/2021 | Mr. Matkar G.D. Builder | 30 | PO2, PO12PSO1, PSO2 |
| 3 | Awareness about actual construction of buildings. | Field visit on Niketan construction satara | 26/03/2021 | Mr. Amey Apte Builder | 28 | PO12, PSO2 |

CAY m3 (2019-20):

| Sr. No | GAP | Action Taken | Date- Month- Year | Resource Person with Designation | No. of Students Participate d | Relevance to POs, PSOs |
|-----------|---|--|-------------------------|--|--|--------------------------------|
| 1 | Ethics | No vehicle day | 11/01/2020 | | | PO8 |
| 2 | Awareness about actual working on site | Guest lecture on site knowledge | 03/02/2020 | Mr. Vasudev | 24 | PO1, PO3,PO11, PSO1,PSO2 |
| 3 | Placing of precast units on site | Industrial visit Aditi Buildcon and Ananda construction, Satara | 10/02/2020 | Mr.Matkar Sir Mr.Vasudev Sir Builder | 36 | PO1, PO3,PO11, PSO1,PSO2 |
| 4 | Development in Infrastructure engineering | Visit to CWPRS and Pune metro | 06/03/2020 | | 39 | PO1, PO3,PO5,PO 12,PSO2 |
| 5 | Application of new techniques in engineering geology | Guest Lecture on Detection of groundwater vein by using Dawsing Technique | 06/07/2020 | Dr. Sarote R.R. Professor JSPM Bavdhan | 34 | PO5, PSO1 |
| 6 | Actual designing of RCC Members on site | Guest Lecture on RCC Design | 08/07/2020 | Prof. Kakade Sir COEP Pune | 34 | PO3, PSO2 |
| | Advancements | Guest Lecture on Advance Surveying | 09/07/2020 | Prof. Chafalkar Sir JSPM Tathawade | 34 | PO5, POS2 |
| 7 | in Surveying | Guest Lecture on using unmanned aerial vehicles as remote sensing platform aerial survey | 10/07/2020 | Prof. Mule Sir JSPM Narhe | 35 | PO5, PSO2 |
| 8 | Career opportunity for construction management field | Guest Lecture on Construction management career opportunity | 15/07/2020 | Prof. Dr. Minde MIT Kothrud | 30 | PO9,PO12,P SO1 |

| 9 | Career after graduation in Government sector | Guest Lecture on Art of success for civil services | 16/07/2020 | Mr. Jojo Mathew HIT, Nidasoshi | 37 | PO12 |
|----|--|---|------------|---|----|----------------------|
| 10 | Awareness about higher education | Guest Lecture on career guidance for civil engineering | 17/07/2020 | Prof. Khandekar sir PVPIT Pune | 32 | PO12, PSO2 |
| 11 | Awareness about Career opportunity for Structural engineer | Guest Lecture on Career opportunity in structural engineering | 20/07/2020 | Prof. Dr. wagh Sir | 35 | PO12,PSO2 |
| 12 | Advancements in transportation | Guest Lecture on Advancement in mass transport system | 21/07/2020 | Prof. Vipul Naidu PVPIT Pune | 34 | PO1,PO3, PO5,PO12 |

2.2. Teaching - Learning Processes

(100) (25)

2.2.1. Describe Processes followed to Improve quality of Teaching & Learning

A Planning & adherence to academic calendar:

- The institute adheres to the academic calendar of DBATU Technical University Lonere. The academic calendars are the mirror of the academic activities of the institute and the department.
- The institute prepares its own academic calendar after the university academic calendar announcement at the beginning of each semester.
- In line with Institute academic calendar, department prepares annual activity calendar separately and share it with faculties and student
- All faculty & student follows 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

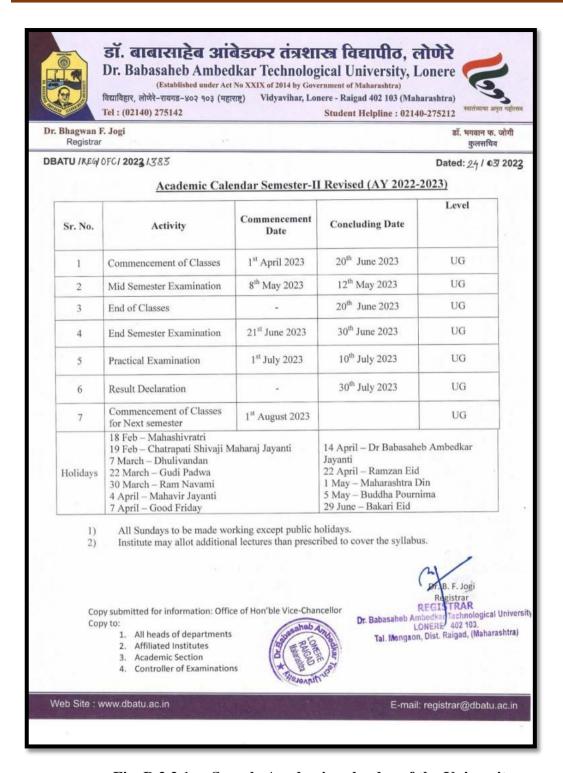


Fig. B.2.2.1a.: Sample Academic calendar of the University

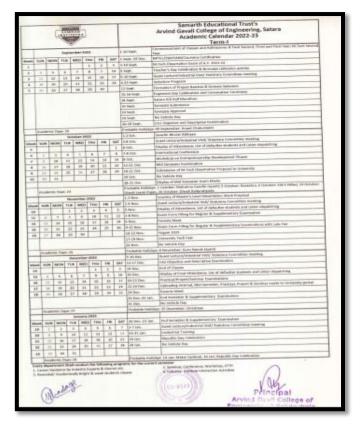




Fig. B.2.2.1b.: Sample Institute Academic Calendar

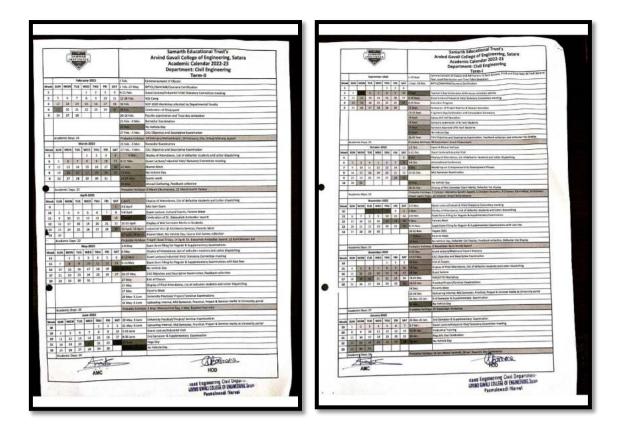


Fig. B.2.2.1c.: Department Academic Calendar

Power point Video from Industry Video Lectures by NPTEL Videos presentation by Spoken Tutorials Faculty Members Experts Faculty Members Power point Delivery of Lectures presentation by in classroom Students E Resources Quizes Project based Collaborative Instructional Methods and Group Projects Learning Learning **Pedalogical Initiatives** Conducting experiments in a group Insitute Industry Vertual Learning Expert Lectures collaboration Online teaching Person from Resource person through Zoom, Virtual Lab from Academia Google Meet, Industry

B. Use of instructional methods and pedagogical initiatives:

Microsoft Team

Fig. 2.2.1 d Instructional methods & pedagogy

Delivery

Faculty use various resources for class room teaching like chalk and duster, Intelligent Interactive Panel /Projector etc. Each student is free to ask any query related to the subject during lectures. Faculty members resolve the doubts of students asked during lectures.

Use of e-resources:

Faculty members use PowerPoint Presentations on difficult topics for better understanding. They also use videos of various MOOC Platforms like National Programme on Technology Enhanced Learning (NPTEL) videos, MIT Open Source Video and the videos of industry Experts.

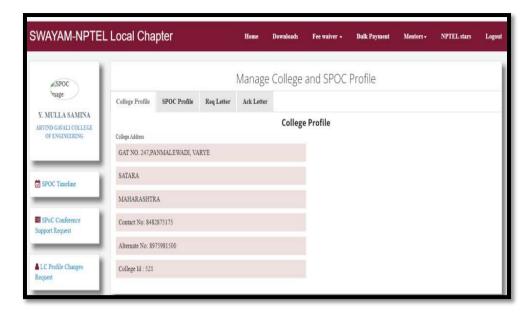


Fig. 2.2.1 e Swayam NPTEL Local Chapter

Collaborative Learning:

Collaborative learning is the educational approach of using groups to enhance learning through working together. Groups of two or more learners work together to solve problems, complete tasks, or learn new concepts. It promotes learning from other's viewpoints, promotes listening to criticism and advice, develops public speaking and active listening skills and improves cooperation.

- Curriculum includes the subject like Seminar, Mini project, Major Project where 3-5 students
- The following methods are used for collaborative learning.
- 1. Project work divides in small modules and subset of students work on different modules.
- 2. Seminar and Power point presentation preparation activity also carried in group of 3-5 students.
- 3. For subject like MOS Laboratory experiments are performed in a group of 3-4 students.
- 4. Moodle is important ICT initiative of civil department, which is useful for collaborative learning. Various activities conducted through includes quiz, assignment, e resource sharing

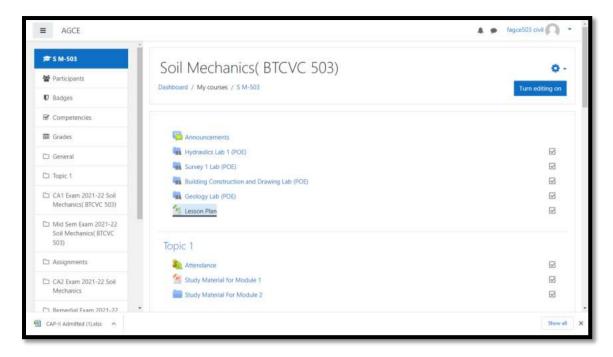


Fig. 2.2.1 f MODDLE Web

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 7 and 8 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 labs: Faculty members use virtual labs of different IITs to conduct some difficult experiments of the respective labs. Instruction manuals about conduction of experiments are given in virtual labs, students follow these instruction materials to complete the experiments. There is no need to install latest software in the labs as different software and simulators are available in virtual labs.
- 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 labs online. During lockdown period faculty members taken all classes online. Some faculty members also run their own created video lectures, NPTEL and YouTube videos during online lectures using MS teams, Google meet and zoom.

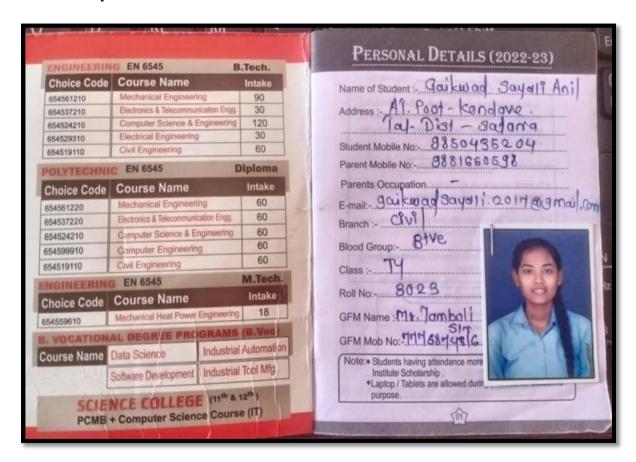


Fig. B.2.2.1 h: Online Learning on Google Meet

(04)

C. Methodologies to support weak students and encourage bright students

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 helps 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.



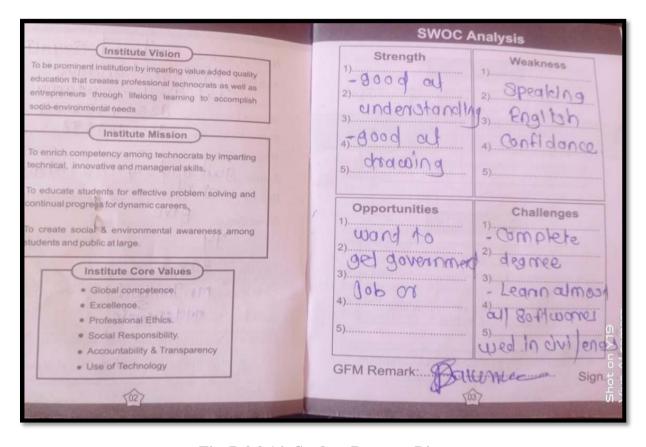


Fig. B.2.2.1 i: Student Progress Diary

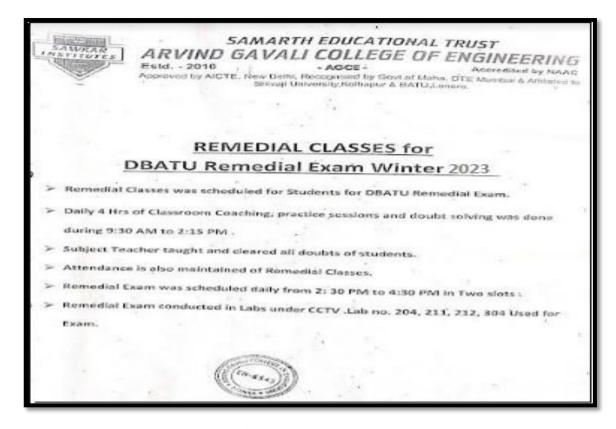


Fig. B.2.2.1 j: Sample Notice of Remedial Classes

| YAC | Monday | subject | Faculty Name | TIME |
|----------|--|--|--|---------------------|
| (4) TEST | | Design of steel | | 9:30am to 11:30 pm |
| Date | 5/5/2023 | structure | Mr.Katkar R.A | 1:00 pm to 2:50 pm |
| | | structure | structure | 3:00pm to 5:00pm |
| YAC | Tuesday | subject | Faculty Name | TIME |
| | The second secon | Geotechnical | | 9:30am to 11:30 pm |
| Date | 6/5/2023 | engineering | MRS.Chaudhari S.S | 1:00 pm to 2:50 pm |
| | | engineering | | 3:00pm to 5:00pm |
| YAC | Wednesday | subject | Faculty Name | TIME |
| Date 7 | | | | 9:30am to 11:30 pm |
| | 7/5/2023 | Structural Mechanics-II | Mr.Katkar R.A | 1:00 pm to 2:50 pm |
| | | | the fact of the first of the fi | 3:00pm to 5:00pm |
| YAC | Thursday | subject | Faculty Name | TIME |
| | | Design of steel | Mr.Katkar R.A | 9:30am to 11:30 5pm |
| Date | 8/5/2023 | Design of steel structure | | 1:00 pm to 2:50 pm |
| | 54.7665 | structure | | 3:00pm to 5:00pm |
| YAC | friday | subject | Faculty Name | TIME |
| -15 | | | 4-11 | 9:30am to 11:30 pm |
| Date | 9/5/2023 | Structural Mechanics-II | Mr.Sapkal R.N | 1:00 pm to 2:50 pm |
| | - 11 | Allega - The second sec | | 3:00 pm to 5:00 pm |
| 4 | AMC Membe | Head Engineer | HIGOCOVII Department LEGE OF ENGINEERING, Satara Iswadi (Varve) | Ripkinal / |

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 GPS Surveying, Fluid Mechanics, etc. are made available to bight 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.

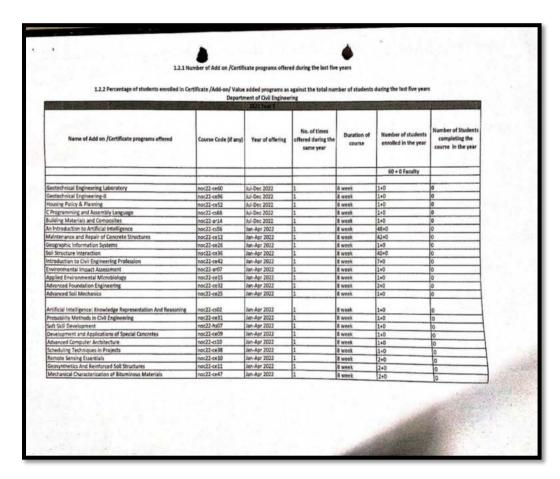


Fig. B.2.2.1 l: Sample NPTEL Enrollment



Fig. B.2.2.1 m: Sample NPTEL Certificate

Department selects one of the final year students as the "Best out-going student" of the program and student is suitably rewarded for one's bright performance. Selection in 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, university marks, Following table shows last three years best outgoing students.

Table B.2.2.1a: Best outgoing student award

| Sr. No. | Name of Student | Academic Year | Best Outgoing Student |
|------------|----------------------|------------------|------------------------------|
| 1 | Shibe Sneha Tanaji | 2022-23 | Best Outgoing Student |
| 2 | Kharade Akshada | 2021-22 | Best Outgoing Student |
| 3 | Dhorke Vikas Jaising | 2020-21 | Best Outgoing Student |
| 4 | Desai Anuradha Ashok | 2019-20 | Best Outgoing Student |

D. Quality of classroom teaching

(03)

- Teachers are properly assigned courses and practical sessions before the semester even begin, 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 student in learning



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

E. Conduct of experiments:

All laboratories of the civil engineering department are equipped with enough number of instrument required for the performance of various experiments.

- 1. Each student performs experiments.
- 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

(03)

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.

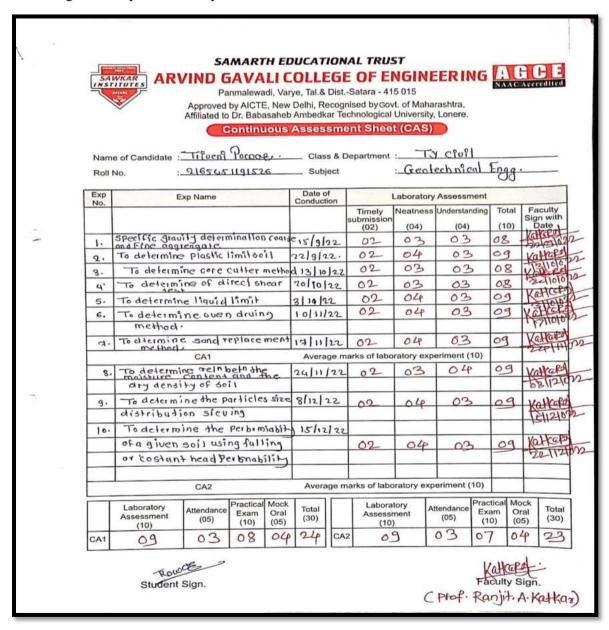


Fig.2.2.1 p. Sample Laboratory Evaluation Sheet

G. Student feedback of teaching-learning process and actions taken

(06)

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).

Arvind Gavali College of Engineering, Satara Department of Civil Engineering

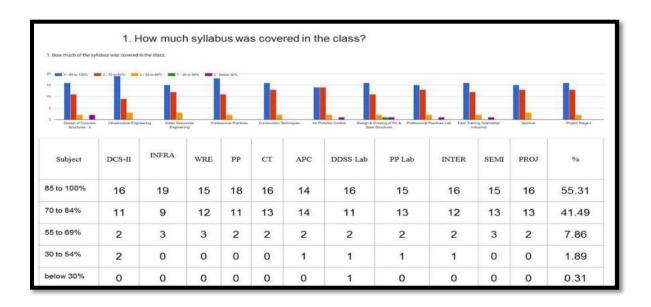
Final Year Feedback

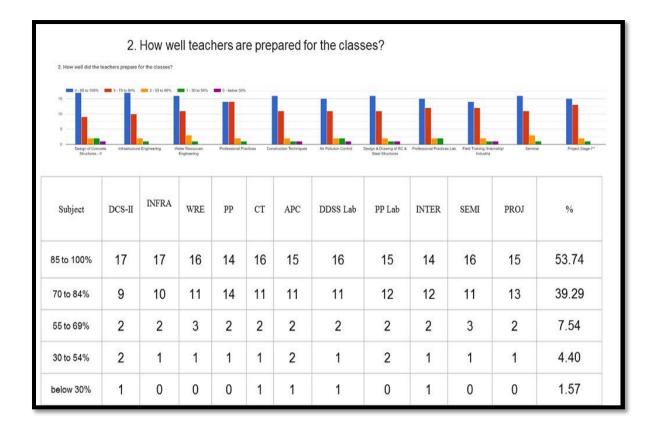
Month- Nov/Dec 2022-23

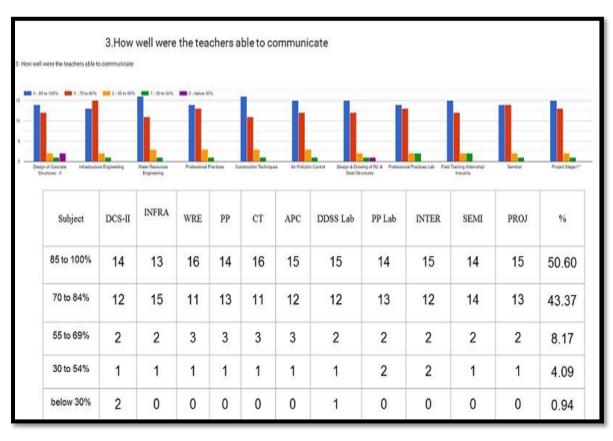
Total Responses-:35

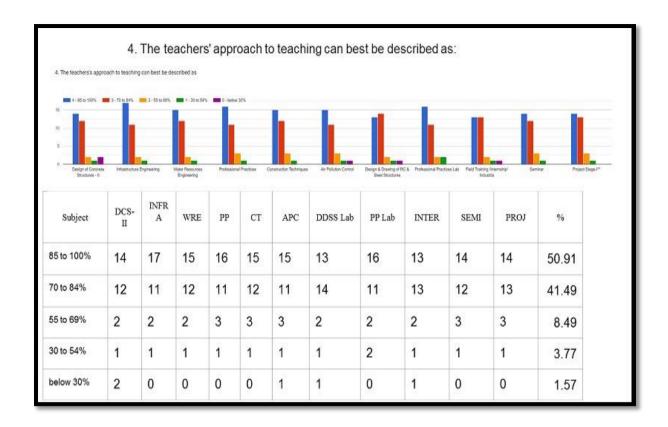
Total Class Strength-65

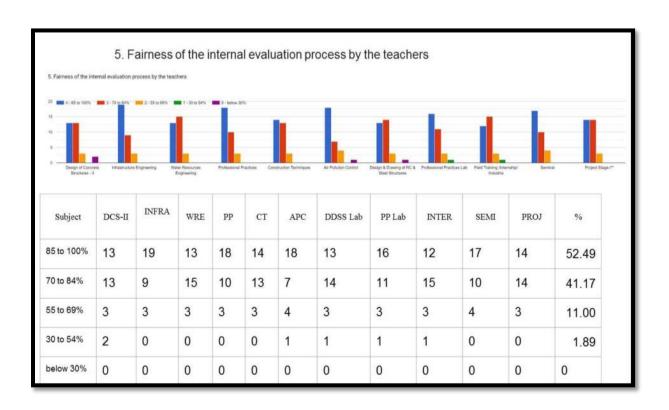
Feedback Percentage-:54%

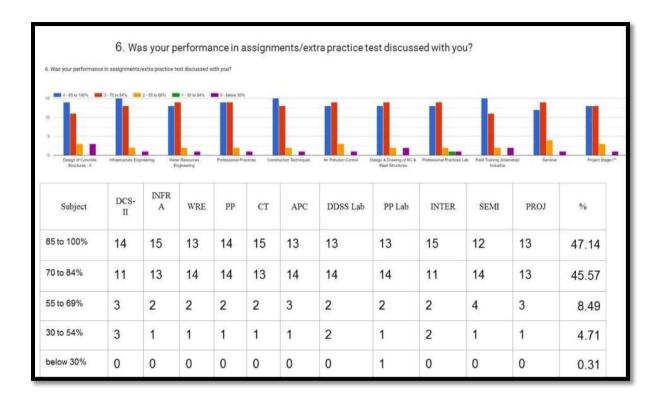


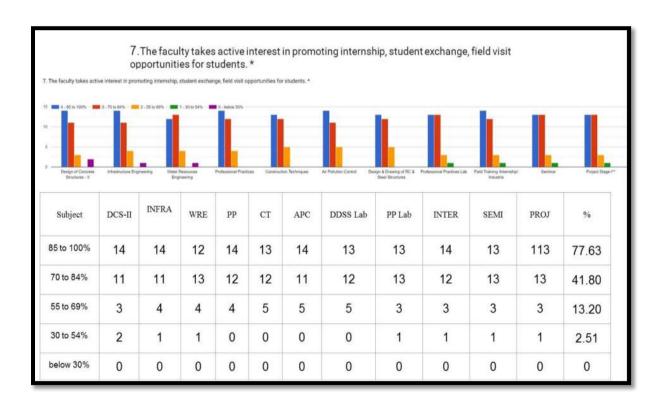


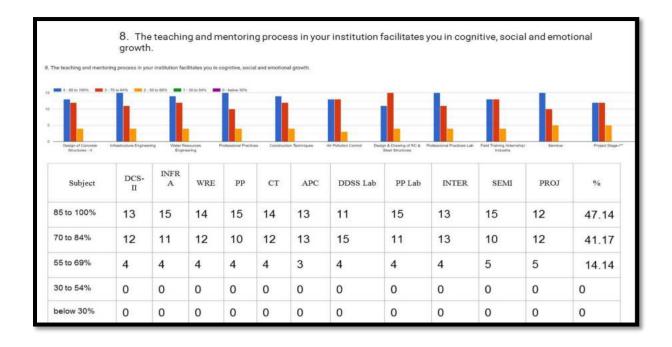


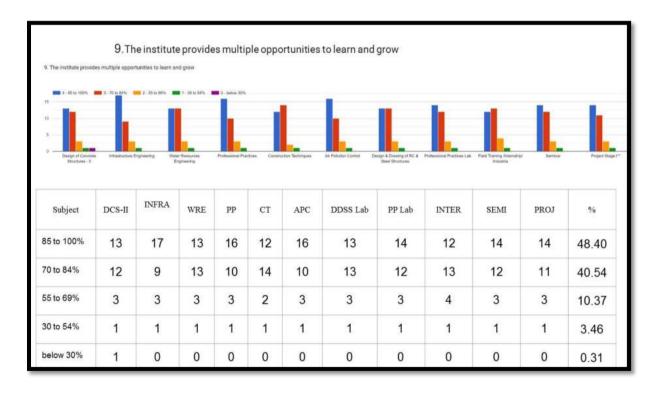


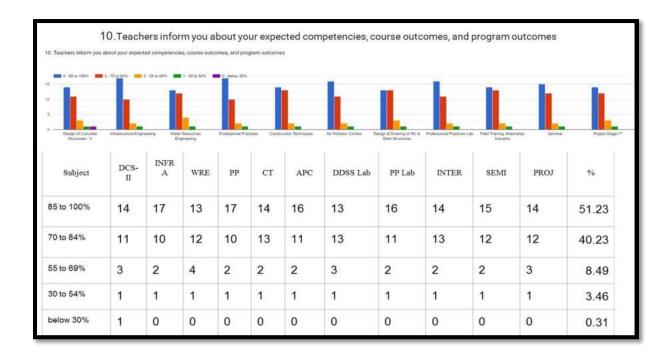


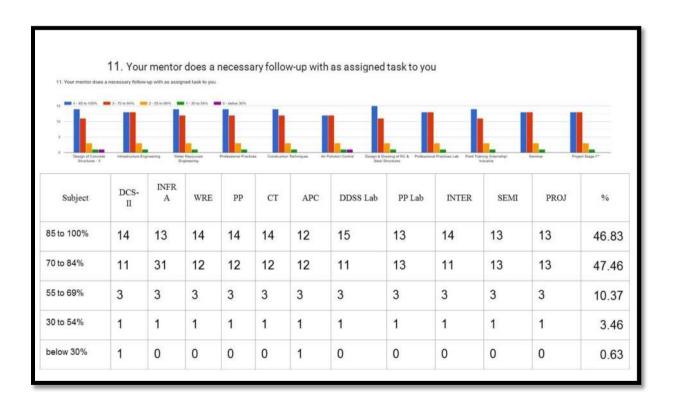


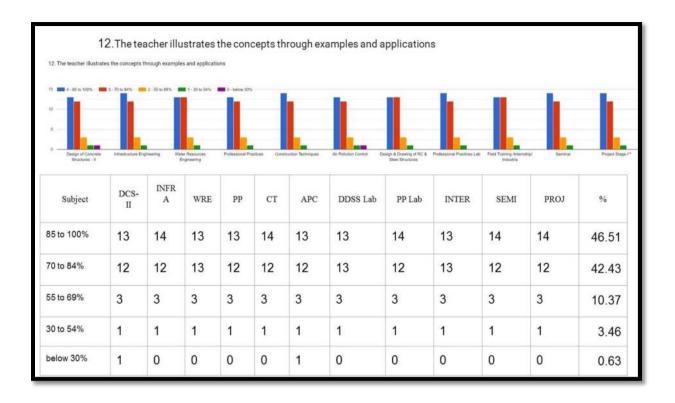


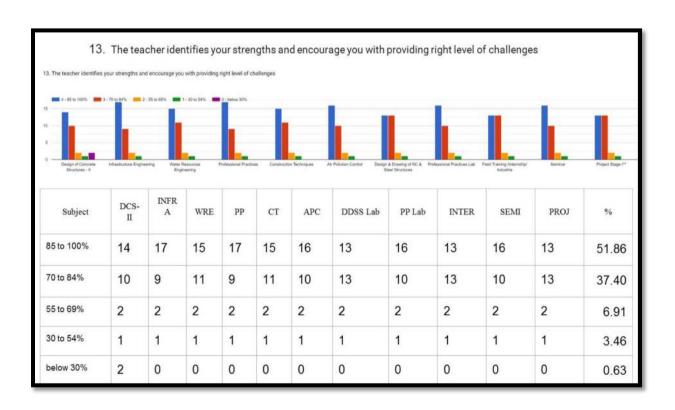


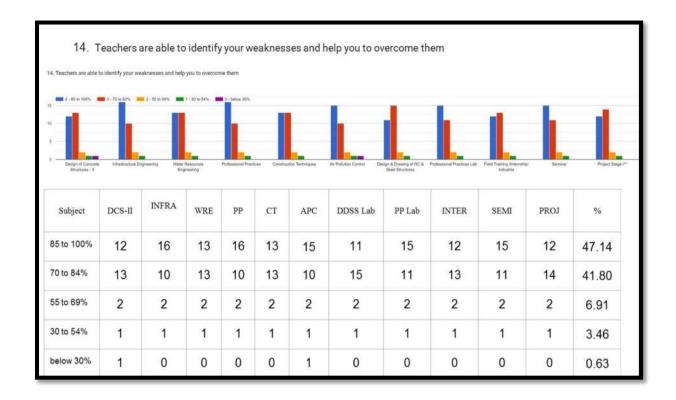


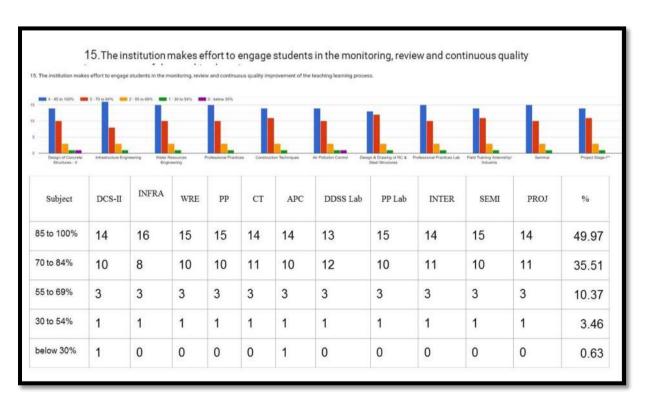


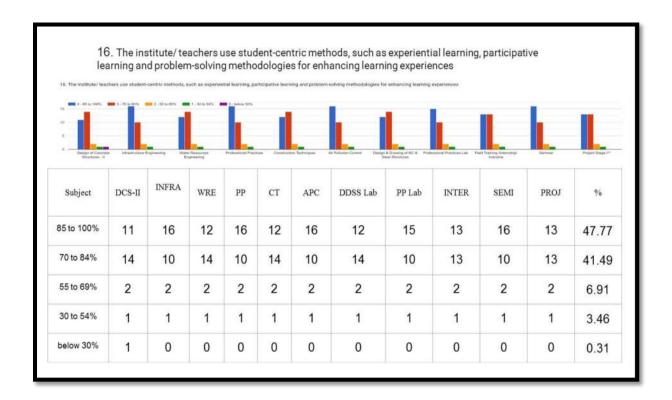


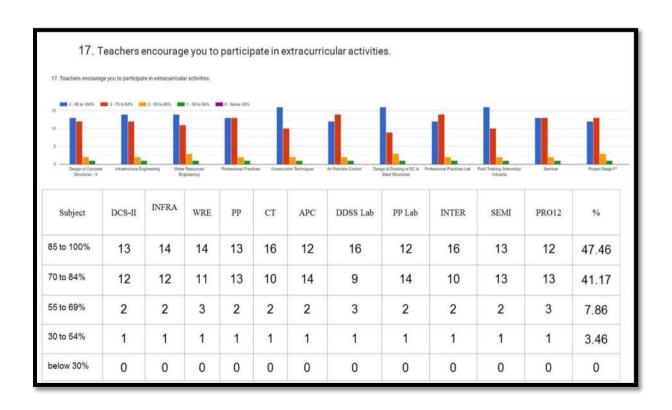


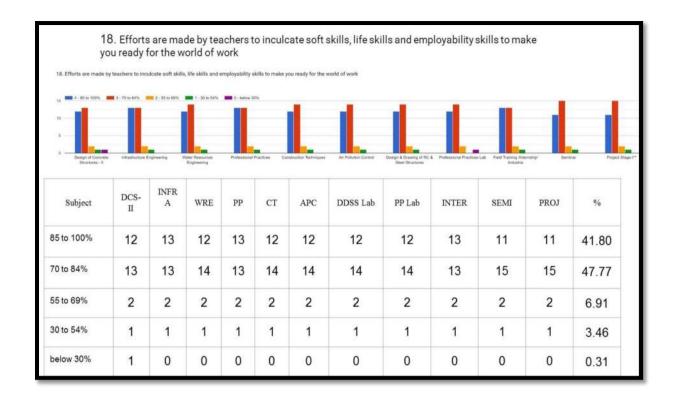


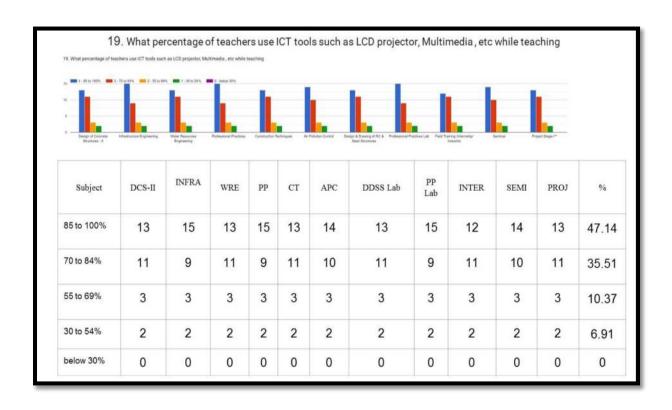












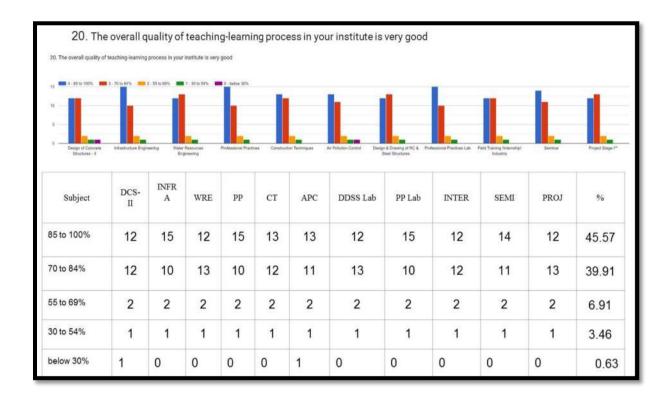


Fig.2.2.1 q. Sample Online Feedback Form

| | - | 0 | erall Analysis | | - |
|--|--------------------|-----------|--|---|---------|
| Subject | Faculty | Avg. % | Appreciation | Suggestion for Improvement | |
| Design of Concrete Structures - II | Dr.P.R.Bamane | 86% | Satisfactory design examples given to students | Provide notes on time | A Dava |
| Infrastructure Engineering | Ms. D.S. Jadhav | 86% | Explanation method and providing notes on time | Provide important questions | Dadhou |
| Water Resources Engineering | Mr. M.S. Shikalgar | 87% | Syllabus Coverage | Provide information according to competitive exam | Jukalga |
| Professional Practices | Mr.R.N.Sakpal | 86% | Teaching Method | Provide PPT and Videos | 8 |
| Construction Techniques | Mr.R.N.Sakpal | 86% | Concept clearance | Explain future scope of subject to students | - |

rlead Engineering Civil Department Sylving Gavalu College of Engineering, Satur Panmalewadi (Varya)

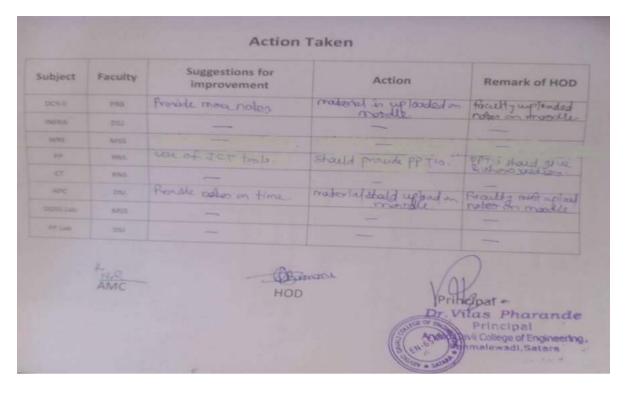


Fig.2.2.1 r. Sample Feedback Analysis and Action Taken

2.2.2. Quality of Internal Semester Question papers, Assignments and Evaluation (20)

(Mention the initiatives, implementation details and analysis of learning levels related to Quality of semester question papers, assignments and evaluation)

- Civil Engineering department follows the evaluation of scheme of DBATU University Lonere.
- Internal and external exams are 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 with evaluation process during their orientation program itself.
- Department forms a Program Evaluation Review Committee (PERC) for question paper's quality checking, evaluation and effective process implementation.
- Three sets of question paper for each course are prepared by the faculty members and submitted to the PERC Committee. The committee member selects one copy based on the questions' quality and relevance to COs.
- This selected set is further reviewed by the Head of the department (HOD). After approval from the HOD, final paper is printed and submitted to Exam Committee, one day prior to the scheduled class test to maintain the privacy issues.
- The test coordinators schedule the test time table, test invigilation allotment, room allotment and coordinate in smooth execution of the test in the scheduled time as per COE and display the same on the notice boards. The test time table, seating arrangement documents posted on what-sup group of students.
- Assessment questions for theory are aligned with bloom's taxonomy and the questions were decided as per the COs which are framed by the course coordinators according to the blooms level, verified by the test coordinator and approved by HOD.
- The duration of the test is 1 hrs. and the question papers are set to make the students to learn time management. Before first test 33.33 %, Mid semester test 66.66 % and test two 100% of syllabus is covered by course coordinator
- Three sets of question paper for each course are prepared by the faculty members and submitted to the PERC Committee. The committee member selects one copy based on the questions' quality and relevance to Co.
- This selected set is further reviewed by the Head of the department (HOD). After approval from the HOD, final paper is printed and submitted to Exam Committee, one day prior to the scheduled class test to maintain the privacy issues.
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- The duration of the test is 1 hrs. And the question papers are set to make the students to learn time management. Before first test 33.33 %, Mid semester test 66.66 % and test two 100%

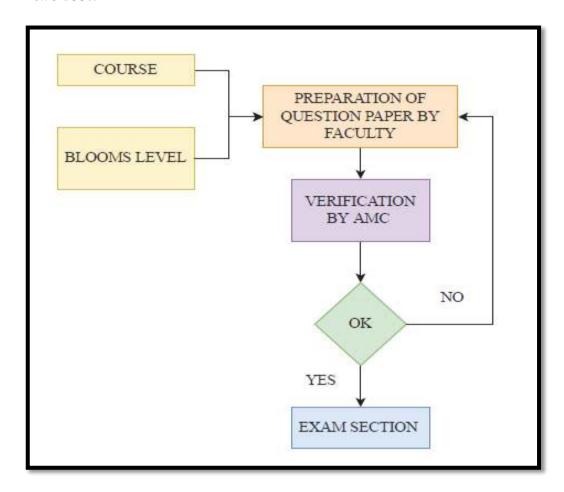


Fig B.2.2.2.a: Internal Question Paper Setting and Evaluation Process

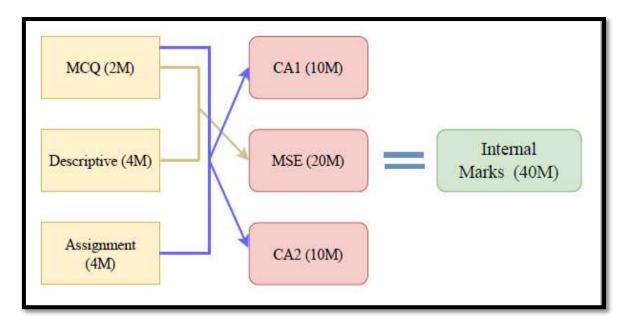


Fig B.2.2.2.b: Process for Internal semester Question Paper setting and evaluation

Evaluation:

- a) The faculty member after each internal assessment test evaluates the test books as per the scheme of evaluation.
- b) The faculties after every internal assessment test they explain the solution of the questions in the class.
- c) For any genuine reasons, if a student was unable to perform well in the given three internal assessment tests, improvement test is given to him/her.
- d) The average of the marks obtained from any best two test is chosen for the award of internal assessment marks.
- e) Assignments are used as a tool for practice and evaluation is based purely on Internal Assessment Test.

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

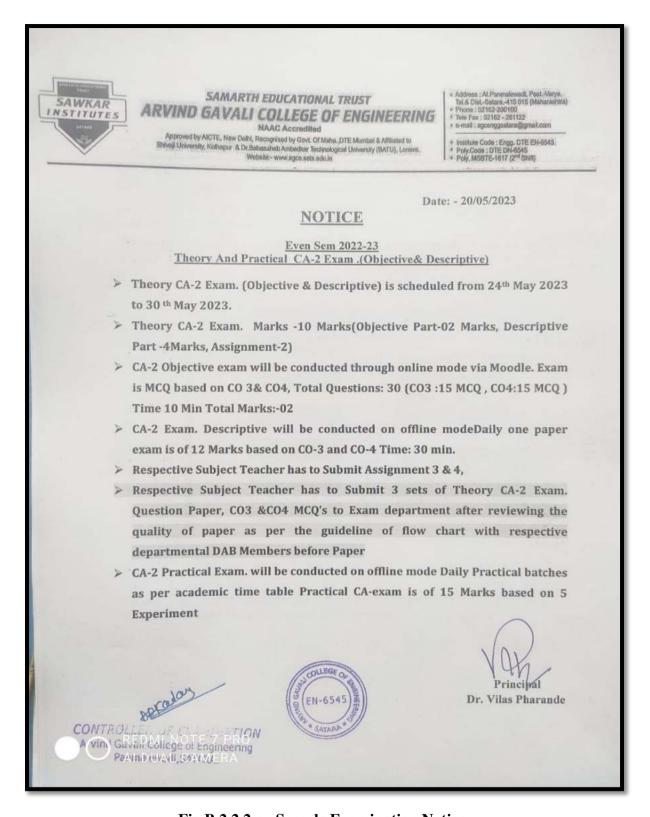


Fig B.2.2.2.c: Sample Examination Notice

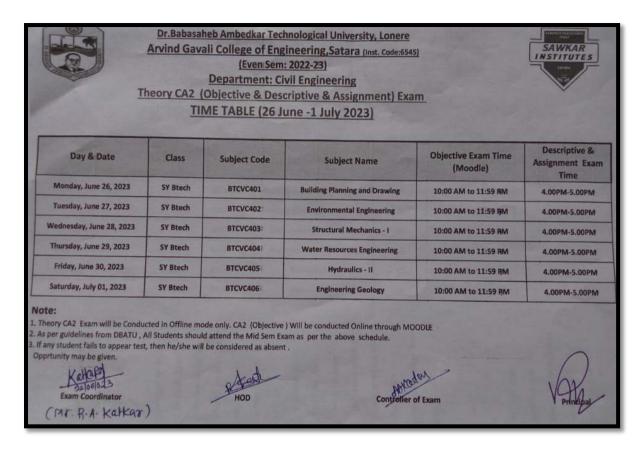


Fig B.2.2.2.d: Sample Examination Time Table



DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA EVEN SEM 2022-23

CA-2 Examination (Descriptive) -May 2023

Course: B. Tech in Civil Engineering Sem: VI

Subject Name: Environmental Engineering

Subject Code:BTCVC402

Max Marks: 12 Date: - 27 /06/2023 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 6 Marks Q.2 Solve Any one of the following. CO3 (A) State the requirements which are considered while designing the distribution system. **CO3** (B) Explain the following layout systems for distribution a) Dead end system b) Radial system Q. 3 Solve Any one of the following. 6 Marks **CO4** (A) Explain the process of collection of solid waste. **CO4** (B) What are the sources of solid waste

*** End ***

Fig B.2.2.2.e: Sample CA 2 Question Paper

B. Process to ensure questions from outcomes/learning level perspective (05)

- 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 in charge 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.
- Achievement of each course outcome on the map separately

C. Evidence of CO coverage in class test/mid-term tests

(05)

- 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.

Internal assessment tools (Direct) are:

Table 2.2.2a Direct Internal Assessment Tools

| Internal Assessment Tools |
|----------------------------------|
| CA1, MSE, ESE |
| CA1,MSE, ESE |
| CA2,MSE ,ESE |
| CA2, ESE |
| |

D. Quality of Assignments and its relevance to Cos

(05)

- 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. BabasahebAmbedkar Technological University, Lonere ArvindGavali College of Engineering, Satara (Inst. Code: 6545) EVEN Sem (2022-23) Department: Civil Class: TY Subject: Foundation Engineering Subject Code :BTCVC 602 Assignment No: 3A Published Date: 27/05/2023 Submission Date: 27/05/2023 Shear strength parameters of soil are Q.1) CO-3 [6 Marks] Cohesion(C) = 35 kN/m², Frictional angle(φ) = 22.5° and mobilized shear parameters $C_m = 22.5$ kN/m^2 and $\phi_m = 16^0$, Calculate the factor of safety with respect to (a) Strength (b) Cohesion (c) Friction. The average inter granular pressure on the failure surface is 120 kN/m2. Assignment No: 4A Design a Combined rectangular footing to carry Q.1) column load of 2500 kN and 3500 kN at 5 m CO-4 [6 Marks] spacing on sandy soil with allowable soil pressure of 275 kN/m2. Lighter column is at a distance of 300 mm clear from property line. Size of column is 400 mm X 400 mm. gn of Faculty Mr. Ranjit. A Katkar

Fig B.2.2.2.f Assignment with CO relevance

| | | Arvind Gaval | samarth E Samarth E I College of En nalysis Theor | ducational ginering, ry CA-2 | Trust's Satara (l Odd Se | Inst Code | : 6545) | | | | | |
|----|---|--------------------------------|--|------------------------------------|--------------------------------|---------------|---------|--------|---------------------|------------------------|----------------|----------------|
| | | | (12th-1 | 7th Dec.2 | 122) | | | | | | | |
| | Class:- Third Year Civil | Sem:-V | Subject:- | Geotechi | ical En | gineerin | g (BTC | CVC 50 | 2) | Dept: (| Civil | |
| | | | Obje | ctive | | Desc | riptive | | Assign | ment | | |
| | | | Total out of | Total out of 1 | Q.1(A) | Q.1(B) | Q.2(A) | Q.2(B) | Assignm ent No.1 | Assign ment No.2 | Total Marks | Final Marks |
| - | | | 1 | 1 | 6 | 6 | 6 | 6 | 12 | 12 | 38 | 10 |
| | | | CO-3 | 00-4 | CO-3 | 004 | CO-3 | 00-4 | CO-3 | 00-4 | | |
| 1 | CHORAGE ABHAY SANJAY | 2165451191001 | 1.00 | 1.00 | 4.00 | 75000 | | 6.00 | 10.0 | | 33.00 | |
| 3 | THORAT AKASH ANANDRAO | 2165451191002 | 0.00 | 0.00 | 3.00 | | | 6.00 | 10.0 | 10.0 | 32.00 29.00 | 8 |
| 4 | AVDHUT ASHOK MANE | 2165451191003 | 0.00 | 0.00 | | | | 0.00 | 10.0 | 10.0 | 0.00 | 0 |
| 5 | CHAITANYA SIDDHESHWAR WAGH | 2165451191004 | 0.00 | 0.00 | | | | | | | 0.00 | 0 |
| 6 | SHINDS HARSHADA KISHOR | 2165451191005 | 1.00 | 1.00 | | 6.00 | - | 6.00 | 11.0 | 12.0 | 37.00 | 10 |
| 7 | SAWANT MAYURI SANTOSH | 2165451191006 | 0.00 | 0.00 | 4.00 | | | 6.00 | 10.0 | 11.0 | 31.00 | 8 |
| 8 | KEDARE POOJA RAMISH | 2165451191007 | 0.00 | 0.00 | | 2.00 | | | 11.0 | 11.0 | 24.00 | 6 |
| 9 | PAWAR SACHIN HANAMANT | 2165451191008 | 0.00 | 0.00 | 4.00 | - | | 6.00 | 10.0 | 10.0 | 30.00 | 8 |
| 10 | SAHIL DADASO SATPUTE | 2165451191009 | 0.00 | 0.00 | 4.00 | | | 4.00 | 10.0 | 10.0 | 28.00 | 7 |
| 11 | KUMBHAR SANINA NARAYAN | 2165451191010 | 1.00 | 1.00 | 4.00 | | | 6.00 | 11.0 | 11.0 | 34.00 | 9 |
| 12 | SHRIKRUSHN DIPAK CHAVAN SUYOG YASHWANT KADAM | 2165451191011 | 1.00 | 1.00 | 4.00 | | | 6.00 | 11.0 | 11.0 | 34.00 | 9 |
| 13 | CHAVAN SWAPNALI MANIK | 2165451191012 | 1.00 | 0.00 | | | | | 10.0 | 11.0 | 22.00 | 6 |
| 14 | PAWAR SWAPNALI KALIDAS | 2165451191013 | 1.00 | 1.00 | 4.00 | | | 6.00 | 11.0 | 10.0 | 33.00 | 9 |
| 15 | GURAV ANIRUDHA DILIP | 2165451191501 | 1.00 | 1.00 | 1.00 | | | | 11.0 | 11.0 | 25.00 | 7 |
| 16 | PISAL SAVAN SADHU | 2165451191502 2165451191503 | 1.00 | 0.00 | 4.00 | _ | _ | 6.00 | 12.0 | 11.0 | 34.00 | 9 |
| 17 | CHANGAN MIHIR AJAY | 2165451191504 | 0.00 | 0.00 | 6.00 | | _ | 6.00 | 12.0 | 11.0 | 37.00 | 10 |
| 18 | JAOTAP AKHILESH SURESH | 2165451191505 | 1.00 | 1.00 | | - | _ | | | | 0.00 | 0 |
| 9 | DANGE SALMAN NASHIRKHAN | 2165451191506 | 0.00 | 0.00 | 3,00 | \rightarrow | - | 6.00 | 10.0 | 11.0 | 32.00 | 8 |
| 0 | CHAVAN PRITHVIRAJ NITIN | 2165451191507 | 0.00 | 0.00 | 2.00 | - | - | - | 9.0 | 9.0 | 20.00 | 0 |
| 1 | PATIL AVADHUT BABAN | 2165451191508 | 0.00 | 0.00 | 4.00 | \rightarrow | _ | 6.00 | 10.0 | 11.0 | 31.00 | 5 |
| 12 | SHELKE SIDDHESHWAR JAYASTMO | 2165451191509 | 1.00 | 1.00 | 4.00 | 5.00 | | 6.00 | 11.0 | 11.0 | 35.00 | 8 |
| 3 | VALEKAR MAYUR JANARDAN | 2165451191510 | 0.00 | 0.00 | 4.00 | 3.00 | | 4.00 | 11.0 | 11.0 | 30.00 | 9 |
| 4 | KALBHOR BALRAM POPAT | 2165451191511 | 1.00 | 1.00 | 3.00 | - | | 6.00 | 11.0 | 12.0 | 34.00 | 9 |
| 25 | GAIKWAD NAKUL MANOJ | 2165451191512 | 0.00 | 0.00 | 4.00 | | - | 4.00 | 10.0 | 11.0 | 29.00 | 8 |
| 7 | VALEKAR DINESH SHRIMANT | 2165451191513 | 1.00 | 1.00 | 4.00 | | | 6.00 | 11.0 | 11.0 | 34.00 | 9 |
| 8 | KADAM ATUL RAMESH | 2165451191514 | 1.00 | 1.00 | 5.00 | | | 6.00 | 12.0 | 11.0 | 36.00 | 9 |
| 9 | GHORPADE SHUBHAM ANANDRAO | 2165451191515 | 0.00 | 0.00 | 3.00 | | | 6.00 | 10.0 | 10.0 | 29.00 | 8 |
| 0 | MORE PRATHAMESH DATTATRAY | 2165451191516 | 0.00 | 0.00 | | | | | | | 0.00 | 0 |
| 1 | KUNDALE AKSHAY SUDHIR | 2165451191517 | 0.00 | 0.00 | | | | | | | 0.00 | 0 |
| 00 | KADAM GANESH VISHNU Mhavashe OM Chandralount | 2165451191518 | 0.00 | 0.00 | 3.00 | | | 6.00 | 10.0 | 10.0 | 29.00 | 8 |
| 3 | PAWAR TEJAS MADHAV | 2165451191519 | 0.00 | 0.00 | | | | | | | 0.00 | 0 |
| 4 | PADWAL SAURABH RAJENDRA | 2165451191520 2165451191521 | 0.00 | 0.00 | | | | | | | 0.00 | 0 |
| 5 | HADPAD PRAVIN ASHOK | | 0.00 | 0.00 | | | | | | | 0.00 | 0 |
| 6 | Nadaf Dilshad Samen | 2165451191522 2165451191523 | 0.00 | 1.00 | 4.00 | _ | _ | 6.00 | 11.0 | 11.0 | 34.00 | 9 |
| 7 | AWAGHADE PRAVIN VILAS | 2165451191524 | 0.00 | 0.00 | - | - | | _ | | _ | 0.00 | 0 |
| 8 | KADAM PRIYANKA GANGARAM | 2165451191525 | 1.00 | 1.00 | _ | 5.00 | - | | | | 0.00 | 0 |
| 9 | POWAR TRIVENI RAJARAM | 2165451191526 | 0.00 | 0.00 | 4.00 | 5.00 | | 6.00 | 11.0 | 11.0 | 35.00 | 9 |

Fig B.2.2.2.g Sample Assignments Evaluation Record

2.2.3. Quality of student projects

(25)

(Quality of the project is measured in terms of consideration to factors including, but not limited to, environment, safety, ethics, cost, type (application, product, research, review etc.) and standards. Processes related to project identification, allotment, continuous monitoring, evaluation including demonstration of working proto types and enhancing the relevance of projects. Mention Implementation details including details of POs and PSOs addressed through the projects with justification)

A. Projects Identification and allocation methodology to Faculty Members (03)

Student carry 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) Hydraulics
- b) Environmental Engineering
- c) Structural Analysis and Design
- d) Construction management
- e) Transportation
- f) Irrigation

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.

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

- 1. R& D committee displays a list of faculty members along with their areas of expertise on notice board.
- 2. A list of previous year's projects is displayed at 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 minimum 3 and maximum 5 and contact the concerned faculty member.
- 4. If any group failed to submit guide name then project coordinator will assign the guide to the group.
- 5. Students can choose/come out with a problem for the project. If they are not able to come out with the problem, then the supervisor will give a problem to the students for execution of the project work.
- 6. Committee finally allots the projects by considering various parameters like relevance to POs, originality, feasibility, technology and resource required.

- 7. The guide monitors the progress of the project work on a regular basis and keeps the track record. In case, the performance of the students group is not satisfactory, the matter is reported to PAC for required action.
- 8. The guide ensures the compliance of university format for submission of the project report

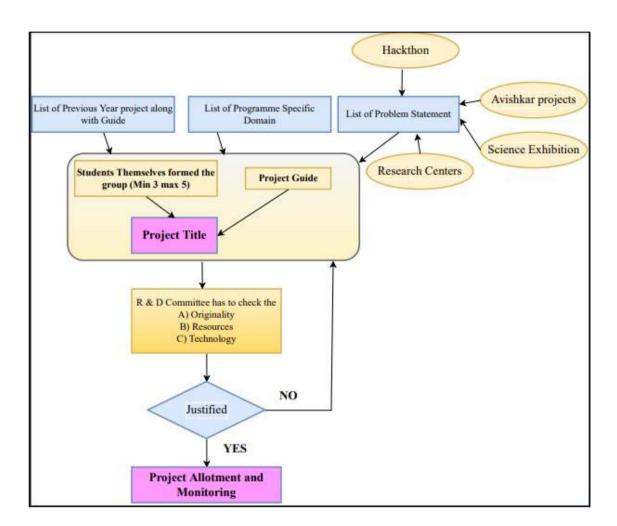


Fig B.2.2.3.a: Project Identification & allocation method

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| Conta | Date | | Contact No. 98604 | 40715 | Task Assigned | Industrial Mentor Signature | Alumni Mentor Signature | Guide Signature | Project Co-ordinate Signature |
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| Noc4 | Date | Topic Discussed | Task Assigned | Industry Mentor Signature | Alumni Mentor Signature | Guide Signature | Project Co-ordinator Signature |
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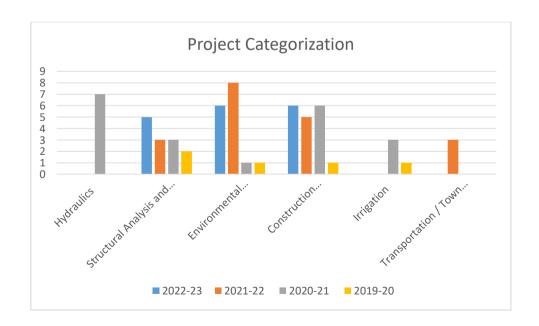
Fig B.2.2.3.b: Sample Project Progress Sheet

B. Types and relevance of projects and their contribution towards attainment of POs and PSO (05)

Hydraulics, Structural Analysis and Design, Environmental Engineering, Construction Management and Irrigation are major domain of project development in civil engineering department

Table 2.2.3.a Project Categories

| Project Domain | No | o. of Project | in each dor | nain |
|--------------------------------|---------|---------------|-------------|---------|
| | 2022-23 | 2021-22 | 2020-21 | 2019-20 |
| Hydraulics | 0 | 0 | 7 | 0 |
| Structural Analysis and Design | 5 | 3 | 3 | 2 |
| Environmental Engineering | 6 | 8 | 1 | 1 |
| Construction Management | 6 | 5 | 6 | 1 |
| Irrigation | 0 | 0 | 3 | 1 |
| Transportation / Town Planning | 0 | 3 | 0 | 0 |
| Total | 17 | 19 | 20 | 05 |



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 project guide and project assessment committee members and also the projects are mapped to PO's and PSO's.

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 of computer science concepts or principles. Course Outcomes:
- 1. Improve the professional competency and research aptitude in 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 team to solve problems with 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 broader social context of

CO - PO MAPPING OF PROJECT P01 P0 2 P03 PO 4 PO 5 P011 P0 12 P06 PO 8 PO 7 CO 1 3 3 2 3 2 3 3 2 2 3 3 2 CO 2 3 2 1 3 3 3 2 CO3 3 3 3 CO 4 3 3 2 3 3 3 2 CO 5 3 3 CO 6 3 3 2 3 Strength of Correlation: High: 3 Medium: 2 Low: 1

Table 2.2.3.b: Project CO-PO mapping

Procedure of CO Attainment

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

Academic Year: CAY (2022-23)
Table B.2.2.3c Mapping of Projects (PR1-PR19) with PO and PSO

| Group No | Project Name | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PS O1 | PS O2 |
|-------------|--|---------|---------|---------|---------|---------|------|-------------|---------|---------|----------|----------|----------|----------|----------|
| 1 | Seismic performance of multistory building with response spectrum method | Y | Y | | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y |
| 2 | Rain Water Harvesting | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 3 | Design of Modular Multistoried Steel Frame Building | Y | Y | | Y | Y | | | Y | Y | Y | Y | Y | Y | Y |
| 4 | Analysis and Design of equitable water supply for rural water distribution network | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y |
| 5 | Analytical Investigation on Mitigation of Short Column Effect In Partial In filled Frames | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 6 | Design of Paving Tiles using industrial waste carbon | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 7 | Design and Estimate of Sewage Treatment Plant | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 8 | Experimental analysis on Green Concrete | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 9 | Water quality analysis and modelling for lower koyana river | Y | Y | | Y | Y | | | Y | Y | Y | Y | Y | Y | Y |

| 10 | Marine pollution and its removal | Y | | | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | Advanced Materials and Techniques used in construction | Y | Y | | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y |
| 12 | Design of OPOD house and structure | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 13 | Retrofitting of a RC structure | Y | Y | Y | | | | Y | Y | Y | Y | Y | Y | Y | Y |
| 14 | Use of glass and granite as an aggregate in concrete block for sustainable construction | Y | Y | Y | | | | Y | Y | Y | Y | Y | Y | Y | Y |
| 15 | Waste Water Management | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 16 | Building Drawing and 3d Modelling | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 17 | Impact of lightning on building and remedial measures. | | | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y |

Academic Year: CAY m1 (2021-22) Table B.2.2.3c Mapping of Projects (PR1-PR19) with PO and PSO

| Grp No | Project Name | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PS O1 | PSO2 |
|-----------|---|---------|---------|---------|---------|---------|---------|------|---------|---------|----------|----------|----------|----------|------|
| 1 | Behavior of Bacterial concrete by varying types of bacteria | Y | Y | | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y |
| 2 | Compressed Stabilized Earth block | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 3 | Cognitive Properties of crushed and PPC concrete | Y | Y | | Y | Y | | | Y | Y | Y | Y | Y | Y | Y |
| 4 | Manufacturing of bricks by using foundry waste sand and its comparison with burnt clay bricks | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y |
| 5 | Utilization of tier CRUMB for water proofing | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 6 | Effect of RERA on construction and GST on construction. | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |

| 7 | Sewage Treatment Plant | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
|----|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | Movable Divider for Traffic management | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 9 | Performance Evaluation of conventional bricks | Y | Y | | Y | Y | | | Y | Y | Y | Y | Y | Y | Y |
| 10 | Eco Bricks | Y | | | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 11 | Urban Town planning | Y | Y | | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y |
| 12 | To study the effect of glass fiber and steel fiber in concrete | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 13 | Sponsored Project Rainwater | Y | Y | Y | | | | Y | Y | Y | Y | Y | Y | Y | Y |
| 14 | Sponsored Project Rainwater | Y | Y | Y | | | | Y | Y | Y | Y | Y | Y | Y | Y |
| 15 | Energy Audit for Pachgani Nagar Parishad | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 16 | Water Audit for Pachgani Nagar Parishad | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 17 | Building Information Modelling | | | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y |
| 18 | Road Power Generation by Mechanical mechanism | Y | Y | | Y | | Y | | Y | Y | Y | Y | Y | Y | Y |
| 19 | Castilated Beam | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |

Academic Year: CAY m2 (2020-21)

Table B.2.2.3d Mapping of Projects (PR1-PR20) with PO and PSO

| Group No | Project Name | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | P O 12 | PS O1 | PS O2 |
|-------------|--|---------|---------|---------|---------|---------|---------|------|---------|---------|----------|----------|--------------|----------|----------|
| 1 | A Case Study of Kolmba river analysis | Y | Y | | Y | Y | | Y | | Y | Y | Y | Y | Y | Y |
| 2 | Structural Audit of existing Building | Y | Y | Y | Y | | | | | Y | Y | Y | Y | Y | Y |
| 3 | Planning and distribution of pipe distribution network | Y | Y | Y | Y | Y | | | Y | Y | Y | Y | Y | Y | Y |
| 4 | Experimental Study of effect of glass fiber in glass powder cement concrete | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 5 | Retrofitting of ill detailed beam column connection | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 6 | Utilization of plastic in manufacturing of paver block | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 7 | Ferro Cement Construction | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 8 | Concrete blocks using waste material | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 9 | Condition Assessment of building | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 10 | Experimental Investigation of modified bitumen with plastic | Y | Y | Y | Y | | Y | | Y | Y | Y | Y | Y | Y | Y |
| 11 | Effect of Granite and marble waste to enhance the properties of silty soil | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 12 | Analysis and Design of G+15 Building | Y | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 13 | Reuse and Recycle of construction and demolition of waste | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |

| 14 | Study of watershed management | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | Palm island Dubai | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 16 | Light guage steel structure. | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 17 | Rainwater Harvesting | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 18 | Strengthening of beam and column | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 19 | Future scope in construction industry | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |
| 20 | To study the effect of carbon lamination. | Y | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y |

Academic Year: CAY m3 (2019-20)
Table B.2.2.3e Mapping of Projects (PR1-PR5) with PO and PSO

| Group No | Project Name | PO 1 | PO 1 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PS O1 | PS O2 |
|-------------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| 1 | AGCE Amphitheatre | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 2 | Watershed Management in AGCE, Satara with Special Reference to Khodiaiwadi, Karad | Y | Y | Y | Y | | Y | | Y | Y | Y | Y | Y | Y | Y |
| 3 | AGCE Rainwater Harvesting System | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 4 | A Study on Hollow core Foam Concrete Wall | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| 5 | Beam Column Connection Under Monotonic and cyclic loading | Y | Y | Y | Y | | Y | Y | Y | Y | Y | Y | Y | Y | Y |

(05)

A. Process for project work monitoring and evaluation

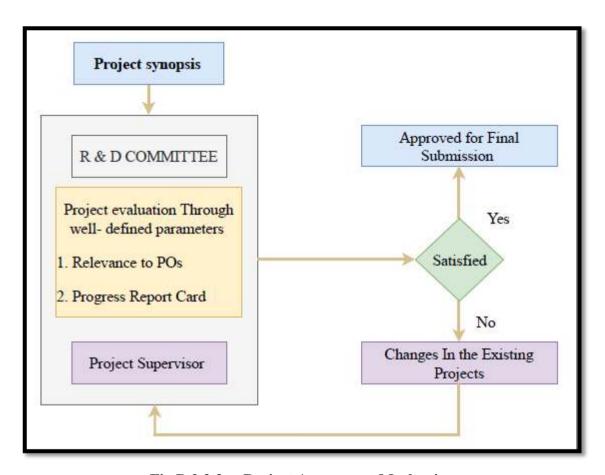


Fig B.2.2.3.c: Project Assessment Mechanism

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 f 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 above mentioned performance indicators are evaluated on 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 | Sr. No Performance Indicators/Rubrics | |
|--------|--|-------------|
| 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 above mentioned performance indicators are evaluated on scale of 1-5.

Excellent: 5 Very Good: 4 Good: 3 Satisfactory: 2 Not Satisfactory: 1

Project work Evaluation:

- a) **Internal Evaluation:** The project work and the report will be evaluated by the internal committee at Phase-1, Phase-2
- b) **External Evaluation:** The project work and the report will be evaluated by internal and external examiners appointed by the University.
- c) The examiners will take a presentation and demonstration followed by Viva-Voce on the project work carried out by students. The students need to defend their project work. Based on the presentation and Viva-Voce, the marks will be awarded to the students, which will be sent to the university

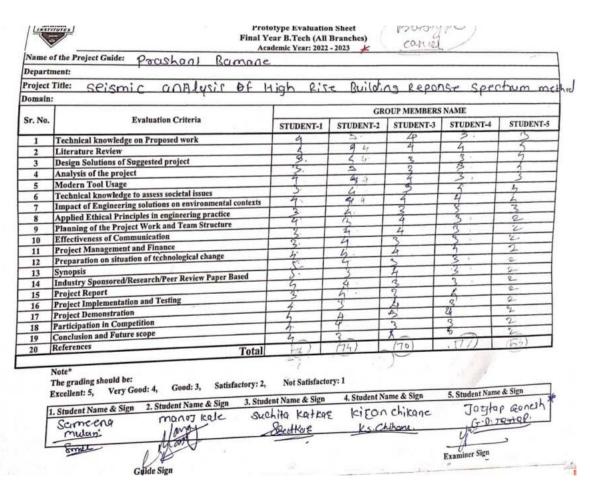


Fig B.2.2.3.d Sample Evaluation Record

Process to assess individual and team performance

(05)

Project assessment is the process of evaluating the performance of 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 suggestion for improving individual and team performance.

The assessment evaluation can be done by using assessment method like individual and team performance questionnaires and present in front of RR committee. Students need to score more than 60% for continuing to content work otherwise consult with guide. After reworking again need to present in front of RR committee and will start to do further work. The process to assess individual and team performance is shown in Fig. 2.2.3e.

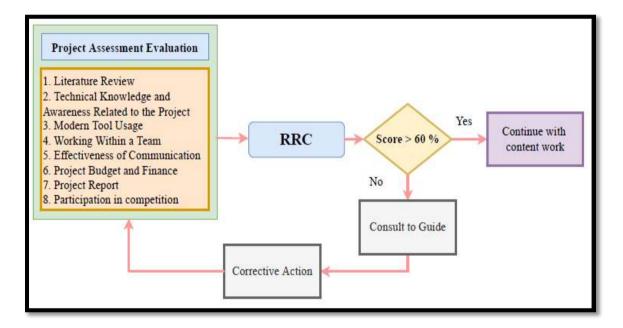


Figure B.2.2.3.e: Student Performance Evaluation Mechanism

B. Quality of completed projects/working prototypes

(05)

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 i. 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 j. Three Best Project

| Group No | Name of Student | Name of Guide | Title of Project |
|----------|-------------------------|------------------------|---|
| 7 | Momin Talha Pthan Sajma | Prof. Sapkal Rajendra | Design and Estimate of Sewage Treatment |
| | Mohite Ankita | | Plant |
| 6 | Jadhav Parth | Prof. Ranjit A | Design of Paving |
| | Patil Jaydeep | Katkar | Tiles using industrial waste carbon |
| | More Saish | | |
| | Jadhav Rajat | | |
| 13 | Sakunde Neha | Dr. P.R. Bamane | Retrofitting of a RC |
| | Patankar Priyanka | | structure |
| | Shirke Sani | | |

CAY m1 (2021-22):

Table B.2.2.3 j. Three Best Project

| Group No | Name of Student | Name of Guide | Title of Project |
|----------|--------------------|-------------------|---------------------------------------|
| | Akshata Kharade | | |
| G14 | Rohit Waghmode | | Sponsored Project |
| | Ankita Doumani | Prof Shinde S.S. | Rain Water |
| | Ashitosh Mechkar | | |
| | 7 Ishirosh Weenku | | |
| | Snehal Jagtap | | Energy Audit for |
| G15 | Aakansha Babar | Dr. Thombare V.R. | Pachgani Nagar Parishad |
| | Prathmesh Salunkhe | | |
| | Mayur Desai | Asst. Prof Gujar | Constitutive |
| | Vaibhav Tupe | Abhay | Properties of crush sand PPC concrete |
| G3 | Abhishek wagh | | |
| | Chaitanya Salunkhe | | |

CAY m2 (2020-21):

Table B.2.2.3 k. Three Best Project

| Group No | Name of Student | Name of Guide | Title of Project |
|----------|--|---------------------------|---------------------------------------|
| G2 | Vaishnavi Patil Pooja Sankpale Aboli Parate Supriya Salunkhe | Asst. Prof. Gujar A.V. | Structural Audit of existing building |

| G5 | Mayur Pawar Omkar Mane Jay Chavan Bhushan Mahale Vitthal Gurav | Asst. Prof. Gujar A.V. | Retrofitting of ill detailed beam column connection |
|----|--|---------------------------|--|
| G3 | Trupti Jadhav Suchitra Patil Nikita Khandzode Swaranjli Katkar | Dr. Thombare V.R. | Planning and Distribution of pipe distribution network |

CAY m3 (2019-20):

Table B.2.2.3 l. Three Best Project

| Group No | Name of Student | Name of Guide | Title of Project |
|----------|-------------------|-------------------|--------------------|
| G1 | Tanveer Atar | | |
| | Abhijeet Nikam | Mr. Ajay Kolekar | |
| | Anupsinh Shinde | | AGCE Amphitheatre |
| | Abhishek Shinde | | |
| | Suraj Yadav | | |
| | Harshada Shingate | | |
| | Aishwarya Shinde | | A Study of Hollow |
| G4 | Sanjeevani Patil | Dr. Thombare V.R. | core foam concrete |
| | Varsha Jadhav | | wall |
| | Sagar Chavan | | |

| | Aniruddha Desai | | |
|-----|----------------------|---------------------|----------------------|
| | Rupesh Gurav | | Beam column |
| 0.5 | D : LT :I | N. D. 1 0 1 1 | connection under |
| G5 | Ruturaj Jathar | Mr. Rajendra Sapkal | monotonic and cyclic |
| | Pratik Mohite | | loading |
| | Sanghamitra Nagkirti | | |



Figure B.2.2.3.f Intra-College Project Competition

A. Evidences of papers published/Awards received by projects etc.

(02)

CAY (2022-23) & CAY m1 (2021-2022)

| Sr. No. | Academic Year | Name of the Competition | Number of students participated |
|------------|------------------|--|---------------------------------|
| 1 | 2022-23 | National Level Project Competition (by Doulatrao Aher College of Engineering Karad)21/03/2022 | 02 |
| 2 | 2021-22 | AVISHKAR 2021-2022 Zonal Level Competition by DBATU | 02 |



Dr. Babasaheb Ambedkar Technological University, Lonere
State Technical University, Maharashtra Act No. XXIX of 2014

,

AVISHKAR 2022

Certificate of Excellence

This certificate is proudly presented to

| Mr. | / Miss | Swapnali | Chavan | |
|-----|--------|-------------|--------|--|
| of | Arwind | , collège a | Engg. | |

for securing first/second place in zonal level Avishkar 2022 held at

Sharad Institute of Technology College of Engineering, Yadrav

on 10th December 2022.

Category: UG/PG/PPG/Teachers

Descipline: PS

lilind Ovhal Prof. Dhanashri Biradar bserver Coordinator Dr. Sharad Jadhav Coordinator



Figure B.2.2.3. i Sample Project Participation Certificate

2.2.4. Initiatives related to industry interaction

(15)

(Give details of the industry involvement in the program such as industry-attached laboratories, partial delivery of appropriate courses by industry experts etc. Mention the initiatives, implementation details and impact analysis)

The department of Civil 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.

A. Industry supported laboratories

(05)

Table B. 2.2.4 a. Industry Supported Lab Details

| Sr. | Industry | Name of | Objective | Relevance |
|-----|------------------------|--------------|----------------------------------|-----------|
| No | Attached | Company/ | | to |
| | Laboratories | Organization | | PO/PSO |
| | | | | |
| | DI 1. | Abhay Gujar | 1. Awareness about the different | PO12,PSO2 |
| 1 | Plumbing Laboratory | Assiciates | plumbing material used on site | |
| | Laboratory | Satara | | |

A. Industry involvement in program design and partial delivery of any regular courses for students (05)

a. Industrial visits:

Industrial Visit for the engineering students is an essential activity as per their curriculum in order to get a proper insight into how the real working environment of a company is and the functionality at different levels. With an aim 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 | 2019-2020 | Chaitanya Residency, Satara | 17/04/2023 | 30 |
| 2 | 2022-23 | 2019-2020 | Model developers Satara. | 17/04/2023 | 30 |
| 3 | 2021-22 | 2018-19 | Sewage treatment plant at Akurdi | 24/05/2022 | 40 |
| 4 | 2020-21 | 2019-20 | Aditi buildcon construction Satara | 17/03/2021 | 30 |
| 5 | 2019-20 | 2018-19 | Visit to CWPRS and Pune metro | 06/03/2020 | 39 |

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





Fig 2.2.4.a Industrial Visit

| STUDENT'S FEEDBA INDUSTRIAL VISIT/ INTERNSHIP | |
|---|--|
| Impact/ learning experience of the st | udent from the visit/ training/ Internship * |
| ○ Excellent | |
| O Very Good | |
| ○ Good | |
| ○ Moderate | |
| 2. How do you rate the working as a ter | am member * |
| ○ Excellent | |
| O Very good | |
| ○ Good | |
| ○ Moderate | |
| 10. Live Projects Handling * | |
| ○ Excellent | |
| O Very good | |
| ○ Good | |
| ○ Moderate | |
| 11. Suggestions if any | |
| Your answer | |
| Submit | Clear form |
| | STA MINI |

Fig 2.4 b Format of student feedback on industrial visit

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



Figure 2.2.4 c. Sample Industrial Talk Session

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



Figure 2.2.4 c. Sample 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. | Name of Company | Authorized Person | Duration |
|-----|---------------------------------|--------------------------|----------------------------------|
| No. | | | |
| 1 | Aditi Buildcon, Satara | Mr. Ghanshyam D Matkar | 14 Jan,2020 – 13 Jan,2025 |
| 2 | Niketan Construction, Satara | Mr. Amai Agate | 8 Jan, 2020 – 8 Jan, 2025 |
| 3 | SI Consultant Karad | Mr. Shreedhar K. Inamdar | 25 Jan, 2020 – 24 Jan, 2025 |
| 4 | Model developers, Satara. | Mr. Makrand Dhavale | 16 April,2022 – 15 April,2027 |

MEMORANDUM OF UNDERSTANDING

BETWEEN

Arvind Gavali College of Engineering

Niketan Construction, Satara

8 January 2020 to 8 January 2025

This Agreement made and entered into on this date 8 January 2020 between Arvind Gavali College of Engineering, situated at Gate No. 247, Panmalewadi, Varye, Satara - 415015, affiliated to DBATU Lonere & Shivaji University, Kolhapur and Niketan Construction, Satara - 415004.

1. OBJECTIVES

- The objective of this Memorandum of Understanding is:

 a. To promote interaction between institute and company in mutually beneficial areas.

 b. To provide a formal basis for initiating interaction between institute and company.

Institute and company propose to collaborate through

- a. Providing Guidance to student's regarding learning design process and design software, manufacturing process, product flow, quality tools and modern tool usage
 b. Guiding product development process.

The MoU is intended to recognize the general basis for a cooperative and a collaborative working relationship between the two parties. The purpose of MoU is to have mutual intentions to jointly work on projects required for industries and research needs, with learned faculty of good industrial for mutual benefit and growth, on the areas specified below:

- Industrial Visits
 Guest Lectures/Seminars
 Guiding Mini Projects and BE Project Work
- Help in placements Internships
- Placement.

Each of the above modes of interaction will be initiated by entering into a separate agreement between the two parties.

3. FORMS OF RESEARCH AND DEVELOPMENT PROGRAMS

The form of any of the said Research and Development Program entered into by the Parties may also include the following:

- a. In their own existing facilities The performance of research and development individually by each Party or concurrently by both Parties in mixed groups at their own facilities with regular exchanges of results.
 b. In a separate research and development facility The performance of research and development by the technical personnel of both Parties working together in the facilities of one Party or in mixed groups at the facilities supported by either Party.
 c. Third parties The performance of research and development by the Parties together with one or more third parties.

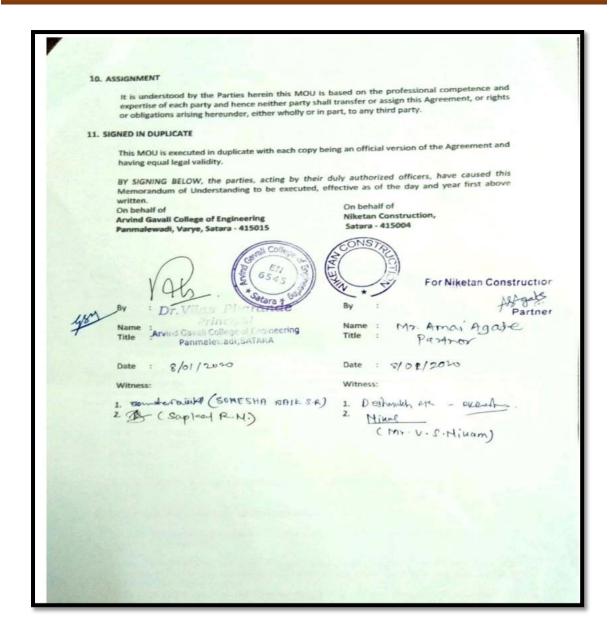


Figure 2.2.4 e. Sample MOU

F. Impact analysis of industry institute interaction and actions taken thereof (05)

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

| Sr. | Industry Involved | | Outcome | Impact Analysis | |
|-----|--|---|--|--|--|
| No | Interaction | | | | |
| | Initiative | | | | |
| 1 | Invited Talks from Industry Experts | Lecture on new developments and technologies adopted in bridge and railway engineering Mr. A.P. Bhalerao Project Manager SKBLLP | Students gain knowledge about new developments in transportation engineering | Enrichment of knowledge of use of new technologies in bridge and railway engineering | |
| 2 | Invited Talks from Industry Experts | Lecture on recent development in infrastructure engineering Me Amte R.A. JW Infra builder | Awareness about recent development in infrastructure engineering | Enrichment of knowledge about recent trends in infra | |
| 3 | Industrial Visits | Sewage treatment plant at akurdi | Advancement in wastewater treatment | Awareness about advancement in wastewater treatment | |
| 4 | Industrial Visits | At water treatment plant | Advancement in water treatment process | Awareness about advancement in water treatment | |

| 5 | Industrial Visit | At Aditi buildcon | Actual working | Enrichment of |
|---|------------------|---------------------|--------------------|--------------------|
| | | construction satara | at civil | knowledge as per |
| | | Mr. Matkar G.D. | engineering | current industry |
| | | Wii. Watkai G.D. | industries | needs |
| | | | | |
| | | | | |
| 6 | Industrial Visit | At Niketan | Awareness | Enrichment of |
| | | construction | about actual | knowledge as per |
| | | Mr. Amey Builder | working at | current industry |
| | | Wif. Affley Buffder | construction site | needs |
| 7 | Industrial Visit | Madal davalanana | Student seen on | Vnovdodoo |
| / | industriai visit | Model developers, | Student seen on | Knowledge |
| | | Satara. | site component | expansion in |
| | | | of building and | accordance with |
| | | | its function, also | current industrial |
| | | | seen actual | needs. |
| | | | working on site. | |
| | | | | |



Fig 2.2.4 g Sample 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 aware working culture of Industry
- 3. To provide knowledge of design, manufacturing, quality and testing of products

B. Industrial/Internship/Summer Training Course Outcomes:

- a) Student will understand industrial environment and practices
- b) Student will work on specific project and complete it in stipulated time period
- c) Student will able to understand the importance of quality of product and human safety
- d) Student will able to relate theory and practical while dealing with industrial problem

C. Implementation of Industrial Training:

 The placement department approaches various companies every semester to provide internships to students. Some companies where students undergo are mentioned in the below table.

| Sr. No. | Company Name | |
|---------|--|--|
| 1 | AB engineering, Bidri | |
| 2 | Sarswati Construction, Ambegaon, Narhe | |
| 3 | Kavya Construction | |
| 4 | Anitra Builders & Developers, Wai | |
| 5 | Swarajya Construction, Deur satara | |
| 6 | Mahalaxmi Construction, Tapola Mahabaleshwar | |
| 7 | Sapkal Construction, Wai | |
| 8 | Sai Construction Architects and Engineers, Gargoti Kolhapur | |
| 9 | Kamthe pmv pvt.ltd,Kharghar, Navi Mumbai | |

| 10 | Akshay Constructions, satara | |
|----|---|--|
| 11 | SA Enterprises, Wai | |
| 12 | V.V(B.S) Multi.services LLB,Kolhapur | |
| 13 | Chavan Constructions, Tarle Patan Satara | |
| 14 | Rajveer Builders,Satara | |
| 15 | Chavan Constructions, Tarle Patan Satara | |
| 16 | Deep Constructions,Satara | |
| 17 | Deep arch Constructions, Umbraj Karad | |
| 18 | Salunkhe Constructions Satara | |
| 19 | Aadhi Structural and Engineers pvt.ltd | |
| 20 | D.M. and Associates Consultancy Services, Atapadi | |
| 21 | Dhumal Constructions, Satara | |
| 22 | Ananda Construction Satara | |
| 23 | Shriram Associates, Satara | |
| 24 | Verity Contracts Pvt Itd Pune | |
| 25 | Akshay Construction, Nagthane | |
| 26 | Amardeep Khot Engg & Consultants, Gargoti | |
| 27 | Pravin Pawar & Associate, Satara | |
| 28 | Kadam Construction, Satara | |
| 29 | Samarth Infra Pune | |
| 30 | Sarnobat Construction, Kolhapur | |
| 31 | Tanay Infrastructure Ltd. | |
| 32 | Dr. Kiran Pawar Consultancy Ichalkaranji | |
| 33 | MST Associates & Construction | |
| 34 | Vastukala Associates, Dahiwadi | |
| 35 | Shanksharda Constructions, Karvir | |

| 36 | Manisha Pardeshi & Associates Satara | |
|----|--------------------------------------|--|
| 37 | Econ Reality Pvt Ltd Satara | |
| 38 | khalifa Constructions, Deur | |
| 39 | Mangalraj Construction Borkhal | |
| 40 | Innovative Construction Satara | |
| 41 | Shriram Associates, Satara | |
| 42 | Shraddha Construction Patan | |

- 2. Proper guidelines, suggestions, and scope of industry internship/summer training are provided to students.
- 3. Help students to 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 industry internship.
- 6. All the students are required to submit their training reports along with a certificate from the concerned industry.

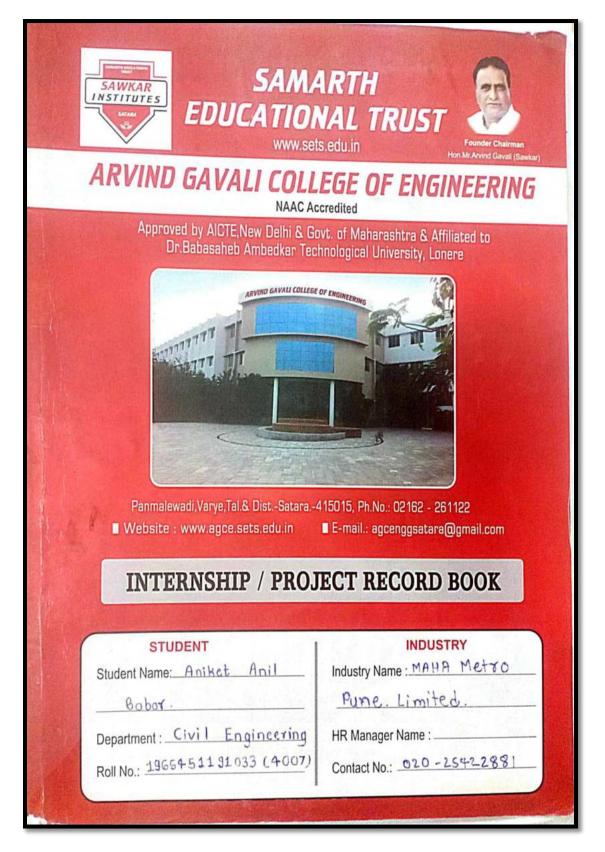


Figure B.2.2.5a Industrial/Internship/Summer Training Record Book

| ARVIND GAVALI COLLEGE OF ENGINEERING Approved by AICTE. New Diehr. Recognised by GM. Of Mana. DTE Mumbal & Affiliated to Website - www. agce. selfs edu.in. Ref. No.: AGCE /108 / C. Juli / A. | Address: At Panmalewadi, Post -Varye, Tal & Dat -Satara -415 015 (Maharashtra) Phone 02162 - 281122 - 200100 - mail agcengsatara@gmail.com - instruct Code : Engg. DTE EN-6545 |
|--|---|
| REINO AGCE /106/Civil/2022/ Dec/381 | Poly MSBTE-1617 |
| То, | Date: 24/12/2022. |
| Maharashtra Metro Rail | |
| Carporation Limited, Pune | |
| Subject : Request for Internship & Project in the Ind | lunt- |
| Respected Sir, | ustry |
| The Samarth Educational Trust has been actively associated was since its inception in 1988 and is developing fast into a Prime Educational Center of Maharashtra. It has presently the following constituent institutes under its um | tre in the Western region |
| Arvind Gavali College of F | armacy College |
| Sawkar Hamasan Hi | alli College of Pharmacy |
| To merge industry - institute gap, Dr. Babasaheb Ambedkar Technol | ological University.Lonere |
| have design Curriculum for B.Tech student to undergo Internship in the in | |
| Project / Assignment. This enables them to acquire practical knowledge and ac | |
| Objective (PEOs). Internship & Project in the Industry provides exposure to the | |
| them to develop their carrier in high - tech Industrial requirements, which lead | |
| employability. | |
| Student Name: Babar Aniket Anil Class Contact No.: 9579896065 Email ID: aniket a 14 Period from: 06/02/2023 to 06/08/2023 | |
| The Institute shall be grateful for your kind co-operation. | |
| Prof. 0x. P. R. Bamane Mob. 9518 | 762449 |
| Thanking you | Yoursell |
| Dr. | Vilas Pharande Principal A.G. Francisco A.G. Francisco |

Figure B.2.2.5b Recommendation letter for industrial/summer training

| Sr. | Date | Attendance Sheet | Student's | Officer's |
|-----|---------------|--|------------------------|------------------------|
| 1. | | Task Complete | Signature | Signature |
| | 174/23 | Safety Induction. | HAROLDEN | 7 |
| 2. | 1/4/23) | Design Strady | Medbar | |
| 3. | 1/4/23) | DPR Reading & study. | SABabar | Wizprof |
| 1. | 1/4/23 | site Plan | Meriban | |
| 5. | 1/4/23 | Prawing Study. | &Pearmar . | |
| | 1/4/23 | Visiting at office. | LABOUR | |
| r. | Date | . Task Completd . | Student's Signature | Officer's Signature |
| | 2/4/23 | Sunday. off. | Medicar | MSTonap |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| T | Date | Task Completd | Student's Signature | Officer's Signature |
| 0. | 3/4/23 | Two duys leave. | MBabas. | MSTarape |
| 1 | 37475 | | | |
| + | | 141 | | |
| + | | | | |
| + | | 7 · | | |
| + | - | | 7 | 14. |
| | | La markin Offices | | |
| gge | stions for Ca | ndidate by Company Internship Officer: | | |
| | | tor: SapKd). I Name of Company | | |

Figure B.2.2.5 c Sample Industrial/Internship/Summer training Attendance Sheet

Post Training Assessment:

Internal Assessment

| Understanding | Organization | Topic | Question/Answer | Training |
|----------------|--------------|--------------|-----------------|-------------|
| of Topics of | Skill(10M) | Presentation | (10M) | Report(10M) |
| training (10M) | | Skill(10M) | | |

Industry Assessment:

| To wi | hom it mag | y Concern | ! | 4 |
|---|-----------------------|--------------------|--|--|
| his is to certify that Mr./45 A ni ke | | | | |
| YEST ME. Tech. of Civil Engir | neerin . | | | Iroi |
| Potent has been all and Make | 1 1 1 2 | L. Q.:1 C | vina Gavaii Co | illege of Enginee |
| Satara has been working with Mahay | | | Contract of Contra | |
| as trainee/ stipendiary/ intern during .01 | ./04/2023 | to 30/ | 04/202 | 3 |
| Below is performance of the candidate en | valuated on following | parameters for aca | demic purpose | |
| Parameters | Needs Improvement | Satisfactory | Good | Excellent |
| Behavior | | | ~ | |
| Performs in a dependable manner | | | | - |
| Cooperates with co-workers and supervisors | | | | |
| Shows interest in work | | | ., | ~ |
| Learns quickly | | | | 1 |
| Shows initiative | | | | ~ |
| Produces high quality work | | | ~ | |
| Accepts responsibility | | | | |
| Accepts criticism | | | | |
| Demonstrates organizational skills | | | ~ | |
| Uses technical knowledge and expertise | | | ~ | |
| Shows good judgement | | | | |
| Demonstrates creativity/originality | | | | |
| Analyzes problems effectively | | | ~ | 4-1-1 |
| Is self-reliant | | | ~ | |
| Communicates well | | | | |
| Writes effectively | | | ~ | |
| Has a professional attitude | | | | |
| Gives a professional appearance | | | | |
| Is punctual | | | ~ | |
| Uses time effectively | | | | |
| (Ref: AICTE Internship Policy Guideline | s and Procedure Pag | e 30) | Seavillace | |
| We wish him/her every success in | life. | | (A) | |
| Name: MILIND 5.TON Designation: BY, CPM 22 | St ² | | 15 | STORY OF THE PARTY |

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

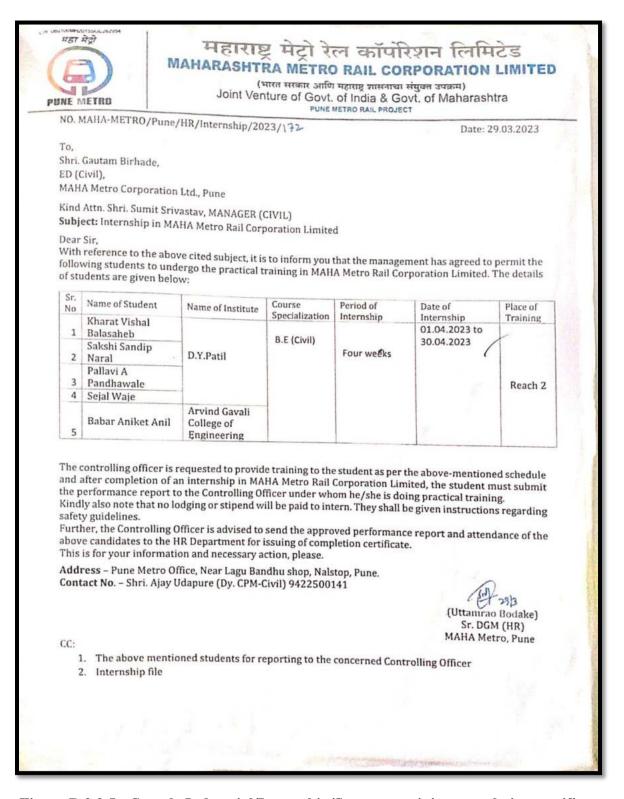


Figure B.2.2.5 e Sample Industrial/Internship/Summer training completion certificate

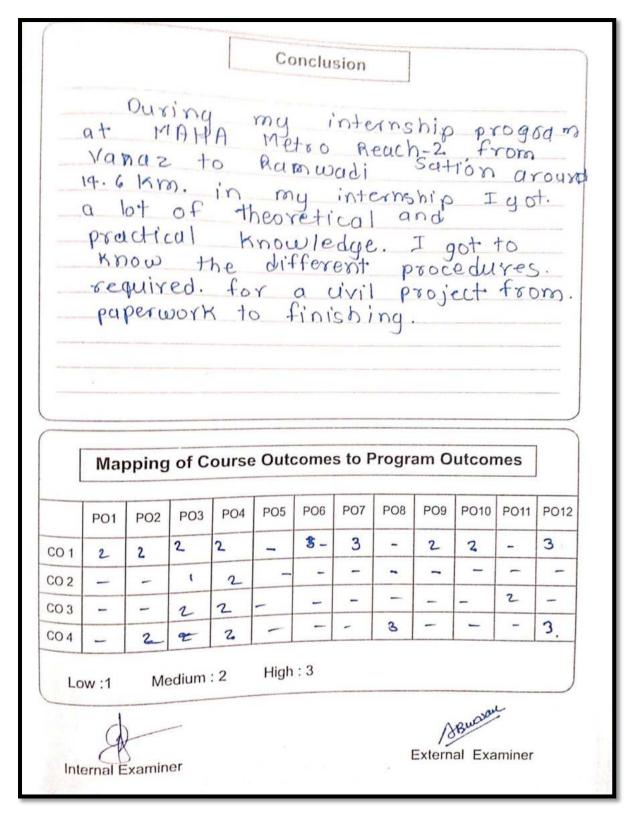


Figure B.2.2.5 f Sample Industrial/Internship/Summer training outcome mapping to program outcome.

Student Training Information CAY (2022-2023)

| Sr No | Name of the Candidate (B Tech 2022-23) | Name of the Company |
|----------|--|-------------------------------------|
| 1 | Ketan Parmar | Sai Construction, Satara |
| 2 | Kamble Vikrant Tanaji | Global Surveyer & Developer, Satara |
| 3 | Jagtap Pravin Mohan | Global Surveyer & Developer, Satara |
| 4 | Jadhav Parth Chandrakant | Jad Industry |
| 5 | Shinde Snehal Anand | K.P. Constr. And Design, Satara |
| 6 | Sakunde Neha Jitendra | Shlok Construction,Satara |
| 7 | Patankar Priyanka Dilip | Shubham Construction, Satara |
| 8 | Jagdale Sushant Bharat | Bartakke Associate Satara |
| 9 | Khare Omkar Dilip | Bartakke Associate Satara |
| 10 | Chikane Shubham Suresh | Shubham Construction, Satara |
| 11 | Pathan Shajma Aslam | Shubham Construction, Satara |
| 12 | Choudhari Omkar Sarjerao | R.B. Raut Associate, Satara |
| 13 | Raut Rohan Bapurao | R.B. Raut Associate, Satara |
| 14 | Samina Sayyad Mulani | Shubham Construction, Satara |
| 15 | Jagtap Ganesh Devidas | Shubham Construction, Satara |
| 16 | Shaikh Gouspak Allauddin | Shaikh Constr. Satara |
| 17 | Babar Aniket Anil | Mahametro Pune |
| 18 | More Saish Sandeep | Sai Construction, Satara |
| 19 | Salunkhe Siddheshwar Vilas | L & T Infra Mumbai |
| 20 | Lingale Jeevan Shahaji | Unique Construction Tarle |

| 21 | Pujari Vishal Vitthal | Raj Constr. Pune |
|----|------------------------------|-----------------------------------|
| 22 | Patil Vaibhav Vijay | Mr. Bhaskr Khambe Asso., Satara |
| 23 | Shelar Sagar Mahadev | R.B. Raut Associate, Satara |
| 24 | Salunkhe Aniket Bhaskar | Kshitij Construction, Satara |
| 25 | Aditya Sawant | P.B. Sawant Stone Crusher |
| 26 | Ghorpade Prajjwal Ramchandra | Manoj Construction, Satara |
| 27 | Jadhav Parth Chandraknt | Jad Industry Satara |
| 28 | Patil Jaydip Jaywant | Mahesh Patil Infra Satara |
| 29 | Shirke Sani Rajesh | Shubham Constrion, Satara |
| 30 | Roman Aniket Ramesh | Matoshri Construction, Satara |
| 31 | Patil Prashant Dhanaji | Shirke Associate Sangali |
| 32 | Mohite Ankita Ashok | Shubham Constrion, Satara |
| 33 | Momin Talha Shahanwaj | Kolte Patil Constr. Pune |
| 34 | Dhakal Nirmala Khadakbahadur | Dhyirsheel Kolekar Constr. Satara |
| 35 | Katkar Suchita Bhausaheb | Shubham Constrion, Satara |
| 36 | Kale Manoj Kisan | Shubham Constrion, Satara |
| 37 | Gaikwad Sushant Parashram | Bartakke Asso. Satara |
| 38 | Jadhav Rajat Shivaji | Raj Construction Satara |
| 39 | Lokhande Shubham Bhimrao | Raj Construction Satara |
| 40 | Patil Aadesh Dilip | Raj Construction Satara |
| 41 | Chikane Kiran Sitaram | Shubham Constrion, Satara |
| 42 | Sneha Shibe | L & T Constr. Mumbai |

Student Training Information CAY m1 (2021-2022)

| Sr No | Name of the Candidate (B Tech 2021-22) | Name of the Company | |
|----------|---|-------------------------------------|--|
| 1 | Nalawade Siddhant Rajendra | Skayline Construction, Satara | |
| 2 | Yedage Pratiksha Govind | Rajweer Builders, Satara | |
| 3 | Desai Ajinkya Vijay | A.S.DESAI INFRA. PVT LTD. SATARA | |
| 4 | Khavale Swapnil Digambar | Salunkhe Construction, karad | |
| 5 | Malavi Sampann Sarjerao | Matoshri Construction, Karad | |
| 6 | Shelar Kanchan Jayavant | S.P. Infra karad | |
| 7 | Lad Akshay Kisan | A. R. Construction, Satara | |
| 8 | Gavane Prashant Sopan | Skayline Construction, Satara | |
| 9 | Kale Pruthviraj Kisan | Skayline Construction, Satara | |
| 10 | Salunkhe Prathmesh S | Das Associate, Wai | |
| 11 | Babar Aakanksha Vinayak | Aerial Mappers, Pune | |
| 12 | Bhojane Gavrav Dhananjay | Nirmitee Properties, wai | |
| 13 | Pawar Vishwjeet Vinod | Skayline Construction, Satara | |
| 14 | Hujjaifa Farrukh Momin | Salunkhe Construction, karad | |
| 15 | Khot Shreeranjan Ravindrakumar | Integrum Property Services | |
| 16 | Thorat Prajwal Prakash | Matoshri Construction, Karad | |
| 17 | Shivthare Nikita R. | Space Designer, Satara | |
| 18 | Patil Ramchandra Shivaji | A. R. Construction, Satara | |
| 19 | Patole Ashutosh Somnath | Shankar Kumbhar Interior, satara | |

| 20 | Deshmane Diksha Somnath | Irfan Mulla Construction, Chafal | |
|----|----------------------------|-------------------------------------|--|
| 21 | Musale Harshada Ravindra | Das Associate, Wai | |
| 22 | Suryawanshi Vinayak Netaji | Skayline Construction, Satara | |
| 23 | Kadam Niranjan A. | A.S.DESAI INFRA. PVT LTD. SATARA | |
| 24 | Bhandare Akshay Arun | A. R. Construction, Satara | |
| 25 | Lad Nikhil B | Vijay Chavan, Kamthi, satara | |
| 26 | Kadam Suraj Prakash | A. R. Construction, Satara | |
| 27 | Khalatkar Shubham | A. R. Construction, Satara | |
| 28 | Sonawale Rushikesh Rajaram | Skayline Construction, Satara | |
| 29 | Jadhav Atharv Deepak | A.S.DESAI INFRA. PVT LTD. SATARA | |
| 30 | Pawar Dhiraj Jagannath | Pawar Developers, Koregao, satara | |
| 31 | Kamble Pratik Sunil | Shiv Construction, Gargoti | |
| 32 | Sapkal Namrata Sanjay | Aerial Mappers, Pune | |
| 33 | Mechkar Ashitosh A | Das Associate, Wai | |
| 34 | Khatal Rajshree Madhukar | Shahikant Dhumal, Surveyer, satara | |
| 35 | Gaikwad Mahesh Lakshman | Skayline Construction, Satara | |
| 36 | Patil Amruta S. | Mulla Construction, Chafal | |
| 37 | Raut Samrat Ashok | Matoshri Construction, Karad | |
| 38 | Jagtap Snehal Suresh | Das Associate, Wai | |
| 39 | Ghorpade Mayur Suresh | Vijay Chavan, Kamthi, satara | |
| 40 | Desai Mayur Krishnat | Vijay Chavan, Kamthi, satara | |

| | | _ | |
|----|----------------------------|--------------------------------|--|
| 41 | Tupe Vaibhav | Matoshri Construction, Karad | |
| 42 | Wagh Abhishek Babasaheb | Vijay Chavan, Kamthi, satara | |
| 43 | Mane Ajit Jaysing | Skayline Construction, Satara | |
| 44 | Randive Neeraj D | Skayline Construction, Satara | |
| 45 | Salunkhe Chaitanya Santosh | Vijay Chavan, Kamthi, satara | |
| 46 | Chavan Mahesh | Matoshri Construction, Karad | |
| 47 | Prasad Kadam | Randhive Construction, Koregao | |
| 48 | Abhishekh Jadhav | Randhive Construction, Koregao | |
| 49 | Akshata Kharade | Deshmukh Valuer, Vaduj | |
| 50 | Nikita Nikam | Aerial Mappers, Pune | |
| 51 | Sham Madne | Matoshri Construction, Karad | |
| 52 | Rohit WaghMode | Matoshri Construction, Karad | |
| 53 | Ankita Doudmani | Rajveer Builder, Satara | |
| | • | · · | |

Student Training Information CAY m2 (2020-2021)

| Sr No | Name of the Candidate (B Tech 2020-21) | Name of the Company |
|----------|--|-------------------------------|
| 1 | Patil Suchitra vilas | Dhumal Constructions,Satara |
| 2 | Jadhav Nitin Ashok | Ananda Construction Satara |
| 3 | Madane Shantaram Jaywant | Ananda Construction Satara |
| 4 | Phanase Akshay Krishnat | Ananda Construction Satara |
| 5 | Amate Mayur Balkrushna | Shriram Associates, Satara |
| 6 | Sankpale Pooja Parshuram | Verity Contracts Pvt Itd Pune |

| 7 | Salunkhe Supriya Suresh | Akshay Construction, Nagthane | |
|----|----------------------------|--|--|
| 8 | Patil Vaishnavi Vitthal | Amardeep Khot Engg & Consultants, Gargoti | |
| 9 | Parte Aboli Vikas | Pravin Pawar & Associate, Satara | |
| 10 | Khandzode Madhukar Nikita | Kadam Construction, Satara | |
| 11 | Sawant Sachin Suhas | Samarth Infra Pune | |
| 12 | Patil Abhijit Bhikaji | Sarnobat Construction, Kolhapur | |
| 13 | Kodag Vikas Pandurang | Tanay Infrastructure Ltd. | |
| 14 | Phalke Shubham Vijay | Chavan Construction, Tarale | |
| 15 | Bhosale Aniket dadu | Chavan Construction, Tarale | |
| 16 | Jadhav Saurabh Suresh | Chavan Construction, Tarale | |
| 17 | Pujari Sachin Vitthal | Chavan Construction, Tarale | |
| 18 | Chavan pallavi dattatray | Dr. Kiran Pawar Consultancy Ichalkaranji | |
| 19 | Sutar Omkar Sanjay | Deep Arch Construction, Umbraj | |
| 20 | Sutar Sujit Hariram | MST Associates & Construction | |
| 21 | Chavan Vikram Bhagwan | Deep Arch Construction, Umbraj | |
| 22 | Shinde Prajwal Pradipkumar | Vastukala Associates, Dahiwadi | |
| 23 | Daphale Sayali Dattatray | Shanksharda Constructions, Karvir | |
| 24 | kumbhar Rohit Mohan | Manisha Pardeshi & Associates Satara | |
| 25 | Gurav Vaishnavi Laxman | Manisha Pardeshi & Associates Satara | |
| 26 | Mulik Aditya Shrikant | Antara Builders and developers, Wai | |
| 27 | Shinde Sonali Suresh | Econ Reality Pvt Ltd Satara | |

| Jadhav Trupti vijay | Salunkhe Construction Satara | |
|-----------------------------|--|--|
| Patil komal Ankush | Dhumal Constructions,Satara | |
| Katkar Swaranjali Shankar | Chand & Associates, Satara | |
| Bhaldar Soaeb Distagir | khalifa Constructions, Deur | |
| Gaikwad Parag pandurang | khalifa Constructions, Deur | |
| Jadhav Parag Jaywant | khalifa Constructions, Deur | |
| Pawar Rushikesh Chandrakant | Mahalakshmi Construction | |
| Pharande Prasad Subhash | Mangalraj Construction Borkhal | |
| Jamdade Rohit Dhanaji | Mangalraj Construction Borkhal | |
| Sathe Yashwant Pandharinath | Innovative Construction Satara | |
| Jangam Sanket Abhijit | Innovative Construction Satara | |
| kalyanshetti Snehal Suresh | Rajveer Builders, Satara | |
| Jadhav kalyani Sunil | Samrat Construction Sangli | |
| Jadhav Rohit Sanjay | Manan Construction Sangli | |
| Gurav Pravin Suresh | Shriram Associates, Satara | |
| Kalbhor Aniket Subhash | AP Construction Patan | |
| Mone Abhishek Mukundd | Shriram Associates, Satara | |
| Shinde Akshay Amrutrao | Shriram Associates, Satara | |
| Lokare Pradnesh Baliram | Shraddha Construction Patan | |
| | Patil komal Ankush Katkar Swaranjali Shankar Bhaldar Soaeb Distagir Gaikwad Parag pandurang Jadhav Parag Jaywant Pawar Rushikesh Chandrakant Pharande Prasad Subhash Jamdade Rohit Dhanaji Sathe Yashwant Pandharinath Jangam Sanket Abhijit kalyanshetti Snehal Suresh Jadhav kalyani Sunil Jadhav Rohit Sanjay Gurav Pravin Suresh Kalbhor Aniket Subhash Mone Abhishek Mukundd Shinde Akshay Amrutrao | |

Student Training Information BE CAY m3 (2019-2020)

| Sr No | Name of the Candidate (BE 2019- 20) | Name of the Company | |
|----------|--|--|--|
| 1 | Shinde Sonali Suresh | AB engineering, Bidri | |
| 2 | Vikram Lakshman Gaikwad | Sarswati Construction, Ambegaon Narhe | |
| 3 | Mahesh Shankar Chavan | Kavya Construction | |
| 4 | Rohit Mohan Kumbhar | Anitra Builders & Developers, Wai | |
| 5 | Nitin Ashok Jadhav | Swarajya Construction, Deur satara | |
| 6 | Arjun Kadam | Mahalaxmi Construction, Tapola Mahabaleshwar | |
| 7 | Ranit Dhanaji Jamdade | Sapkal Construction, Wai | |
| 8 | Vaishnavi Vitthal patil | Sai Construction Architects and Engineers, Gargoti Kolhapur | |
| 9 | Vaibhav Anil Sapkal | Sapkal Construction, Wai | |
| 10 | Prasad Subhas Pharande | Kamthe pmv pvt.ltd,Kharghar, Navi Mumbai | |
| 11 | Rohit Namdev Lohar | Akshay Comstructions, satara | |
| 12 | Rahul Sopan Vairat | SA Enterprises, Wai | |
| 13 | Pradnyanesh Baliram Lokare | V.V(B.S) Multi.services LLB,Kolhapur | |
| 14 | Nandukumar Narayan Jagtap | Akshay Comstructions, satara | |
| 15 | Sujit Hariram Sutar | Chavan Constructions, Tarle Patan Satara | |
| 16 | Suraj Nanaso Bichukale | V.V(B.S) Multi.services LLB,Kolhapur | |
| 17 | Aditya Krishnant Mulik | Anitra Builders & Developers, Wai | |
| 18 | Sanket Sashikant Jadhav | Rajveer Builders,Satara | |

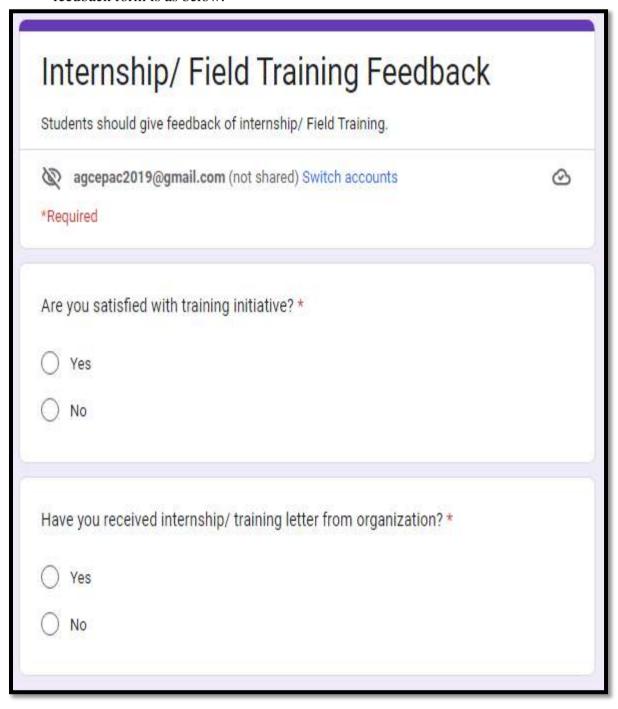
| 19 | Akshay Krishnath Phanase | V.V(B.S) Multi.services LLB,Kolhapur | |
|----|----------------------------|--|--|
| 20 | Shantaram Jayavant Madane | V.V(B.S) Multi.services LLB,Kolhapur | |
| 21 | Aniket Dadu Bhosale | Chavan Constructions, Tarle Patan Satara | |
| 22 | Vaishnavi Laxman Gurav | Anitra Builders & Developers, Wai | |
| 23 | Ajay H. Dhobale | Deep Constructions,Satara | |
| 24 | Chaitanya Sashikant Raut | Rajveer Builders,Satara | |
| 25 | Prajwal Pradipkumar Shinde | Rajveer Builders,Satara | |
| 26 | Gunjan Santosh Ghadage | Deep arch Constructions, Umbraj Karad | |
| 27 | Kalyani Sunil More | Salunkhe Constructions Satara | |
| 28 | Swaranjali Shankar Katkar | Aadhi Structural and Engineers pvt.ltd | |
| 29 | Pallavi Datatray Chavan | Deep arch Constructions, Umbraj Karad | |
| 30 | Rushikesh Pawar | D.M. and Associates Consultancy Services, Atapadi | |
| 31 | Sayali Datatray Daphale | Sai Construction Architects and Engineers, Gargoti Kolhapur | |
| 32 | Omkar Kambale | D.M. and Associates Consultancy Services , Atapadi | |

C. Impact Analysis:

- These training programs have helped students in the development of good projects in their final year.
- 2Most of the student's undergone training has got recruited by different software & core companies.
- 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 team work and leadership skills.

D. 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 at the industry.
- The feedback is conducted to understand the satisfaction of the students on the initiative and the scope for improvement in the initiative for the 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 submission of report. The sample feedback form is as below.



| Have | e you got guidance from supervisor/ senier members? * |
|------|--|
| 0 | Yes |
| 0 | No |
| Have | e you observed safety measures/precautions taken while working?* |
| 0 | Yes |
| 0 | No |
| 0 | e you applied engineering knowledge during training? * Yes |
| Have | e you identified latest tools and technologies?* |
| 0 | Yes |
| 0 | No . |

| Have you got opportunity to work in team? * |
|---|
| O Yes |
| ○ No |
| Was there ample opportunity of Learning? * |
| O Yes |
| ○ No |
| Would you recommend your juniors for training in this company? * Yes No |
| Have you got realistic preview of career field ? * |
| ○ Yes |
| ○ No |
| |
| |

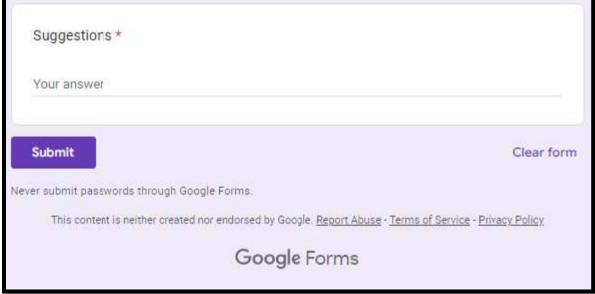


Figure B.2.2.5 g Sample Feedback Form of Industrial Training/Internship

| CRITERION | COURSE OUTCOMES AND PROGRAM | 120 |
|-----------|-----------------------------|-----|
| 03 | OUTCOMES | |
| | | |

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 Civil 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)

| Mechan | Mechanical Engineering graduates will be able to | | | | | | | | | | |
|--------|---|--|--|--|--|--|--|--|--|--|--|
| PSO1 | The students will be able to analyse and design a system to meet desired needs, using basic knowledge of science, mathematics and technology in view to keep in pace with the recent development. | | | | | | | | | | |
| PSO2 | Civil Engineering students will be able to plan and perform various activities on construction projects. | | | | | | | | | | |

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 | СО | Course Outcome |
|-------|-----------------------------------|------------|---|
| | | BTCVC302.1 | Perform the stress-strain analysis. |
| SEM-3 | Mechanics of Solids (BTCVC302) | B1CVC302.2 | Draw force distribution diagrams for members and determinate beams. |
| | | BTCVC302.3 | Find deflections in determinant beams. |
| | | BTCVC302.4 | Visualize force deformation behavior of bodies. |

| | | BTCVC 402.1 | Set out horizontal curves. |
|-------|--|-------------|---|
| | | B1CVC 402.1 | Set out nonzontal curves. |
| SEM-4 | Surveying I I SEM-4 (BTCVC 402) | BTCVC 402.2 | Carry out a geodetic survey, taking accurate measurements using instruments and apply mathematical adjustment of errors involved in surveying measurements. |
| | | BTCVC 402.3 | Plan a survey for applications such as road alignment and height of the building |
| | | BTCVC 402.4 | Invoke advanced surveying techniques over conventional methods in the field of civil engineering. |
| | | BTCVC502.1 | Have a basic understanding of matrix method of analysis and will be able to analyze the determinant structure |
| SEM-5 | Structural Mechanics-II (BTCVC502) | BTCVC502.2 | Have a basic understanding of the principles and concepts related to finite difference and finite element methods |
| | | BTCVC502.3 | Have a basic understanding of concept of influence line |
| | | BTCVC502.4 | Explain the basic concept of structural vibration and its mathematical models. |

| | | BTCVE605A. 1 | Determine the sewage characteristics and design various sewage treatment plants. |
|-------|--|------------------|---|
| SEM-6 | Waste Water Treatment (BTCVE605A) | BTCVE605A. 2 | Understand municipal water and wastewater treatment system design and operation. |
| | (= : = : = : : : : : : : : : : : : : : : | BTCVE605A. 3. | Apply environmental treatment technologies and design processes for treatment of industrial waste water |
| | | BTCVE605A. | Understand the rural sanitation schemes. |
| | | BTCVC703.1 | Understand need of Irrigation in India and water requirement as per farming practice in India |
| SEM-7 | Water Resources Engineering | BTCVC703.2 | Understand various irrigation structures and schemes. |
| | (BTCVC703) | BTCVC703.3 | Develop basis for design of irrigation schemes. |
| | | BTCVC703.4 | Classify the various irrigation structures and schemes. |
| | | BTCESS802E.1 | Relate with the practical significance and importance of Soil-Structure interaction |
| SEM-8 | Soil Structure Interaction | BTCESS802E.2 | Model Soil-structure interaction problems using various concepts |
| | (BTCESS802E) | BTCESS802E.3 | Compute various parameters associated with dynamic analysis of structure and foundation |
| | | BTCESS802E.4 | Apply the theories of Dynamic Soil-Structure Interaction to various practical Engineering problems |

3.1.2. CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from the 3^{rd} to the 8^{th} 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 3^{rd} to the 8^{th} semester. Record for all courses is available with the program.

CO-PO matrices

| | Course Name: Mechanics of Solids (BTCVES302) | | | | | | | | | | | |
|-------------|--|------|------|------|------|---------|--------|------|-----|------|------|------|
| Course | | | | | C | ourse (| Outcom | ne | | | | |
| Outcome | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| BTCVES302.1 | 2 | 2 | | 1 | 1 | 3 | 2 | 1 | | | | 2 |
| BTCVES302.2 | 2 | 2 | 2 | | | 2 | 2 | 1 | | | | 2 |
| BTCVES302.3 | 1 | 2 | 3 | 2 | 1 | | 1 | | | | | 2 |
| BTCVES302.4 | 2 2 3 2 1 1 3 | | | | | | | | | | | |
| Average | 1.75 | 2.00 | 2.67 | 1.67 | 1.00 | 2.50 | 1.67 | 1.00 | | | | 2.25 |

| | Course Name: Surveying I I (BTCVC 402) | | | | | | | | | | | | |
|--------------|--|-------------|------|------|-----|------|------|-----|-----|------|------|------|--|
| Course | Course Outcome | | | | | | | | | | | | |
| Outcome | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | |
| BTCVC 402 .1 | 3 | 1 | | | | 2 | 2 | | | | | | |
| BTCVC 402. 2 | 3 | 3 | 3 | 1 | | 2 | 2 | | | | | 2 | |
| BTCVC 402. 3 | 3 | 3 | 2 | 1 | | 2 | 2 | | | | | | |
| BTCVC 402. 4 | 3 | 3 2 1 2 2 2 | | | | | | | | | | | |
| Average | 3.00 | 2.25 | 2.00 | 1.00 | | 2.00 | 2.00 | | | | | 2.00 | |

| | Course Name: Structural Mechanics-II (BTCVC502) | | | | | | | | | | | |
|------------|---|------|------|------|------|--------|-------|-----|-----|------|------|------|
| Course | | | | | | Course | Outco | ome | | | | |
| Outcome | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| | | | | | | | | | | | | |
| BTCVC502.1 | 3 | 2 | 2 | 1 | 1 | | 1 | | | | | 3 |
| BTCVC502.2 | 3 | 1 | 1 | | 1 | | | | | 1 | | 2 |
| BTCVC502.3 | 3 | 1 | 1 | 1 | | 2 | | | | 1 | | 2 |
| BTCVC502.4 | 3 | 1 | | | | 1 | 1 | | | | | |
| Average | 3.00 | 1.25 | 1.33 | 1.00 | 1.00 | 1.50 | 1.00 | | | 1.00 | | 2.33 |

| | Course Name: Waste Water Treatment (BTCVE605A) | | | | | | | | | | | | | |
|------------|--|------|------|------|-----|------|------|------|------|------|------|------|--|--|
| Course | Program Outcome (PO) | | | | | | | | | | | | | |
| Outcome | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | | |
| BTCVE605A1 | 3 | 2 | 3 | | | 1 | | | | | | | | |
| BTCVE605A2 | 3 | 2 | 3 | | | 1 | | | | | | | | |
| BTCVE605A3 | 2 | 2 | 3 | | | 1 | | | | | | | | |
| BTCVE605A4 | 1 2 2 2 1 | | | | | | | | | | | | | |
| Average | 2.67 | 2.00 | 3.00 | 1.00 | | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | | | | |

| | Course Name: Water Resources Engineering (BTCVC703) | | | | | | | | | | | |
|-------------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Course Program Outcome (PO) Outcome | | | | | | | | | | | | |
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| BTCVC703.1 | 2 | | | | 2 | | | | | 1 | | 2 |
| BTCVC703.2 | 2 | | | | 1 | | | | | 1 | | 1 |
| BTCVC703.3 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | | 2 | 2 | 2 | 1 |
| BTCVC703.4 | 2 | 1 | | | | 1 | 1 | | 2 | | | 1 |
| Average | 2.0 | 1.5 | 3.0 | | 1.7 | 1.5 | 1.5 | | | | | 1.3 |

| | Course Name: Soil Structure Interaction (BTCESS802E) | | | | | | | | | | | |
|--------------|--|-----|-----|-----|-----|--------|--------|--------|-----|------|------|------|
| Course | | | | | Pro | gram (| Outcon | ne (PO |) | | | |
| Outcome | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| BTCESS802E.1 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | | 1 | | 2 | 2 |
| BTCESS802E.2 | 3 | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 3 |
| BTCESS802E.3 | 2 | 2 | 2 | 2 | 1 | 1 | | | 1 | 1 | 1 | 2 |
| BTCESS802E.4 | 1 | 2 | 1 | | 1 | | | | | | 1 | 3 |
| Average | 2.3 | 1.8 | 1.5 | 1.7 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.3 | 2.5 |

CO-PSO matrices

| Course Name: Mechanics of Solids (BTCVES302) | | | | | | | | | | |
|--|------|------|--|--|--|--|--|--|--|--|
| Course | PSO1 | PSO2 | | | | | | | | |
| BTCVES302.1 | 2 | 1 | | | | | | | | |
| BTCVES302.2 | | | | | | | | | | |
| BTCVES302.3 | | 1 | | | | | | | | |
| BTCVES302.4 | 1 | 2 | | | | | | | | |
| Average | 3 | 4 | | | | | | | | |

| Course Name: Surveying I I (BTCVC 402) | | | | |
|--|------|------|--|--|
| Course | PSO1 | PSO2 | | |
| BTCVC 402.1 | 2 | | | |
| BTCVC 402.2 | | 1 | | |
| BTCVC 402.3 | 1 | 1 | | |
| BTCVC 402.4 | 2 | 2 | | |
| Average | 2 | 1 | | |

| Course Name: Structural Mechanics-II BTCVC502 | | | | |
|---|------|------|--|--|
| Course | PSO1 | PSO2 | | |
| BTCVC502.1 | 3 | 2 | | |
| BTCVC502.2 | 3 | 1 | | |
| BTCVC502.3 | 2 | | | |
| BTCVC502.4 | 1 | | | |
| Average | 2 | 2 | | |

| Course Name: Waste Water Treatment (BTCVE605A) | | | |
|--|------|------|--|
| Course | PSO1 | PSO2 | |
| BTCVE605A.1 | | 1 | |
| BTCVE605A.2 | 2 | 2 | |
| BTCVE605A.3 | | 2 | |
| BTCVE605A.4 | 1 | 2 | |
| Average | 1.50 | 1.75 | |

| Course Name: Water Resources Engineering(BTCVC703) | | | | |
|--|------|------|--|--|
| Course | PSO1 | PSO2 | | |
| BTCVC703.1 | 2 | 1 | | |
| BTCVC703.2 | 1 | 2 | | |
| BTCVC703.3 | 1 | | | |
| BTCVC703.4 | 2 | 2 | | |
| Average | 1.50 | 1.67 | | |

| Course Name: Soil Structure Interaction (BTCESS802E) | | | | | | | | | |
|--|------|------|--|--|--|--|--|--|--|
| Course | PSO1 | PSO2 | | | | | | | |
| BTCESS802E.1 | 1 | 1 | | | | | | | |
| BTCESS802E.2 | | 2 | | | | | | | |
| BTCESS802E.3 | 1 | | | | | | | | |
| BTCESS802E.4 | 1 | 2 | | | | | | | |
| Average | 1.00 | 1.67 | | | | | | | |

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.

CO-PO Mapping Matrix

| Class | Course Name & Code | PO1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 |
|-------------|---|------|---------|---------|---------|---------|---------|------|---------|---------|----------|----------|----------|
| | Engineering Mathematics – I(BTBS101) | 2.75 | 1.75 | 2 | | 1 | | | | | | | 1.5 |
| | Engineering Physics (BTBS102) | 2.25 | 1.5 | 2 | | 2.5 | 1 | | 3 | 1.5 | 2 | | 1.5 |
| | Engineering Graphics(BTES103) | 1.33 | 2.25 | 2 | 2 | | | | | 3 | | | 1.33 |
| | Communication Skills(BTHM104) | | | | | 1.67 | 1.67 | | 2 | 2 | 3 | | 2.75 |
| FY- SEMI | Energy & Environment Engineering (BTES105) | 2.33 | | 2.5 | | 1.5 | 1.5 | 3 | 2 | 1.5 | 2 | | 2.5 |
| | Basic Civil & Mechanical Engineering(BTES106) | 2.25 | | 1.5 | 1 | 3 | 1.5 | 1 | 3 | 2 | 1.67 | 1 | 2 |
| | Engineering Physics Lab(BTBS107L) | 2 | 2 | 2 | | 3 | 3 | 3 | | 2 | 2 | | 2 |
| | Engineering Graphics Lab(BTES108L) | 1.67 | 3 | 2.5 | 3 | 1.67 | | | 1 | 2.5 | 2.5 | | 2.5 |
| | Communication Skills Lab(BTHM109L) | | | | | 1.67 | 1.67 | | 2 | 2 | 3 | | 2.75 |
| FY- | Engineering Mathematics –II (BTBS201) | 2.75 | 2 | 1 | 1.5 | | | | | | | | 1.33 |
| SEMII | Engineering Chemistry (BTBS202) | 2.95 | 2.92 | 2.93 | | | 2.99 | 2.94 | | | | | 3.01 |

| | Engineering Mechanics(BTES203) | 2.25 | 2.5 | 2 | 2 | 1 | | | | 2 | 2.5 | | 2 |
|---------------|--|------|------|------|------|------|------|------|---|------|-----|---|------|
| | Computer Programming in "C"(BTES204) | | 2.25 | 2 | 2 | | | | | | | | 1.5 |
| | Workshop Practices (BTES205) | 1.67 | 3 | 2.5 | 3 | 1.67 | | | 1 | 2.5 | 2.5 | | 2.5 |
| | Basic Electrical &Electronics Engineering(BTES206) | 2.5 | | 3 | 1 | 3 | | 1.5 | 2 | 2.67 | 2 | | 3 |
| | Computer Programming Lab(BTBS207L) | 1.75 | 2 | 2.25 | | 3 | 3 | 1.5 | | 2 | 2.5 | | 2 |
| | Engineering Chemistry Lab(BTBS208L) | 1.75 | 2 | 2.25 | | 3 | 3 | 1.5 | | 2 | 2.5 | | 2 |
| | Engineering Mechanics Lab(BTES209L) | 1.75 | 1.33 | 1.75 | | | 1.5 | 1 | | | | | 1 |
| | Mini Project (BTES210P) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Field Training / Internship/Industrial Training (BTES211P) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Engineering Mathematics- III(BTBSC301) | 1.25 | 1.67 | 2 | | 1.25 | | | | 2 | | 1 | 1.75 |
| | Mechanics of Solids(BTCVC302) | 1.75 | 2 | 2 | 1.67 | 1 | 1.5 | 1.67 | 1 | | | | 2.25 |
| | Hydraulics-I(BTCVC303) | 1.75 | 1.67 | 2 | 2 | 2.25 | 2 | 2.33 | | | | | 2 |
| | Surveying-I(BTCVC304) | 2 | 1.75 | 3 | | 1.5 | 1.75 | 1.75 | | | | | 2 |
| SY- SEMIII | Building Construction(BTCVC305) | 2.25 | 1.5 | 1.25 | | 2 | 1.67 | 2 | | | | | 1.25 |
| | Engineering Geology(BTCVC306) | 2.25 | 1.5 | 1.67 | | 2 | 2 | 2 | | | | | 2 |
| | Soft Sills Development(BTHM303) | | | | | 1.67 | 1.67 | | 2 | 2 | 3 | | 2.75 |
| | Hydraulics Laboratory | 1.75 | 1.75 | 1.33 | 2 | 2.25 | 2 | 2.25 | | | | | 2 |

| | I(BTCVCL307) | | | | | | | | | | | | |
|---------------|--|------|------|------|------|------|------|------|---|------|-----|---|------|
| | Surveying Laboratory I(BTCVL308) | 1.75 | 1.67 | 2 | 1.25 | 2.25 | 2 | 2.25 | | | | | 2 |
| | Building Constructions Drawing Laboratory(BTCVL309) | 2.25 | 1.5 | 1.25 | | 2 | 2 | 2 | | | | | 2 |
| | Engineering Geology Laboratory(BTCVL310) | 2 | 1.75 | 2.5 | | 1.67 | 2 | 2 | | | | | 2 |
| | Seminar on topic of field visit to Foundation Work(BTCVS311) | 3 | 2 | | 2 | 1 | | | 1 | | | | 3 |
| | Field Training/Internship/Industrial (BTCVF312) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Hydraulics-II(BTCVC401) | 1.75 | 1.5 | 1.75 | 1.5 | 2 | 2.25 | 2 | | | | | 1.25 |
| | Surveying-II(BTCVC402) | 2 | 2.25 | 2 | 1 | 2 | 2 | 2 | | | | | 2 |
| | Structural Mechanics- I(BTCVC403) | 2 | 1.33 | 1.67 | 2 | 1.5 | 1.5 | 1 | | | | | 1.25 |
| | Product Design Engineering – I(BTID405) | 2 | | 3 | 1 | | | | | | | | 1 |
| | Planning for Sustainable Development(BTCVE404B) | 2 | 1.5 | 1.75 | 1.67 | | 1.67 | 1.25 | | | | | 2 |
| SY- SEM IV | Engineering Management(BTCVC406) | 2 | | | | 2 | | | 2 | 2 | 2 | 2 | 2 |
| | Basic Human Rights(BTHM3401) | | | 2 | | 2 | | | | | 2 | | 1 |
| | Hydraulics Laboratory- II(BTCVL407) | 2 | 1.33 | 2 | 2 | 2.25 | | | | | | | 2 |
| | Surveying Lab II(BTCVL408) | 2 | 1.25 | 1.25 | 2 | 2.25 | 2 | 2.25 | | | | | 2 |
| | Mechanics of Solids Lab(BTCVL409) | 2 | 1.5 | 2 | 2 | 2.25 | 2 | 2.25 | | | | | 2 |

| | Mini Project(BTCVM410) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
|-----|--|------|------|------|------|------|------|------|-----|------|-----|-----|------|
| | Seminar on topic of field visit to work involving superstructure construction(BTCVCF411) | 3 | 2 | | 2 | 1 | | | 1 | | | | 3 |
| | Design of Steel Structures(BTCVC501) | 1.75 | 1.75 | 2 | 1.33 | 2 | | 2 | | | | 1 | 2 |
| | Structural Mechanics- II(BTCVC502) | 2 | 1.33 | 1.67 | 2 | 1.5 | 1.5 | 1 | | | | | 1.25 |
| | Soil Mechanics(BTCVC503) | 2 | 1.25 | 1.25 | 1 | 1.67 | 2 | 2 | | | | | 2 |
| | Environmental Engineering(BTCVC504) | 2 | 1.25 | 1.5 | 1 | 2 | 1 | 2 | | | | | 2 |
| | Transportation Engineering(BTCVC505) | 2 | 1.5 | 1.75 | 1 | 1.25 | 2 | 1.5 | | | | 1 | 2 |
| TY- | Materials, Testing & Evaluation(BTCVE506A) | 2.25 | 1.33 | 1.75 | 1 | 1 | | 1.75 | | | | | 2 |
| | Essence of Indian Traditional Knowledge(BTHM507) | 3 | 2 | | 2 | 1 | | | 1 | | | | 3 |
| | Soil Mechanics Laboratory(BTCVL508) | 2 | 1.5 | 2 | 2 | 2.25 | 2 | 1.75 | | | | | 2 |
| | Environmental Engineering Laboratory(BTCVL509) | 2 | 1.5 | 2 | 1 | 1.75 | 2 | 1 | | | | | 2 |
| | Transportation Engineering Laboratory(BTCVL510) | 2 | 1.75 | 1.25 | 2 | 2.25 | 2 | 1.75 | | | | | 2 |
| | Seminar on Topic of Field Visit to works related to Building Services(BTCVS511) | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | | 2 | 2 | 3 |
| | Design of Concrete Structures I(BTCVC601) | 1.67 | 2 | 1.5 | | 2 | 1 | 2 | 1.5 | | | 1.5 | 1.67 |
| | Foundation Engineering(BTCVC602) | 1.75 | 1.5 | 1.5 | 2 | 2 | 1 | 2 | | | | | 2 |
| | Concrete | 2 | | 1.33 | 1 | 2 | 1.75 | 1.75 | | | | | 2 |

| | Technology(BTCVC603) | | | | | | | | | | | | |
|-----------------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | Project Management(BTCVC604) | 1.33 | 1.33 | 1.5 | 2 | 1.5 | 1 | | | | | 1.67 | 1.2 |
| | Waste Water Treatment(BTCVE605A) | 2 | 1.5 | 1.75 | 1.5 | | 2 | 2 | | | | | 2 |
| | Building Planning and Design(BTCVC606) | 2 | 2 | 1.5 | 2 | 2 | 1 | 2 | 1.75 | | 2 | 2 | 2 |
| | Concrete Technology Laboratory(BTCVL607) | 2 | 2 | 1.5 | 2 | 2 | | | | | 2 | | 2 |
| | Building Planning, Design and Drawing Laboratory(BTCVL608) | 2 | 2 | 1.5 | 2 | 2 | 1 | 2 | 1.75 | | 2 | 2 | 2 |
| | Community Project (Mini Project)(BTCVM609) | 2.67 | 3 | 2 | 2 | 1 | 2 | 2 | | 2 | 2 | | 2 |
| | Seminar on Topic of Field Visit Road Construction (BTCVS610) | 3 | 2 | 2 | 2 | 1 | 2 | | 1 | 2 | | 2 | 3 |
| | Industrial Training (BTCVF611) | 2 | 2 | 1.5 | 2 | 2 | 1 | 2 | 1.75 | 1.25 | 2 | 2 | 2 |
| | Design of Concrete Structures II(BTCVC701) | 1.67 | 2 | 1.5 | | 2 | 1 | 2 | 1.5 | | | 1.5 | 1.67 |
| | Infrastructure Engineering (BTCVC702) | 2 | 1 | 2 | 2 | 1 | 2 | | | | | | |
| D. Tl. | Water Resources Engineering (BTCVC703) | 2 | 2 | 2 | 1 | 1.75 | 2 | 1 | 2 | | | | 1.5 |
| B-Tech- SEM VII | Professional Practices(BTCVC704) | 2 | 1.75 | 2 | 2 | 1.67 | 2 | 2 | 1.5 | 1.5 | 1.5 | 1.5 | 2 |
| | Construction Techniques(BTCVE705A) | 2 | 2.25 | 1.5 | 2 | 2 | 2 | 2 | 1.25 | 1.25 | 2 | 3 | 2 |
| | Air Pollution Control(BTCVOE706B) | 2 | 2 | 2 | 2 | 1.75 | 2 | 1 | 2 | | | | 1.67 |
| | Design & Drawing of RC & | 2.65 | 2.89 | 2.57 | 2.68 | 2.89 | 2.57 | 2.68 | | 2.63 | 2.65 | | |

| | Steel Structures (BTCVL707) | | | | | | | | | | | | |
|-----------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|
| | Professional Practices (BTCVL708) | 2 | 1.75 | 2 | 3 | 1.67 | 2 | 2 | 1.5 | 1.5 | 1.5 | 1.5 | 2 |
| | Field Training / Intern ship/Industrial Training (BTCVT709) | 3 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Seminar (BTCVS710) | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| | Project Stage-I(BTCVP711) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Maintenance and repair of concrete structures (BTCVSS801D) | 2 | 1.5 | 1.5 | 2 | 2.25 | 2 | 2 | | | | | 2 |
| | Soil structure interaction (BTCESS802E) | 2 | 1.5 | 1.5 | 2 | 2 | 1.5 | 2 | 1.75 | 2 | 2 | 2 | 1.67 |
| BTech- SEM VIII | Project-II(BTCEP803) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| ACTUA | ACTUAL AVERAGE PO | | 1.85 | 1.99 | 1.82 | 1.91 | 1.95 | 1.89 | 1.92 | 2.14 | 2.24 | 2.07 | 2.09 |

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 | | am Specific ome (PSO) |
|-----------|--|------|--------------------------|
| Class | Class | PSO1 | PSO2 |
| | Engineering Mathematics –I(BTBS101) | 2 | 1 |
| | Engineering Physics (BTBS102) | | |
| | Engineering Graphics (BTES103) | 1.00 | |
| | Communication Skills (BTHM104) | | |
| | Energy & Environment Engineering (BTES105) | 2.00 | 1.00 |
| FY-SEM | Basic Civil & Mechanical Engineering (BTES106) | 1.00 | |
| | Engineering Physics Lab (BTBS107L) | | |
| | Engineering Graphics Lab (BTES108L) | 1.00 | |
| | Communication Skills Lab (BTHM109L) | | |
| | Engineering Mathematics –II (BTBS201) | | |
| FY-SEM II | Engineering Chemistry (BTBS202) | | |
| | Engineering Mechanics (BTES203) | | |

| | Computer Programming in "C" (BTES204) | | |
|------------|--|------|------|
| | Workshop Practices (BTES205) | | |
| | Basic Electrical &Electronics Engineering (BTES206) | | |
| | Computer Programming Lab (BTBS207L) | | |
| | Engineering Chemistry Lab (BTBS208L) | | |
| | Engineering Mechanics Lab (BTES209L) | 2.00 | 1.00 |
| | Mini Project (BTES210P) | 1.00 | 1.00 |
| | Field Training / Internship/Industrial | | |
| | Training (BTES211P) | 1.00 | 1.00 |
| | Engineering Mathematics-III(BTBSC301) | 2.66 | 2.67 |
| | Mechanics of Solids (BTCVC302) | 1.50 | 1.33 |
| | Hydraulics I (BTCVC303) | 2.00 | 2.00 |
| | Surveying-I(BTCVC304) | 2.00 | 2.00 |
| | Building Construction (BTCVC305) | 2.00 | 2.00 |
| | Engineering Geology (BTCVC306) | 2.00 | 2.00 |
| | Soft Sills Development (BTHM303) | 1.00 | 1.00 |
| SY SEM- IV | Hydraulics Laboratory I(BTCVCL307) | 2.00 | 2.00 |
| | Surveying Laboratory I(BTCVL308) | 2.00 | 2.00 |
| | Building Constructions Drawing | 2.00 | 2.00 |
| | Laboratory(BTCVL309) | 2.00 | 2.00 |
| | Engineering Geology Laboratory (BTCVL310) | 3.00 | 2.00 |
| | Seminar on topic of field visit to Foundation Work(BTCVS311) | 2.00 | 1.00 |
| | Field Training/Internship/Industrial | 2.00 | 1.00 |

| | (BTCVF312) | | |
|--------------|--|------|------|
| | Hydraulics-II(BTCVC401) | 2.00 | 2.00 |
| | Surveying-II(BTCVC402) | 2.00 | 1.00 |
| | Structural Mechanics-I(BTCVC403) | 2.00 | 2.00 |
| | Product Design Engineering – I(BTID405) | 3.00 | 2.00 |
| TEXT OF MANY | Planning for Sustainable Development(BTCVE404B) | 2.00 | 1.00 |
| TY-SEM IV | Engineering Management(BTCVC406) | 3.00 | 2.00 |
| | Basic Human Rights(BTHM3401) | 3.00 | 2.00 |
| | Hydraulics Laboratory-II(BTCVL407) | 3.00 | 2.00 |
| | Surveying Lab II (BTCVL408) | 2.00 | 1.00 |
| | Mechanics of Solids Lab(BTCVL409) | 2.00 | 1.00 |
| | Mini Project(BTCVM410) | 2.00 | 1.00 |
| | Seminar on topic of field visit to work involving superstructure construction(BTCVCF411) | 3.00 | 2.00 |
| | Design of Steel Structures(BTCVC501) | 2.00 | 2.00 |
| | Structural Mechanics- II(BTCVC502) | 2.00 | 1.00 |
| TY- SEM V | Soil Mechanics(BTCVC503) | 2.00 | 1.00 |
| | Environmental Engineering(BTCVC504) | 2.00 | 1.00 |
| | Transportation Engineering(BTCVC505) | 2.00 | 2.00 |
| | Materials, Testing & Evaluation(BTCVE506A) | 2.00 | 1.00 |
| | Essence of Indian Traditional Knowledge(BTHM507) | 1.00 | 3.00 |
| | Soil Mechanics Laboratory(BTCVL508) | 1.00 | 2.00 |
| | Environmental Engineering | 1.00 | 2.00 |

| | Laboratory(BTCVL509) | | |
|---------------|---|------|------|
| | Transportation Engineering | | |
| | Laboratory(BTCVL510) | 2.00 | 2.00 |
| | Seminar on Topic of Field Visit to works | | |
| | related to Building Services(BTCVS511) | 3.00 | 2.00 |
| | Design of Concrete Structures I(BTCVC601) | 3.00 | 2.00 |
| | Foundation Engineering(BTCVC602) | 2.00 | 2.00 |
| | Concrete Technology(BTCVC603) | 2.00 | 2.00 |
| | Project Management(BTCVC604) | 2.00 | 1.00 |
| | Waste Water Treatment(BTCVE605A) | 2.00 | 2.00 |
| BTech-SEM VII | Building Planning and Design(BTCVC606) | 2.00 | 2.00 |
| | Concrete Technology Laboratory(BTCVL607) | 3.00 | 2.00 |
| | Building Planning, Design and Drawing Laboratory (BTCVL608) | 1.00 | 1.00 |
| | Community Project (Mini Project) (BTCVM609) | 1.00 | 1.00 |
| | Seminar on Topic of Field Visit Road Construction (BTCVS610) | 1.00 | 1.00 |
| | Industrial Training(BTCVF611) | 1.00 | 2.00 |
| | Design of Concrete Structures II(BTCVC701) | 1.00 | 2.00 |
| | Infrastructure Engineering(BTCVC702) | 2.00 | 1.00 |
| | Water Resources Engineering(BTCVC703) | 2.00 | 2.00 |
| | Professional Practices(BTCVC704) | 2.00 | 2.00 |
| | Constructionn Techniques(BTCVE705A) | 2.00 | 2.00 |
| | Air Pollution Control(BTCVOE706B) | 2.00 | 2.00 |
| | Design & Drawing of RC & Steel | 2.76 | 2.73 |

| | Structures(BTCVL707) | | |
|-------------|---|------|-------|
| | Professional Practices | • 00 | 2.00 |
| | (BTCVL708) | 2.00 | 2.00 |
| B.Tech -SEM | Field Training / Intern ship/Industrial | | |
| VIII | Training(BTCVT709) | 2.00 | 1.00. |
| | Seminar(BTCVS710) | 2.00 | 1.00 |
| | Project Stage-I(BTCVP711) | 2.00 | 1.00 |
| | Maintenance and repair of concrete | | |
| | structures (BTCVSS801D) | 1.00 | 2.00 |
| | Soil structure interaction (BTCESS802E) | 1.00 | 2.00 |
| | In-house Project or Internship and Project in Industry*Project-II(BTCEP803) | 1.00 | 2.00 |
| | Average CO-PSO Mapping | 1.90 | 1.66 |

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 assessmente xams, project presentations, or all 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. Practical/Oral/TW
- 2. Tutorial
- 3. Seminar
- 4. Project
- 5. 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

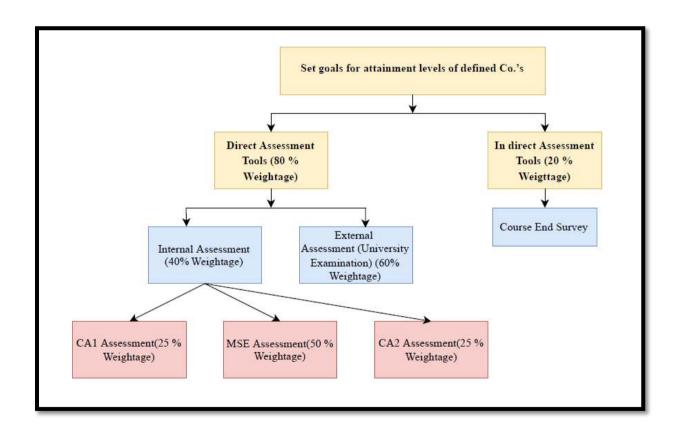
• Direct Assessment Method:

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

Theory



Laboratory

- 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] | | One test/semester |
| 2 | Mid Semester Examination [MSE] | Direct | One test/semester |
| 3 | Continuous Assessment Test 2 [CA2] | Assessment | One/Semester |
| 4 | End Semester Examination [ESE] | Assessment | One/Semester |

Laboratory

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

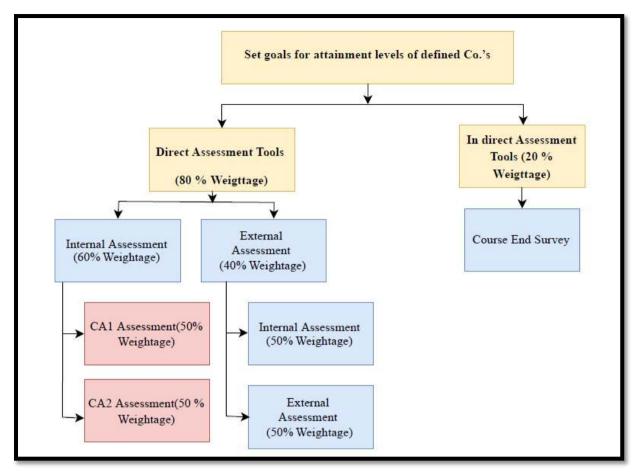


Fig2 Process of defining CO attainment practical examination

Theory

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

Laboratory

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

Laboratory

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

Course Name: Mechanics of Solids

Year: 2019-20

Course Code: (BTCVC302)

Sem-III

| Sciii-111 | | | | | | |
|-----------|------------------------|------------|------------|--------------|--------|----------|
| Course | Assessment | Internal | University | Final Direct | | |
| Outcomes | Tools | Assessment | Result | Course | | |
| | | Attainment | Attainment | Attainment | Target | Remark |
| C302.1 | | 1.2 | 3 | 3.00 | 1.8 | Attended |
| C302.2 | [CA1]/ [CA2]/ [ESE] | 1.1 | 3 | 2.90 | 1.8 | Attended |
| C302.3 | | 1.14 | 3 | 2.94 | 1.8 | Attended |
| C302.4 | | 1.12 | 3 | 2.92 | 1.8 | Attended |

Course Outcome Attainment: 2.94

Course Name: Surveying I I

Year: 2019-20

Course Code: (BTCVC 402)

Sem-IV

| Dem I v | | | | | | | |
|----------|-----------------------|--------------------------|-------------------|------------|--------|----------|--|
| Course | Assessment | Internal | University | Course | | | |
| Outcomes | Tools | Assessment Attainment | Result Attainment | Attainment | Target | Remark | |
| C402.1 | | 1.20 | 3 | 3.00 | 1.8 | Attended | |
| C402.2 | [CA1]/ [CA2]/[ESE] | 1.10 | 3 | 2.90 | 1.8 | Attended | |
| C402.3 | | 1.14 | 3 | 2.94 | 1.8 | Attended | |
| C402.4 | | 1.20 | 3 | 3.00 | 1.8 | Attended | |

Course Outcome Attainment: 2.96

Course Name: Structural Mechanics-II

Year:2020-21

Course Code: (BTCVC502)

| Sem-V | | | | | | |
|----------|------------------------|--------------------------|-------------------|------------|--------|----------|
| Course | Assessment | Internal | University | Course | | |
| Outcomes | Tools | Assessment Attainment | Result Attainment | Attainment | Target | Remark |
| C502.1 | | 1.2 | 3 | 3.00 | 1.95 | Attended |
| C502.2 | [CA1]/ [CA2]/ [ESE] | 1.2 | 3 | 3.00 | 1.95 | Attended |
| C502.3 | | 1.2 | 3 | 3.00 | 1.95 | Attended |
| C504.4 | | 1.2 | 3 | 3.00 | 1.95 | Attained |

Course Outcome Attainment: 2.98

Course Name: Waste Water Treatment

Year: 2020-21

Course Code: (BTCVE605A)

Sem -VI

| Course | Assessment | Internal | University | Course | | |
|----------|------------------------|------------|------------|------------|--------|----------|
| Course | Assessment | michiai | | Course | | |
| Outcomes | Tools | Assessment | Result | Attainment | Target | Remark |
| Outcomes | | Attainment | Attainment | | Target | Remark |
| C605A.1 | | 1.2 | 3 | 3.00 | 1.95 | Attended |
| C605A.2 | [CA1]/ [CA2]/ [ESE] | 1.2 | 3 | 3.00 | 1.95 | Attended |
| C605A.3 | | 1.2 | 3 | 3.00 | 1.95 | Attended |
| C605A.4 | | 1.2 | 3 | 3.00 | 1.95 | Attended |

Course Outcome Attainment: 3.00

Course Name: Water Resources Engineering

Year: 2020-21

Course Code: (BTCVC703)

| Sem -VII | | | | | | | |
|----------|------------------------|--------------------------|-------------------|------------|--------|----------|--|
| Course | Assessment | Internal | University | Course | | | |
| Outcomes | Tools | Assessment Attainment | Result Attainment | Attainment | Target | Remark | |
| C703.1 | | 1.2 | 3 | 3.00 | 2.1 | Attended | |
| C703.2 | [CA1]/ [CA2]/ [ESE] | 1.2 | 3 | 3.00 | 2.1 | Attended | |
| C703.3 | | 1.2 | 3 | 3.00 | 2.1 | Attended | |
| C703.4 | | 1.2 | 3 | 3.00 | 2.1 | Attended | |

Course Outcome Attainment: 3.00

Course Name: Soil Structure Interaction

Year : 2021-22

Course Code: (BTCESS802E)

Sem –VIII

| Sem – v III | | | | | | |
|-------------|------------------------|--------------------------|-------------------|------------|--------|----------|
| Course | Assessment | Internal | University | Course | | |
| Outcomes | Tools | Assessment Attainment | Result Attainment | Attainment | Target | Remark |
| C802E.1 | | 1.2 | 3 | 3.00 | 2.1 | Attended |
| C802E.2 | [CA1]/ [CA2]/ [ESE] | 1.2 | 3 | 3.00 | 2.1 | Attended |
| C802E.3 | | 1.2 | 3 | 3.00 | 2.1 | Attended |
| C802E.4 | | 1.2 | 3 | 3.00 | 2.1 | Attended |

Course Outcome Attainment: 3

CO Attainment:

| Course No | Course Name | CO1 | CO2 | CO3 | CO4 | Average CO Attainment |
|-------------|--|----------|----------|----------|----------|-----------------------------|
| (BTBS101) | Engineering Mathematics – | 2.92 | 2.88 | 2.88 | 2.92 | 2.90 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTBS102) | Engineering Physics | 2.91 | 2.93 | 2.96 | 2.98 | 2.94 |
| (6163102) | | Attained | Attained | Attained | Attained | Attained |
| (BTES103) | Engineering Graphics | 2.48 | 2.45 | 2.48 | 2.41 | 2.46 |
| (B1L3103) | | Attained | Attained | Attained | Attained | Attained |
| (BTHM104) | Communication Skills | 2.81 | 2.87 | 2.93 | 2.82 | 2.86 |
| (611111104) | | Attained | Attained | Attained | Attained | Attained |
| (DTEC1OE) | Energy & Environment | 2.98 | 2.94 | 2.89 | 2.90 | 2.86 |
| (BTES105) | Engineering | Attained | Attained | Attained | Attained | Attained |
| (DTEC106) | Basic Civil & Mechanical | 2.90 | 2.82 | 2.82 | 2.90 | 2.86 |
| (BTES106) | Engineering | Attained | Attained | Attained | Attained | Attained |
| (DTDC107L) | Engineering Physics Lab | 1.97 | 2.89 | 2.47 | 2.93 | 2.56 |
| (BTBS107L) | | Attained | Attained | Attained | Attained | Attained |
| (PTFC100L) | Engineering Graphics Lab | 2.48 | 2.45 | 2.48 | 2.41 | 2.46 |
| (BTES108L) | | Attained | Attained | Attained | Attained | Attained |
| | Communication Chille Lab | 2.87 | 2.85 | 2.87 | 2.93 | 2.88 |
| (BTHM109L) | Communication Skills Lab | Attained | Attained | Attained | Attained | Attained |
| | Engineering Mathematics – | 2.92 | 2.88 | 2.82 | 2.76 | 2.84 |
| (BTBS201) | II | Attained | Attained | Attained | Attained | Attained |
| | For all and a size a Change in the contract of | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 |
| (BTBS202) | Engineering Chemistry | Attained | Attained | Attained | Attained | Attained |
| (BTES203) | Fundamenta - Nambania | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 |
| | Engineering Mechanics | Attained | Attained | Attained | Attained | Attained |
| (0===== | Computer Programming in | 2.48 | 2.47 | 2.47 | 2.47 | 2.47 |
| (BTES204) | "C" | Attained | Attained | Attained | Attained | Attained |
| | Moultobox Duration | 2.45 | 2.45 | 2.93 | 2.45 | 2.57 |
| (BTES205) | Workshop Practices | Attained | Attained | Attained | Attained | Attained |
| | Basic Electrical | 2.90 | 2.82 | 2.82 | 2.90 | 2.86 |
| (BTES206) | &Electronics Engineering | Attained | Attained | Attained | Attained | Attained |
| (BTBS207L) | Computer Programming | 2.48 | 2.47 | 2.47 | 2.47 | 2.47 |

| | Lab | Attained | Attained | Attained | Attained | Attained |
|--------------|---------------------------------|----------|----------|----------|----------|----------|
| | Engineering Chemistry Lab | 2.43 | 2.93 | 2.91 | 2.47 | 2.68 |
| (BTBS208L | Engineering Chemistry Lab | Attained | Attained | Attained | Attained | Attained |
| | Engineering Mechanics Lah | 2.50 | 2.47 | 2.45 | 2.45 | 2.47 |
| (BTES209L) | Engineering Mechanics Lab | Attained | Attained | Attained | Attained | Attained |
| | Mini Project | 2.48 | 2.47 | 2.43 | 2.45 | 2.46 |
| (BTES210P) | Willia Project | Attained | Attained | Attained | Attained | Attained |
| | Field Training / | 1.56 | 1.49 | 1.49 | 1.49 | 1.49 |
| (BTES211P | Internship/Industrial Training) | Attained | Attained | Attained | Attained | Attained |
| (BTBSC301) | Engineering Mathematics- | 2.00 | 2.56 | 2.88 | 2.80 | 2.45 |
| (61636301) | III | Attained | Attained | Attained | Attained | Attained |
| BTCVC302 | Mechanics of Solids | 2.89 | 2.81 | 2.84 | 2.82 | 2.84 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC303) | Hydraulics I | 2.91 | 2.91 | 2.91 | 2.91 | 2.91 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC304) | Surveying-I | 2.94 | 2.86 | 2.87 | 2.88 | 2.89 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC305) | Building Construction | 2.93 | 2.85 | 2.88 | 2.86 | 2.88 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC306) | Engineering Geology | 2.93 | 2.85 | 2.88 | 2.86 | 2.88 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTHM303 | Soft Sills Development) | 1.14 | 1.14 | 1.14 | 1.14 | 1.14 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVCL307) | Hydraulics Laboratory I | 2.60 | 2.59 | 2.61 | 2.60 | 2.60 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVL308) | Surveying Laboratory I | 2.60 | 2.59 | 2.61 | 2.60 | 2.60 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVL309) | Building Constructions | 2.60 | 2.59 | 2.61 | 2.60 | 2.60 |
| | Drawing Laboratory | Attained | Attained | Attained | Attained | Attained |
| (PTC)/I 240\ | Engineering Geology | 2.61 | 2.56 | 2.56 | 2.11 | 2.46 |
| (BTCVL310) | Laboratory | Attained | Attained | Attained | Attained | Attained |
| (DTC\/\$244\ | Seminar on topic of field | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 |
| (BTCVS311) | visit to Foundation Work | Attained | Attained | Attained | Attained | Attained |
| (BTCVF312) | Field | 2.78 | 2.82 | 2.90 | 2.90 | 2.80 |

| | Training/Internship/Industr | Attained | Attained | Attained | Attained | Attained |
|-----------------|---|----------|----------|----------|----------|----------|
| (BTCVC401) | Hydraulics-II | 2.92 | 2.90 | 2.92 | 2.92 | 2.92 |
| (51000401) | Trydradiles ii | Attained | Attained | Attained | Attained | Attained |
| (BTCVC402) | Surveying-II | 2.92 | 2.85 | 2.87 | 2.92 | 2.89 |
| (2:0:0:0:0) | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC403) | Structural Mechanics-I | 2.94 | 2.91 | 2.87 | 2.88 | 2.90 |
| | | Attained | Attained | Attained | Attained | Attained |
| (5715 405) | Product Design Engineering | 2.92 | 2.90 | 2.92 | 2.92 | 2.92 |
| (BTID405) | -1 | Attained | Attained | Attained | Attained | Attained |
| (DTC) (F 40 4D) | Planning for Sustainable | 2.94 | 2.94 | 2.92 | 2.94 | 2.93 |
| (BTCVE404B) | Development | Attained | Attained | Attained | Attained | Attained |
| (BTCVC406) | Engineering Management | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 |
| | _ | Attained | Attained | Attained | Attained | Attained |
| (BTHM3401) | Basic Human Rights | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 |
| | | Attained | Attained | Attained | Attained | Attained |
| BTCVL407 | Hydraulics Laboratory-II | 2.94 | 1.47 | 2.93 | 2.92 | 2.56 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVL408) | Surveying Lab II | 2.92 | 1.47 | 2.93 | 2.92 | 2.56 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVL409) | Mechanics of Solids Lab | 2.92 | 1.47 | 2.93 | 2.92 | 2.56 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVM410) | Mini Project | 2.48 | 2.47 | 2.43 | 2.45 | 2.45 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVCF411) | Seminar on topic of field visit to work involving | 2.78 | 2.80 | 2.80 | 2.93 | 2.10 |
| | superstructure | Attained | Attained | Attained | Attained | Attained |
| (BTCVC501) | Design of Steel Structures | 2.59 | 2.80 | 2.93 | 2.92 | 2.81 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC502) | Structural Mechanics- II | 2.60 | 2.80 | 2.93 | 2.92 | 2.81 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC503) | Soil Mechanics | 1.52 | 1.66 | 1.45 | 1.63 | 1.57 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC504) | Environmental Engineering | 2.37 | 2.71 | 2.81 | 2.70 | 2.65 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC505) | Transportation Engineering | 2.86 | 2.91 | 2.71 | 2.70 | 2.79 |
| | | Attained | Attained | Attained | Attained | Attained |
| (DTC)/EEOCA) | Materials, Testing & | 2.15 | 2.15 | 2.14 | 2.16 | |
| (BTCVE506A) | Evaluation | Attained | Attained | Attained | Attained | Attained |
| (DTUNACOZ) | Essence of Indian | 1.10 | 1.11 | 1.13 | 1.12 | 1.11 |
| (BTHM507) | Traditional Knowledge | Attained | Attained | Attained | Attained | Attained |
| (BTCVL508) | Soil Mechanics Laboratory | 2.90 | 2.88 | 2.88 | 2.40 | 2.76 |

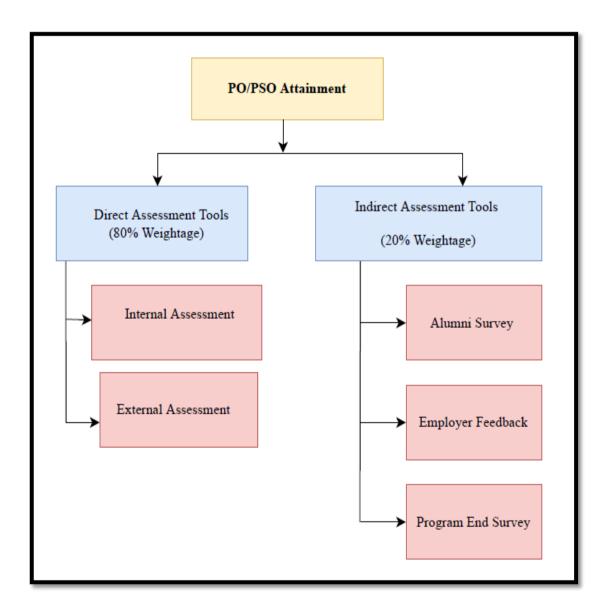
| | | Attained | Attained | Attained | Attained | Attained |
|--------------|---|----------|----------|----------|----------|----------|
| | Environmental Engineering | 2.93 | 2.93 | 2.93 | 2.93 | 2.93 |
| (BTCVL509) | Laboratory | Attained | Attained | Attained | Attained | Attained |
| DTO(# 540) | Transportation Engineering | 1.94 | 2.93 | 2.45 | 2.93 | 2.56 |
| BTCVL510) | Laboratory | Attained | Attained | Attained | Attained | Attained |
| | Seminar on Topic of Field | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 |
| (BTCVS511) | Visit to works related to Building Services | Attained | Attained | Attained | Attained | Attained |
| (BTCVC601) | Design of Concrete Structures I | 2.61 | 2.84 | 2.84 | 2.84 | 2.92 |
| | Structures i | Attained | Attained | Attained | Attained | Attained |
| (BTCVC602) | Foundation Engineering | 2.63 | 2.91 | 2.84 | 2.86 | 2.81 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC603) | Concrete Technology | 2.62 | 2.87 | 2.84 | 2.93 | 2.81 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC604) | Project Management | 2.42 | 2.71 | 2.76 | 2.62 | 2.63 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVE605A) | Waste Water Treatment | 2.60 | 2.80 | 2.93 | 2.92 | 2.81 |
| | | Attained | Attained | Attained | Attained | Attained |
| (PTCVC606) | Building Planning and | 2.84 | 2.89 | 2.84 | 2.76 | 2.83 |
| (BTCVC606) | Design | Attained | Attained | Attained | Attained | Attained |
| (DTC) (LCO7) | Concrete Technology | 2.93 | 2.93 | 2.93 | 2.93 | 2.93 |
| (BTCVL607) | Laboratory | Attained | Attained | Attained | Attained | Attained |
| (DTC)/(609) | Building Planning, Design | 2.93 | 2.94 | 2.91 | 2.93 | 2.92 |
| (BTCVL608) | and Drawing Laboratory | Attained | Attained | Attained | Attained | Attained |
| (BTCVM609) | Community Project (Mini | 2.48 | 2.47 | 2.43 | 2.45 | 2.45 |
| | Project) | Attained | Attained | Attained | Attained | Attained |
| (BTCVS610) | Seminar on Topic of Field Visit Road Construction | 2.00 | 2.00 | 2.15 | 2.56 | 2.15 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVF611) | Industrial Training | 2.13 | 2.26 | 2.56 | 2.56 | 2.48 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC701) | Design of Concrete | 1.91 | 1.87 | 1.79 | 1.74 | 1.83 |
| , | Structures II | Attained | Attained | Attained | Attained | Attained |
| (BTCVC702) | Infrastructure Engineering | 2.08 | 2.20 | 2.07 | 1.98 | 2.08 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVC703) | Water Resources | 1.86 | 1.93 | 1.79 | 1.75 | 1.83 |

| | Engineering | Attained | Attained | Attained | Attained | Attained |
|--------------|------------------------------------|----------|----------|----------|----------|----------|
| (BTCVC704) | Professional Practices | 2.13 | 2.26 | 1.88 | 2.33 | 2.15 |
| , | | Attained | Attained | Attained | Attained | Attained |
| (BTCVE705A) | Construction Techniques | 1.65 | 1.78 | 1.40 | 1.85 | 1.67 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVOE706B) | Air Pollution Control | 2.07 | 2.55 | 2.08 | 2.53 | 2.31 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVL707) | Design & Drawing of RC & | 2.91 | 2.90 | 2.88 | 2.90 | 2.90 |
| (BICVL/0/) | Steel Structures lab | Attained | Attained | Attained | Attained | Attained |
| (BTCVL708) | Professional Practices Lab | 1.65 | 1.78 | 1.40 | 1.85 | 1.67 |
| | | Attained | Attained | Attained | Attained | Attained |
| | Field Training / | 2.13 | 2.26 | 2.56 | 2.56 | 2.48 |
| (BTCVT709) | Internship/Industrial Training. | Attained | Attained | Attained | Attained | Attained |
| (BTCVS710) | Seminar | 2.00 | 2.00 | 2.15 | 2.56 | 2.15 |
| , | | Attained | Attained | Attained | Attained | Attained |
| (BTCVP711) | Project Stage-I | 2.11 | 2.05 | 2.04 | 2.09 | 2.07 |
| | | Attained | Attained | Attained | Attained | Attained |
| (BTCVSS801D) | Maintenance and repair of | 1.66 | 1.79 | 1.62 | 1.85 | 1.73 |
| | concrete structures | Attained | Attained | Attained | Attained | Attained |
| DICECCOOLE | Soil Structure Interaction | 1.65 | 1.78 | 1.63 | 1.85 | 1.73 |
| BTCESS802E | | 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)

(Describetheassessmenttoolsandprocessesusedtogatherthedatauponwhichthe 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 assessmentprocessesthatdemonstratethedegreetowhichtheProgramOutcomesandProgramSpecificOutcomes 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.

Employer survey: To provide information about our graduate's skills and capability.

Program exit survey: To evaluate the success of programme in providing students with opportunities to achieve the POs and PSOs every year.

Process for Evaluation and Assessment of POs & PSOs

The activity, questionaries 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 Attainment = 0.8 * Direct Attainment + 0.2 * 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 presente through Program level Course–PO & PSO matrix as indicated).

PO Attainment:

| Cl | | | | | | | | | | | PO1 | | PO1 |
|----------|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Class | Course Name & Code | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | 0 | PO11 | 2 |
| | Engineering Mathematics –I(BTBS101) | | 2.25 | 2.00 | 2.00 | | | | | | | | 1.50 |
| | Engineering Physics (BTBS102) | 1.00 | 2.00 | | | 1.00 | 1.00 | 1.00 | | | 2.00 | 1.00 | 1.00 |
| | Engineering Graphics(BTES103) | 1.67 | 3.00 | 2.50 | 3.00 | 1.67 | | | 1.00 | 2.50 | 2.50 | | 2.50 |
| | Communication Skills(BTHM104) | | | | | 1.67 | 1.67 | | 2 | 2 | 3 | | 2.75 |
| FY-SEMI | Energy & Environment Engineering (BTES105) | 2.33 | | 2.50 | | 1.50 | | 3.00 | 2.00 | | | | 2.50 |
| | Basic Civil & Mechanical Engineering(BTES106) | 2.25 | | 2.00 | 2.00 | 3.00 | 2.00 | 2.00 | 3.00 | 2.00 | 1.67 | 3.00 | 2.00 |
| | Engineering Physics Lab(BTBS107L) | 2.00 | 2.00 | 2.00 | | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 2.00 | | 2.00 |
| | Engineering Graphics Lab(BTES108L) | 1.67 | 3.00 | 2.50 | 3.00 | 1.67 | | | 1.00 | 2.50 | 2.50 | | 2.50 |
| | Communication Skills Lab(BTHM109L) | | | | | 1.67 | 1.67 | | 2 | 2 | 3 | | 2.75 |
| | Engineering Mathematics –II (BTBS201) | | 2.25 | 2.00 | 2.00 | | | | | | | | 1.50 |
| | Engineering Chemistry (BTBS202) | 2.25 | | 2.00 | 2.00 | 3.00 | 2.00 | 2.00 | 3.00 | 2.00 | 1.67 | 3.00 | 2.00 |
| | Engineering Mechanics(BTES203) | 2.67 | 3.00 | 2.00 | 2.00 | 1.00 | | | | 2.00 | 2.00 | | 2.00 |
| | Computer Programming in "C"(BTES204) | 1.75 | 1.00 | 2.00 | 2.00 | 2.50 | | | 2.00 | 2.00 | 2.50 | | 2.00 |
| | Workshop Practices (BTES205) | 3.00 | | 1.67 | 2.00 | 2.33 | | | | 2.00 | 1.00 | 2.00 | 2.00 |
| FY-SEMII | Basic Electrical & Electronics Engineering (BTES 206) | 3.00 | | 3.00 | 3.00 | 3.00 | | 2.00 | 2.00 | 2.67 | 2.00 | | 2.67 |
| | Computer Programming Lab(BTBS207L) | | 2.00 | 2.25 | | 3.00 | 3.00 | 1.50 | | 2.00 | 2.50 | | 2.00 |
| | Engineering Chemistry Lab(BTBS208L) | 2.25 | 2.00 | 2.50 | | | 1.00 | 2.00 | | 2.00 | 2.50 | | 1.50 |
| | Engineering Mechanics Lab(BTES209L) | 2.67 | 3.00 | 2.00 | 2.00 | 1.00 | | | | 2.00 | 2.00 | | 2.00 |
| | Mini Project (BTES210P) | | | | | 1.00 | | | | 2.67 | 2.67 | | 1.75 |
| | Field Training / Internship/Industrial Training (BTES211P) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |

| | Engineering Mathematics-III(BTBSC301) | 1.25 | 1.67 | 2 | | 1.25 | | | | 2 | | 1 | 1.75 |
|-----------|--|-------|-------|-------|-------|-------|------|------|------|-------|-------|---|------|
| | Mechanics of Solids(BTCVC302) | 1.75 | 2.00 | 2.67 | 1.67 | 1.00 | 2.50 | 1.67 | 1.00 | | | | 2.25 |
| | Hydraulics-I(BTCVC303) | 2.00 | 1.67 | 2.00 | 2.00 | 2.25 | 2.00 | 2.33 | | | | | 2.00 |
| | Surveying-I(BTCVC304) | 2.00 | 2.00 | 2.50 | | 2.00 | 2.00 | 2.00 | | | | | 2.00 |
| | Building Construction(BTCVC305) | 2.25 | 2.00 | 2.00 | | 2.00 | 2.00 | 2.00 | | | | | 2.00 |
| | Engineering Geology(BTCVC306) | 2.25 | 2.00 | 2.00 | | 2.00 | 2.00 | 2.00 | | | | | 2.00 |
| | Soft Sills Development(BTHM303) | 1.25 | | | | 1.33 | | 1.00 | 2 | 1.33 | 1.67 | | 1.00 |
| CV CENTIL | Hydraulics Laboratory I(BTCVCL307) | 2.00 | 1.75 | 2.00 | 2.00 | 2.25 | | | | | | | 2.00 |
| SY-SEMIII | Surveying Laboratory I(BTCVL308) | 2.00 | 1.50 | 2.00 | 2.00 | 2.25 | | | | | | | 2.00 |
| | Building Constructions Drawing Laboratory(BTCVL309) | 2.25 | 2.00 | 2.00 | | 2.00 | | | | | | | 2.00 |
| | Engineering Geology Laboratory(BTCVL310) | 2.00 | 2.00 | 2.50 | | 2.00 | | | | | | | 2.00 |
| | Seminar on topic of field visit to Foundation Work(BTCVS311) | 3 | 2 | | 2 | 1 | | | 1 | | | | 3 |
| | Field Training/Internship/Industrial (BTCVF312) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Hydraulics-II(BTCVC401) | 2.00 | 2.25 | 2.00 | 2.00 | | 2.25 | 2.00 | | | | | 2.00 |
| | Surveying-II(BTCVC402) | 3.00 | 2.25 | 2.00 | 1.00 | | 2.00 | 2.00 | | | | | 2.00 |
| | Structural Mechanics-I(BTCVC403) | 2.00 | 2.25 | 2.00 | 2.00 | 2.00 | 1.33 | 2.00 | | | | | 2.00 |
| | Product Design Engineering – I(BTID405) | 2.00 | 2.25 | 2.00 | 2.00 | | 2.25 | 2.00 | | | | | 2.00 |
| | Planning for Sustainable Development(BTCVE404B) | 2.00 | 1.67 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | | | | | 2.00 |
| | Engineering Management(BTCVC406) | 1.500 | 2.000 | 1.000 | 1.250 | 1.667 | | | | 1.000 | 2.000 | | |
| SY-SEM IV | Basic Human Rights(BTHM3401) | 1.50 | 2.00 | 1.00 | 1.25 | 1.67 | | | | 1.00 | 2.00 | | |
| | Hydraulics Laboratory-II(BTCVL407) | 2.00 | 1.50 | 2.00 | 2.00 | 2.25 | | | | | | | 2.00 |
| | Surveying Lab II(BTCVL408) | 2.00 | 1.50 | 2.00 | 2.00 | 2.25 | | | | | | | 2.00 |
| | Mechanics of Solids Lab(BTCVL409) | 2.00 | 1.50 | 2.00 | 2.00 | 2.25 | | | | | | | 2.00 |
| | Mini Project(BTCVM410) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Seminar on topic of field visit to work involving superstructure construction(BTCVCF411) | 3 | 2 | | 2 | 1 | | | 1 | , | | | 3 |

| | Design of Steel Structures(BTCVC501) | 2.50 | 2.33 | 1.67 | 2.00 | 2.00 | 1.50 | 1.00 | | 1.50 | 1.33 | | 2.00 |
|-----------|---|------|------|------|------|------|------|------|------|------|------|------|------|
| | Structural Mechanics- II(BTCVC502) | 3.00 | 1.25 | 1.33 | 1.00 | 1.00 | 1.50 | 1.00 | | | 1.00 | | 2.33 |
| | Soil Mechanics(BTCVC503) | 2.00 | 1.75 | 2.00 | 1.67 | 1.75 | 2.67 | 2.00 | 2.00 | 1.00 | 1.67 | 1.67 | 1.50 |
| | Environmental Engineering(BTCVC504) | 2.50 | 2.50 | 0.00 | 0.00 | | 3.00 | 2.00 | 2.00 | | | | 2.50 |
| | Transportation Engineering(BTCVC505) | 2.25 | 2.25 | | | 1.00 | 2.00 | | | | 1.00 | 2.00 | 2.00 |
| | Materials, Testing & | 2.25 | 1.33 | 1.75 | 1 | 1 | | 1.75 | | | | | 2 |
| | Evaluation(BTCVE506A) | 2.20 | 1.00 | 1.70 | | | | 1.70 | | | | | _ |
| TY-SEM V | Essence of Indian Traditional Knowledge(BTHM507) | 1.00 | | | | 1.50 | | | 1.50 | 1.50 | 1.33 | | 1.33 |
| | Soil Mechanics Laboratory(BTCVL508) | 3.00 | 2.00 | 2.25 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | |
| | Environmental Engineering Laboratory(BTCVL509) | 2.00 | 1.33 | 2.00 | 2.00 | 1.50 | | | | | 2.00 | | 2.00 |
| | Transportation Engineering Laboratory(BTCVL510) | 2.50 | 1.75 | 1.75 | 1.75 | 1.75 | | | | 1.50 | 1.50 | 2.00 | 2.00 |
| | Seminar on Topic of Field Visit to works related to Building Services(BTCVS511) | 1.50 | 2.00 | 1.00 | 1.25 | 1.67 | | | | 1.00 | 2.00 | | |
| | Design of Concrete Structures (BTCVC601) | 2.75 | 2.33 | 1.50 | 1.33 | 1.75 | 1.50 | 1.00 | | 2.00 | 1.25 | | 1.75 |
| | Foundation Engineering(BTCVC602) | 2.00 | 1.75 | 0.00 | 0.00 | 1.75 | 2.00 | 1.00 | 0.00 | 0.00 | 2.00 | | 1.6 |
| | Concrete Technology(BTCVC603) | 2.25 | 3.00 | 1.50 | 2.00 | 1.75 | 1.50 | 1.00 | | 1.50 | 2.00 | | 1.50 |
| | Project Management(BTCVC604) | 1.75 | 1.50 | 2.00 | 1.00 | 3.00 | 1.00 | 1.25 | 0.75 | 1.25 | 1.75 | 2.00 | |
| | Waste Water Treatment(BTCVE605A) | 2.67 | 2.00 | 3.00 | 1.00 | | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | | |
| | Building Planning and Design(BTCVC606) | | 2.00 | 1.50 | 2.00 | 2.00 | 1.00 | 2.00 | 1.75 | | 2.00 | 2.00 | 2.00 |
| TY-SEM VI | Concrete Technology Laboratory(BTCVL607) | 2.00 | 2.00 | 1.50 | 2.00 | 2.00 | | | | | 2.00 | | 2.00 |
| | Building Planning, Design and Drawing Laboratory(BTCVL608) | 2.00 | 2.00 | 1.50 | 2.00 | 2.00 | 1.50 | 2.00 | 1.75 | | 2.00 | 2.00 | 2.00 |
| | Community Project (Mini Project)(BTCVM609) | 2.00 | 1.00 | 1.00 | 1.67 | | | | 1.25 | 1.67 | 1.00 | | 2.00 |
| | Seminar on Topic of Field Visit Road Construction (BTCVS610) | 1.50 | 2.00 | 1.00 | 1.25 | 1.67 | | | | 1.00 | 2.00 | | |
| | Industrial Training (BTCVF611) | 2.67 | 2 | 3 | 2 | 2.5 | 3 | 2 | 3 | 2.67 | 2.5 | 3 | 3 |
| | Design of Concrete Structures | | | | | | | | | | | | |

| AC | TUAL AVERAGE PO Attainment | 2.21 | 2.03 | 1.93 | 1.79 | 1.83 | 1.82 | 1.74 | 1.76 | 1.74 | 1.90 | 1.97 | 2.04 |
|-----------------|---|------|------|------|------|------|------|------|------|------|------|------|------|
| | Project-II(BTCEP803) | 2.75 | 3.00 | 1.50 | 3.00 | 2.25 | 1.33 | 2.00 | 1.00 | 2.00 | 2.33 | | 1.50 |
| BTech -SEM VIII | Soil structure interaction (BTCESS802E) | 2.3 | 1.8 | 1.5 | 1.7 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.3 | 2.5 |
| | Maintenance and repair of concrete structures (BTCVSS801D) | 2.3 | 1.8 | 1.5 | 1.7 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.3 | 2.5 |
| | Project Stage-I(BTCVP711) | 2.75 | 3.00 | 1.50 | 3.00 | 2.25 | 1.33 | 2.00 | 1.00 | 2.00 | 2.33 | | 1.50 |
| | Seminar (BTCVS710) | 2 | 2 | 1 | 1 | 2 | | | | 1 | 2 | 2 | 2 |
| | Field Training / Intern ship/Industrial Training (BTCVT709) | 2.3 | 2.5 | 3.0 | 2.5 | 2.0 | 2.5 | 1.5 | 3.0 | 2.7 | 2.5 | 2.0 | 2.3 |
| | Professional Practices (BTCVL708) | 3.00 | 3.00 | | 1 | | 1 | 2 | | 2 | | 1 | |
| | Design & Drawing of RC & Steel Structures (BTCVL707) | 2.75 | 2.75 | 2.00 | 1.50 | 1.50 | 1.00 | | | 1.00 | 1.00 | | 1.00 |
| | Air Pollution Control(BTCVOE706B) | 2.50 | 2.00 | 2.00 | 2.00 | 1.75 | 1.00 | 1.50 | | 2.00 | 2.50 | | 1.50 |
| | Construction Techniques(BTCVE705A) | 1.5 | 1.5 | 1.0 | 2.0 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 |
| | Professional Practices(BTCVC704) | 3.0 | 3.0 | 2.8 | 1.8 | 1.0 | | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 3.0 |
| | Water Resources Engineering (BTCVC703) | 2.0 | 1.5 | 3.0 | | 1.7 | 1.5 | 1.5 | | | | | 1.3 |
| | Infrastructure Engineering (BTCVC702) | 2.0 | 1.0 | 2.0 | | 1.0 | 2.0 | 2.3 | | | | | 1.3 |

CO-PO Attainment:

| Course | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| CO Attainment | 2.83 | 2.84 | 2.88 | 2.87 | 2.50 | 2.80 | 2.79 | 2.44 | 2.44 | 2.42 | 2.50 | 2.84 |
| Direct Attainment | 2.9 | 2.8 | 2.9 | 2.9 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.9 | 2.8 |
| Indirect Attainment | 2.69 | 2.86 | 2.98 | 2.9 | 1.2 | 2.69 | 2.86 | 1.1 | 1.1 | 1.01 | 1.1 | 2.86 |

PSO Attainment:

| | Academic Year: 2022-23 | Program Specific | C Outcome (PSO) |
|-----------|--|------------------|-----------------|
| Class | Class | PSO1 | PSO2 |
| | Engineering Mathematics –I(BTBS101) | 2.00 | 1.00 |
| | Engineering Physics (BTBS102) | | |
| | Engineering Graphics (BTES103) | 1.00 | |
| | Communication Skills (BTHM104) | | |
| | Energy & Environment Engineering (BTES105) | 2.00 | 1.00 |
| | Basic Civil & Mechanical Engineering (BTES106) | 1.00 | |
| FY-SEM | Engineering Physics Lab (BTBS107L) | | |
| | Engineering Graphics Lab (BTES108L) | 1.00 | |
| | Communication Skills Lab (BTHM109L) | | |
| | Engineering Mathematics –II (BTBS201) | | |
| | Engineering Chemistry (BTBS202) | | |
| | Engineering Mechanics (BTES203) | | |
| FY-SEM II | Computer Programming in "C" (BTES204) | | |
| | Workshop Practices (BTES205) | | |
| | Basic Electrical & Electronics Engineering (BTES206) | | |
| | Computer Programming Lab (BTBS207L) | | |

| | Engineering Chemistry Lab (BTBS208L) | | |
|---------------------------------------|--|------|------|
| | Engineering Mechanics Lab (BTES209L) | 2.00 | 1.00 |
| | Mini Project (BTES210P) | 1.00 | 1.00 |
| | Field Training / Internship/Industrial | 1.00 | 1.00 |
| | Training (BTES211P) | 1.00 | 1.00 |
| | Engineering Mathematics-III(BTBSC301) | 2.00 | |
| | Mechanics of Solids (BTCVC302) | 2.68 | 2.67 |
| | Hydraulics I (BTCVC303) | 2.00 | 2.00 |
| | Surveying-I(BTCVC304) | 2.67 | 2.67 |
| | Building Construction (BTCVC305) | 2.00 | 2.00 |
| | Engineering Geology (BTCVC306) | 2.00 | 2.00 |
| | Soft Sills Development (BTHM303) | 1.00 | 1.00 |
| SY SEM- III | Hydraulics Laboratory I(BTCVCL307) | 2.00 | 1.00 |
| | Surveying Laboratory I(BTCVL308) | 3.00 | 2.00 |
| | Building Constructions Drawing Laboratory(BTCVL309) | 2.00 | 3.00 |
| | Engineering Geology Laboratory (BTCVL310) | 2.00 | 1.00 |
| | Seminar on topic of field visit to Foundation Work(BTCVS311) | 2.00 | 1.00 |
| | Field Training/Internship/Industrial | | |
| | (BTCVF312) | 2.00 | 1.00 |
| | Hydraulics-II(BTCVC401) | 2.00 | 2.00 |
| | Surveying-II(BTCVC402) | 2.00 | 1.00 |
| SY-SEM IV | Structural Mechanics-I(BTCVC403) | 2.00 | 2.00 |
| , , , , , , , , , , , , , , , , , , , | Product Design Engineering – I(BTID405) | 2.00 | 2.00 |
| | Planning for Sustainable Development(BTCVE404B) | 1.00 | 1.00 |
| | Engineering Management(BTCVC406) | 2.00 | 1.00 |

| | Basic Human Rights(BTHM3401) | 2.00 | 1.00 |
|-----------|--|------|------|
| | | 2.00 | 1.00 |
| | Hydraulics Laboratory-II(BTCVL407) | 2.00 | 2.00 |
| | Surveying Lab II (BTCVL408) | 3.00 | 2.00 |
| | Mechanics of Solids Lab(BTCVL409) | 3.00 | 2.00 |
| | Mini Project(BTCVM410) | 2.00 | 1.00 |
| TY- SEM V | Seminar on topic of field visit to work involving superstructure construction(BTCVCF411) | 2.00 | 1.00 |
| | Design of Steel Structures(BTCVC501) | 2.00 | 2.00 |
| | Structural Mechanics- II(BTCVC502) | 2.00 | 2.00 |
| | Soil Mechanics(BTCVC503) | 2.50 | 2.75 |
| | Environmental Engineering(BTCVC504) | | 3.00 |
| | Transportation Engineering(BTCVC505) | 2.00 | 2.00 |
| | Business Communication & Presentation Skills BTCVE506D | 2.00 | 1.00 |
| | Essence of Indian Traditional Knowledge(BTHM507) | 1.00 | |
| | Soil Mechanics Laboratory(BTCVL508) | 2.00 | 2.00 |
| | Environmental Engineering Laboratory(BTCVL509) | 2.00 | 2.00 |
| | Transportation Engineering Laboratory(BTCVL510) | 2.00 | 2.00 |
| | Seminar on Topic of Field Visit to works related to Building Services(BTCVS511) | 2.00 | 1.00 |
| TY-SEM VI | Design of Concrete Structures I(BTCVC601) | 2.00 | 2.00 |
| | Foundation Engineering(BTCVC602) | 2.00 | 2.00 |
| | Concrete Technology(BTCVC603) | 2.00 | 2.00 |
| | Project Management(BTCVC604) | 2.00 | 1.00 |
| | Waste Water Treatment(BTCVE605A) | 3.00 | 1.00 |
| | Building Planning and Design(BTCVC606) | 2.00 | 2.00 |
| | Concrete Technology Laboratory(BTCVL607) | 2.00 | 2.00 |

| Community Project (Mini Project) (BTCVM609) 2.00 2.00 | | Building Planning, Design and Drawing Laboratory | | |
|--|--|---|------|------|
| Seminar on Topic of Field Visit Road Construction (BTCVS610) 1.00 2.00 | | | 2.00 | 2.00 |
| Industrial Training(BTCVF611) | | | 2.00 | 2.00 |
| Industrial Training(BTCVF611) | | Seminar on Topic of Field Visit Road Construction | | |
| Design of Concrete Structures II(BTCVC701) 2.00 1.00 | | | 1.00 | 2.00 |
| Infrastructure Engineering(BTCVC702) Water Resources Engineering(BTCVC703) Professional Practices(BTCVC704) Construction Techniques(BTCVE705A) Air Pollution Control(BTCVOE706B) Design & Drawing of RC & Steel | | | | |
| Water Resources Engineering(BTCVC703) Professional Practices(BTCVC704) Construction Techniques(BTCVE705A) Air Pollution Control(BTCVOE706B) Design & Drawing of RC & Steel | | | | 1.00 |
| Professional Practices(BTCVC704) Construction Techniques(BTCVE705A) Air Pollution Control(BTCVOE706B) Design & Drawing of RC & Steel | | Infrastructure Engineering(BTCVC702) | 3.00 | 1.00 |
| Construction Techniques(BTCVE705A) Air Pollution Control(BTCVOE706B) Design & Drawing of RC & Steel | | Water Resources Engineering(BTCVC703) | 1.80 | 1.50 |
| Air Pollution Control(BTCVOE706B) Design & Drawing of RC & Steel | | Professional Practices(BTCVC704) | | 2.00 |
| Design & Drawing of RC & Steel | | Construction Techniques(BTCVE705A) | 3.00 | 2.00 |
| | | Air Pollution Control(BTCVOE706B) | 2.50 | 1.50 |
| | | | 2.00 | 1.75 |

| | Professional Practices | | |
|------------------|---|------|------|
| | (BTCVL708) | | 2.00 |
| | Field Training / Intern ship/Industrial Training(BTCVT709) | 1.50 | 2.50 |
| | Seminar(BTCVS710) | 2.00 | 1.00 |
| B.Tech -SEM VII | Project Stage-I(BTCVP711) | 2.75 | 1.50 |
| | Maintenance and repair of concrete structures (BTCVSS801D) | 2.50 | 2.00 |
| | Soil structure interaction (BTCESS802E) | 2.50 | 2.00 |
| B.Tech -SEM VIII | In-house Project or Internship and Project in Industry*Project-II(BTCEP803) | 2.80 | 1.50 |
| | Average CO-PSO Mapping | 2.00 | 1.68 |

PSO Attainment:

| Course | PSO1 | PSO2 |
|---------------------|------|------|
| PSO Attainment | 1.94 | 1.66 |
| Direct Attainment | 2.00 | 1.68 |
| Indirect Attainment | 1.70 | 1.56 |

| CRITERION | Students' Performance | 150 |
|-----------|-----------------------|-----|
| 04 | | |
| | | |

4. STUDENTS' PERFORMANCE

(150)

TableB.4a

| Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable) | CAY (2022-23) | CAY (2021-22) | CAY <i>m</i> 1 (2020-21) | CAY <i>m</i> 2 (2019-20) | CAY <i>m</i> 3 (2018-19) | CAY <i>m</i> 4 (2017-18) | CAY <i>m</i> 5 (2016-17 |
|--|------------------|------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|
| Sanctioned intake of the program(N) | 60 | 60 | 60 | 60 | 60 | 60 | 45 |
| 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) | 04 | 18 | 20 | 12 | 13 | 6 | 10 |
| Number of students admitted in 2 nd year in the same batch via lateral entry(N2) | 15 | 55 | 55 | 53 | 58 | 66 | 41 |
| Separate division students, if applicable(N3) | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Total number of students admitted in the Program(N1+N2+N3) | 19 | 73 | 75 | 65 | 71 | 72 | 51 |

CAY - Current Academic Year

CAYm1- Current Academic Year minus1= Current Assessment Year

CAYm2 - Current Academic Year minus2=Current

Assessment Year minus 1 LYG – Last Year Graduate

minus 1 LYGm1 - Last Year Graduate minus 1 LYGm2

- Last Year Graduate minus

TableB.4b

| Year of entry | N1+N2+N 3 (As defined | Number of students who have successfully graduated without backl in any semester/year of study (Without Backlog means no compartme failures in any semester/year of stud | | | backlogs idy artment or |
|--|-----------------------|--|------------|------------|-------------------------------|
| | above) | I Year | II Year | III Year | IV Year |
| CAY(2022-23) | 04(04+0+0) | | | | |
| CAY(2021-22) | 73(18+55+0) | 03 | | | |
| CAY <i>m</i> 1(2020-21) | 75(20+55+0) | 13 | 58(10+48) | | |
| CAY <i>m</i> 2(2019- 2020) | 65(12+53+0) | 04 | 25(4+21) | 22(11+11) | |
| CAY <i>m3</i> (2018- 2019) | 71(13+58+0) | 06 | 54(06+48) | 54(06+48) | 53(06+47) |
| CAY <i>m4</i> (LYG)(2017-18) | 72(6+66 +0) | 00 | 33 (00+33) | 33(00+33) | 33(00+33) |
| CAY <i>m5</i> (LYG <i>m</i> 1)(2016- 17) | 51(10+41+0) | 01 | 3(00+3) | 03(0+03) | 3(0+3) |

TableB.4c

| Year of entry | N1+N2+N3 (As defined | Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog +without Backlog] | | | d of study) |
|---------------------------|-------------------------|--|------------|-----------|-------------|
| | above) | I Year | II Year | III Year | IV Year |
| CAY(2022-23) | 04(04+0+0) | | | | |
| CAY(2021-22) | 18(18+0+0) | 13 | | | |
| CAYm1(2020-21) | 75(20+55+0) | 13 | 66(13+53) | | |
| CAYm2(2019- 2020) | 65(12+53+0) | 11 | (64)11+53 | 61(11+50) | |
| CAYm3(2018- 2019) | 71(13+58+0) | 08 | (64)07+57 | (64)07+57 | 61(7+54) |
| CAYm4 (LYG)(2017-18) | 72(6+66 +0) | 03 | (65) 03+62 | (63)03+60 | (61)03+58 |
| CAYm5 (LYGm1)(2016-17) | 51(10+41+0) | 03 | (20) 03+17 | (17)02+15 | (17)02+15 |

4.1 Enrolment Ratio (20)

Enrolment Ratio=N1/N

| | N from table B.4a | N1 from table B. 4a | Enrollment ratio |
|----------------|-------------------|---------------------|------------------|
| CAY(2022-23) | 60 | 04 | 0.06 |
| CAY(2021-22) | 60 | 18 | 0.3 |
| CAYm1(2020-21) | 60 | 20 | 0.3 |
| CAYm2(2019-20) | 60 | 12 | 0.2 |

Average Enrollment=(ER1+ER2+ER3)/3=(0.3+0.3+0.2)/3=0.266

TableB.4.1

| Item (Students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year) | Marks |
|--|-------|
| >=90%students enrolled | 20 |
| >=80%students enrolled | 18 |
| >=70%students enrolled | 16 |
| >=60%students enrolled | 14 |
| >=50%students enrolled | 12 |
| Otherwise | 0 |

4.2. Success Rate in the stipulated period of the program

(40)

4.1.1. Success rate without backlogs in any semester/year of study

(25)

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

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

Success rate without backlogs in any year of study=25×Average SI

Success rate without backlogs in any year of study = $25 \times Average SI = 25*0.39 = 9.75$

TableB.4.2.1

| Item | Last Year of Graduate, LYG(CAYm4) (2018-19) | Last Year of Graduate, LYG(CAYm4) (2017-18) | LastYearofGraduateminu s1,LYGm1(CAYm5) (2016-17) |
|---|---|---|--|
| Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable | 71 | 72 | 51 |
| Number of students who have graduated without backlogs in the stipulated period | 48 | 33 | 03 |
| Success Index (SI) Average SI | 0.67 | 0.45 | 0.06 |

4.1.2. Success rate in stipulated period of study

(15)

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

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

Success rate=15×Average SI

Success rate = $15 \times Average SI = 15*0.69 = 10.35$

TableB.4.2.2

| Item | Last Year of Graduate, LYG(CAYm 4) (2018-19) | Last Year of Graduate, LYG(CAYm 5) (2017-18) | Last Year of Graduate minus1, LYGm1 (CAYm6) (2016-17) |
|--|--|--|---|
| Number of students admitted in the corresponding First Year+ admitted in 2 nd year via lateral entry and separate division, if applicable | 71 | 72 | 51 |
| Number of students who have graduated in the stipulated period | 63 | 61 | 17 |
| Success Index(SI) Average Success Index | 0.89 | 0.84 | 0.33 |

Note: If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2will be applicable simultaneously.

4.3 Academic Performance in Third Year

(15)

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

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

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

TableB.4.3

| Academic Performance | CAYm1 (2021-22) | CAYm2 (2020-21) | CAY <i>m3</i> (2019-20) |
|---|-----------------|-----------------|-------------------------|
| Mean of CGPA or Mean Percentage of all successful students(X) | 8.34 | 8.82 | 7.46 |
| Total no. of successful students(Y) | 61 | 64 | 65 |
| Total no. of students appeared in the examination(Z) | 61 | 64 | 65 |
| API=x*(Y/Z) | API= 8.34 | AP1= 8.82 | API2= (7.46) |

| Average API=(API+API1+API2)/3 | (8.21) |
|-------------------------------|--------|
| | |

Academics Performance=1.5*Average API 1.5*(8.21) = (12.32)

4.4 Academic Performance in Second Year

(15)

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

 $API = ((Mean\ of\ 2^{nd}\ Year\ Grade\ Point\ Average\ of\ all\ successful\ Students\ on\ a10\ point\ scale) or (Mean\ of\ the\ percentage\ of\ marks\ of\ all\ successful\ students\ in\ Second\ Year/10)) x (number\ of\ successful\ students/number\ of\ students\ appeared\ in\ the\ examination)$

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

TableB.4.4

| Academic Performance | CAYm1 (2021-22 | CAYm2 (2020-21) | CAY <i>m3</i> (2019-20) |
|---|-------------------|--------------------|-------------------------|
| Mean of CGPA or Mean Percentage of all successful students(X) | 7.25 | 9.03 | 8.92 |
| Total no. of successful students(Y) | 65 | 64 | 64 |
| Total no. of students appeared in the examination(Z) | 65 | 64 | 64 |
| API=X*(Y/Z) | API= 7.25 | API1=9.03 | API2= 8.92 |
| Average API=(API+API1+AP2)/3 | | 8.4 | |

Academics Performance=1.5*Average API 1.5*(8.4) = (12.6)

4.5 Placement, Higher Studies and Entrepreneurship

(40)

Assessment Points=40×average placement= 40*0.873= 34.933

TableB.4.5

| Item | CAYm1 (2021-22) | CAYm1 (2020-21) | CAY <i>m2</i> (2019-20) |
|---|--------------------|--------------------|-------------------------|
| Total No. of Final Year Students(N) | 61 | 63 | 17 |
| No .of students placed in companies or Government Sector(x) | 39 | 54 | 15 |
| No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.)(y) | 0 | 0 | 0 |
| No. of students turned entrepreneur in engineering/technology(z) | 00 | 08 | 02 |
| x+y+z= | 39 | 62 | 17 |
| Placement Index:(x+y+z)/N | 0.64 | P1=0.98(1) | P2= 1(1) |
| Average placement=(P1+P2+P3)/3 | | 0.87 | |

4.5a. Provide the placement data in the below mentioned format with the name of the program and the assessment year:

| Civi | l Engineering (2021-22 | | | |
|-----------|-------------------------------|---------------|-------------------------------------|---------------------------------------|
| Sr. No | Name of Students | Enrollment No | Name of the Employer | Appointment letter Reference No |
| 1 | Nalawade Siddhant Rajendra | 1965451191001 | Skayline Construction, Satara | TPC/ 9110/ 2022/1001 |
| 2 | Yedage Pratiksha Govind | 1965451191002 | Aerial Mappers, Pune | TPC/ 9110/ 2022/1002 |
| 3 | Swami Smita | 1965451191005 | A.R. Kulkarni Associate, sangali | TPC/ 9110/ 2022/1005 |
| 4 | Desai Ajinkya Vijay | 1965451191009 | A.S.DESAI INFRA. PVT LTD. SATARA | TPC/ 9110/ 2022/1009 |
| 5 | Khavale Swapnil Digambar | 1965451191016 | Salunkhe Construction, karad | TPC/ 9110/ 2022/1016 |
| 6 | Patil Tejswini Prakash | 1965451191024 | Aerial Mappers, Pune | TPC/ 9110/ 2022/1024 |
| 7 | Malusare Vaibhav | 1965451191053 | Aerial Mappers, Pune | TPC/ 9110/ 2022/1053 |
| 8 | Shelar Kanchan Jayavant | 1965451191026 | S.P. Infra karad prin Pend | TPC/ 9110/ 2022/1026 |
| 9 | Gavane Prashant Sopan | 1965451191039 | Skayline Construction, Satara | TPC/ 9110/ 2022/1039 |
| 10 | Kale Pruthviraj Kisan | 1965451191040 | Skayline Construction, Satara | TPC/ 9110/ 2022/1040 |
| 11 | Salunkhe Prathmesh S | 1965451191045 | Yessar geomatics Pvt. Ltd, Pune | TPC/ 9110/ 2022/1045 |
| 12 | Dipti Indalkar | 1965451191054 | Aerial Mappers, Pune | TPC/ 9110/ 2022/1054 |

| 13 | Babar Aakanksha Vinayak | 1965451191056 | Aerial Mappers, Pune | TPC/ 9110/ 2022/1056 |
|----|-------------------------------|---------------|--|--------------------------|
| 14 | Pawar Vishwjeet Vinod | 1965451191064 | Skayline Construction, Satara | TPC/ 9110/ 2022/1064 |
| 15 | Hujjaifa Farrukh Momin | 1965451191067 | Salunkhe Construction, karad | TPC/ 9110/ 2022/1067 |
| 16 | Khot Shreeranjan Ravikumar | 2065451191002 | Integrum Property Services | TPC/ 9110/ 2022/21002 |
| 17 | Shivthare Nikita R. | 1965451191004 | Space Designer, Satara print | TPC/ 9110/ 2022/1004 |
| 18 | Patil Ramchandra Shivaji | 1965451191006 | V.S.R. CONSTRUCTION, KAWATEMAHAKAL | TPC/ 9110/ 2022/1006 |
| 19 | Patole Ashutosh Somnath | 1965451191010 | Shankar Kumbhar Interior, satara | TPC/ 9110/ 2022/1010 |
| 20 | Musale Harshada Ravindra | 1965451191014 | Yessar geomatics Pvt. Ltd, Pune | TPC/ 9110/ 2022/1014 |
| 21 | Suryawanshi Vinayak Netaji | 1965451191015 | Skayline Construction, Satara | TPC/ 9110/ 2022/1015 |
| 22 | Bhandare Akshay Arun | 1965451191018 | A. R. Constructions, Satara print | TPC/ 9110/ 2022/1018 |
| 23 | Kadam Suraj Prakash | 1965451191027 | Model Developers, satara | TPC/ 9110/ 2022/1027 |
| 24 | Khalatkar Shubham | 1965451191028 | Meera construction Boriwali print remain | TPC/ 9110/ 2022/1028 |
| 25 | Sonawale Rushikesh Rajaram | 1965451191038 | Skayline Construction, Satara | TPC/ 9110/ 2022/1038 |
| 26 | Jadhav Atharv Deepak | 1965451191041 | Delia Decorators, Pashan Pune | TPC/ 9110/ 2022/1041 |
| 27 | Kamble Pratik Sunil | 1965451191044 | Shiv Construction, Gargoti | TPC/ 9110/ 2022/1044 |
| 28 | Mechkar Ashitosh A | 1965451191047 | Das Associate, Wai | TPC/ 9110/ 2022/1047 |

| | Khatal Rajshree | | Shahikant Dhumal, | TPC/ 9110/ |
|----|----------------------|---------------|------------------------|------------|
| 29 | Madhukar | 1965451191048 | Surveyer, satara | 2022/1048 |
| | Gaikwad Mahesh | | Skayline Construction, | TPC/ 9110/ |
| 30 | Lakshman | 1965451191049 | Satara | 2022/1049 |
| | | | Yessar geomatics Pvt. | TPC/ 9110/ |
| 31 | Patil Amruta S. | 1965451191050 | Ltd, Pune | 2022/1050 |
| | | | Yessar geomatics Pvt. | TPC/ 9110/ |
| 32 | Jagtap Snehal Suresh | 1965451191055 | Ltd, Pune | 2022/1055 |
| | | | Skayline Construction, | TPC/ 9110/ |
| 33 | Mane Ajit Jaysing | 1965451191065 | Satara | 2022/1065 |
| | | | Skayline Construction, | TPC/ 9110/ |
| 34 | Randive Neeraj D | 1965451191066 | Satara | 2022/1066 |
| | | | | TPC/ 9110/ |
| 35 | Chavan Mahesh | 1965451191069 | Utkarsh Pvt. Ltd. | 2022/1069 |
| | | 5165452018111 | Aishwarya Interors | TPC/ 9110/ |
| 36 | Akshata Kharade | 911007 | Pvt. Ltd. | 2022/0071 |
| | | 5165452018111 | | TPC/ 9110/ |
| 37 | Nikita Nikam | 9110072 | Aerial Mappers, Pune | 2022/0072 |
| | | 5165452018111 | Aishwarya Interors | TPC/ 9110/ |
| 38 | Ankita Doudmani | 9110076 | Pvt. Ltd. | 2022/0076 |
| | Namrata Cankal | | Agrical Mannara Duna | TPC/ 9110/ |
| 39 | Namrata Sapkal | 1965451191046 | Aerial Mappers, Pune | 2022/1046 |

| Civi | Civil Engineering (2020-21) | | | | | |
|------------|-----------------------------|------------------|-------------------------|--|--|--|
| Sr. No. | Name of the student placed | Enrollment No. | Name of the Employer | Appointment letter reference No. with date | | |
| 1 | Lokare Pradnesh Baliram | 5165452018111911 | Dimension | TPC/9110/2021/033/01/0 | | |
| | | 0033 | Construction, Satara | 8/2022 | | |
| 2 | Chavan Mahesh Shankar | 5165452018111911 | Utkarsh Pvt. Ltd., | TPC/9110/2021/058/22/0 | | |
| | | 0058 | Baramati | 7/2021 | | |
| 3 | Dhokre Vikas Jaysing | 5165452018111911 | Tata Computer | TPC/9110/2021/049/04/0 | | |
| | | 0049 | Consultancy | 4/2022 | | |
| 4 | Mane Swarup Anil | 5165452018111911 | Rigal College, Chiplun | TPC/9110/2021/064/30/0 | | |
| | | 0064 | | 6/2021 | | |

TableB.4.5a

| 5 | Tarade VaibhavAbaso | 5165452018111911 | Dhumal Construction, | TPC/9110/2021/091 |
|-----|--|--------------------------|---|-------------------------------|
| | | 0052 | Satara | |
| | | | | |
| | | | | |
| 6 | Gurav Vashnavi Laxman | 5165452010111011 | Catha Craye Duna | TPC/9110/2021/025/11/0 |
| O | Gurav Vasiinavi Laxiiian | 5165452018111911 0025 | Same Group, Pune | 3/2022 |
| 7 | Mayur Balu Gulumkar | | Tricon Infra Build Tech, | |
| , | Triayar Bara Garanikar | 0025 | Ltd. | 11 0/9110/2021/001 |
| 8 | Pujari SachinVitthal | 5165452017111911 | | TPC/9110/2021/010 |
| | 3 | 0010 | Construction, Satara | |
| 9 | Mane Omkar Suryakant | 5165452017111911 | Infosis Ltd. Pune | TPC/9110/2021/012 |
| | | 0012 | | |
| 10 | Chavan Vikram | | Trimurti Construction, | TPC/9110/2021/006 |
| | Bhagavan | 0006 | Ashta | |
| 11 | Jadhav Rohit Sanjay | | Sugar Mill, Phalton | TPC/9110/2021/007 |
| 1.0 | D1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 0007 | G D 1 | TTP C 10.1.1.0 10.00.1 10.1.5 |
| 12 | Dhobale Ajay Hement | | Suyog Development | TPC/9110/2021/015 |
| 13 | Patil Komal Ankush | 0015 | Corporation, Satara YesarGeomastic Pvt. | TPC/9110/2021/018 |
| 13 | Patii Komai Ankusii | 0018 | Ltd. Pune | 1PC/9110/2021/016 |
| 14 | Sankapale Pooja | | Owner Design Studio, | TPC/9110/2021/001/01/0 |
| 17 | Parashuram | 0020 | Dharwad | 2/2021 |
| 15 | Chavan Pallavi Dattatray | 5165452018111911 | | TPC/9110/2021/021 |
| | | 0021 | Construction, | |
| | | | Ichalkaranji | |
| 16 | Daphale Sayali Dattatray | 5165452018111911 | SatheConcerteConstruti | TPC/9110/2021/022 |
| | | 0022 | on, Pune | |
| 17 | More Kalyani Sunil | | Buyoji Co. Ltd. Solapur | TPC/9110/2021/023 |
| | | 0023 | | |
| 18 | Katkar Swaranjali | | AkshaiKatkar Associate, | TPC/9110/2021/024 |
| 1.0 | Shankar | 0024 | Satara | TDC /0110 /0001 /000 |
| 19 | Chavan Pragati Sanjay | | Stepron Technology, | TPC/9110/2021/026 |
| 20 | Patil Abhijit Bhikaji | 0026 5165452018111911 | Pune Cool Congo | TPC/9110/2021/030 |
| 20 | Patii Abiijit biiikaji | 0030 | Construction, Pune | 1PC/9110/2021/030 |
| 21 | Mulik Adiya Krishnant | 5165452018111911 | | TPC/9110/2021/031 |
| Z 1 | Willik Aurya Krisimani | 0031 | Services Pune. | 11 C/9110/2021/031 |
| 22 | Jangam Saket Abhijit | 5165452018111911 | | TPC/9110/2021/032 |
| | builguiii builet i loinjit | 0032 | Contractor Pune | 11 0/9110/2021/032 |
| 23 | Kumbhar Rohit Mohan | 5165452018111911 | | TPC/9110/2021/035 |
| | | 0035 | Developers, Pune | |
| 24 | Desai Sunil Shivaji | 5165452018111911 | <u> </u> | TPC/9110/2021/037 |
| | | 0037 | | |
| 25 | Bhosale Aniket Dadu | 5165452018111911 | Shrinath Construction, | TPC/9110/2021/038 |
| | | 0038 | Satara | |
| 26 | Gurav Vitthal Eknath | 5165452018111911 | Max Construction, | TPC/9110/2021/039 |
| | | 0039 | Mumbai | |
| 27 | Bandgar Santosh Rajaram | 5165452018111911 | Mali Construction, | TPC/9110/2021/041 |

| | 0041 | Kavtemahakal | |
|-------------------------|---|--|--|
| Ghadage Gunian Santosh | | | TPC/9110/2021/042 |
| | 0042 | | |
| Kothale Suvarna | | | TPC/9110/2021/046 |
| Pandurang | 0046 | Pune | |
| GuravPravin Suresh | 5165452018111911 | T&T Infra Ltd. Pune | TPC/9110/2021/048 |
| | 0048 | | |
| Jamdade Ranjit Dhanaji | 5165452018111911 | Intelligent Design, Pune | TPC/9110/2021/050 |
| | 0050 | | |
| Phanase Akshay Krishnat | 5165452018111911 | Om Construction Pvt. | TPC/9110/2021/051 |
| | 0051 | Ltd. Katraj Pune | |
| Tarade Vaibhav Abaso | | The state of the s | TPC/9110/2021/052 |
| | | | |
| | | | TPC/9110/2021/054 |
| | | | |
| Mulla Altaf Ashpak | | Aqua Food Exim Dapoli | [FPC/9110/2021/056 |
| | | | |
| Sapkal Vaibhav Anil | | 1 | TPC/9110/2021/059 |
| W 11 0 1 DI | | | TDG (0110 (0001 (000 |
| Kamble Omkar Bhagwan | 5165452018111911 0060 | PanchyatSamitiKarad | TPC/9110/2021/060 |
| Raut Chaitanya | 5165452018111911 | Rachana Construction | TPC/9110/2021/062 |
| Shashikant | 0062 | Lonawala | |
| Prajyot Ramchandra | | VIT Group, Hingwadi, | TPC/9110/2021/063 |
| Jagtap | | Pune | |
| Awale Prajwal Prashant | 5165452018111911 0065 | Lodha Group, Mumbai | TPC/9110/2021/065 |
| Vairat Rahul Sopan | 5165452018111911 0077 | Swapnputi Construction, Wai | TPC/9110/2021/077 |
| | | Dhumal Construction, | TPC/9110/2021/078 |
| DI 11 CI 11 V'' | | , | |
| Phalke Shubham Vijay | 5165452018111911 | | |
| | 0008 | | |
| | | | |
| | | | TPC/9110/2021/079 |
| Jadhav Nitin Ashok | | Satara | |
| | 0009 | | |
| 0.1.37.1 | F1.CF4.F3010111011 | INTL C C | TDC/0110/2021/002 |
| | | JW Intra, Satara | TPC/9110/2021/080 |
| Pandharinath | 0011 | | |
| | | Discourse Const. C. | TDC/0110/2021/001 |
| C4- :: C''' II ' | 5165452010111011 | * | TPC/9110/2021/081 |
| Sutar Sujit Hariram | | Satara | |
| | 0012 | | |
| | | Damahaya Canatayatian | TDC/0110/2021/092 |
| Shinde Prajwal | 5165452018111911 | 1 | 17C/9110/2021/082 |
| 3 | | IN OFOTO | İ |
| Pradipkumar | 0016 | Satara | |
| | Kothale Suvarna Pandurang GuravPravin Suresh Jamdade Ranjit Dhanaji Phanase Akshay Krishnat Tarade Vaibhav Abaso Jagtap Nandkumar Narayan Mulla Altaf Ashpak Sapkal Vaibhav Anil Kamble Omkar Bhagwan Raut Chaitanya Shashikant Prajyot Ramchandra Jagtap Awale Prajwal Prashant Vairat Rahul Sopan Phalke ShubhamVijay Jadhav Nitin Ashok Sathe Yashwant Pandharinath Sutar Sujit Hariram | Ghadage Gunjan Santosh | Sambage Gunjan Santosh 5165452018111911 S.S. Sathe Construction, 0042 Pune |

| 47 | | | Innovative Construction, | TPC/9110/2021/083 |
|----|------------------------------|--------------------------|------------------------------------|-------------------|
| | Shinde Sonali Suresh | 5165452018111911 0017 | Satara | |
| 48 | Patil Vaishnavi Vitthal | 5165452018111911 0019 | JW Infra, Satara | TPC/9110/2021/084 |
| 49 | Sawant Sachin Suhas | 5165452018111911 0027 | Dhumal Construction, Satara | TPC/9110/2021/085 |
| 50 | Kodag Vikas Pandurang | 5165452018111911 0028 | Ramchaya Construction, Satara | TPC/9110/2021/086 |
| 51 | Mone Abhishek Mukund | 5165452018111911 0036 | Innovative Construction, Satara | TPC/9110/2021/087 |
| 52 | Gaikwad Vikram Laxman | 5165452018111911 0040 | JW Infra, Satara | TPC/9110/2021/088 |
| 53 | Khandzode Nikita Madhukar | 5165452018111911 0044 | Dhumal Construction, Satara | TPC/9110/2021/089 |
| 54 | Phanase Akshay Krishnat | 5165452018111911 0051 | Ramchaya Construction, Satara | TPC/9110/2021/090 |
| | . ~ | | • | |

Entrepreneur in Civil Engineering(2020-2021)

| Sr. No. | Name of the student placed | Enrollment No. | Name of the Company | letter reference No. with date |
|------------|----------------------------|-------------------|------------------------|-----------------------------------|
| 1 | Kadam Arjun Suresh | 51654520181119110 | Mahalaxmi | TPC/9110/2021/034/09/0 |
| | | 034 | Construction, Satara | 7/2022 |
| 2 | Lohar Rohit Namdeo | 51654520181119110 | The Engineers Caffee | TPC/9110/2021/053/02/0 |
| | | 053 | | 4/2021 |
| 3 | Sutar Omkar Sanjay | 51654520181119110 | Deparch Construction, | TPC/9110/2021/003 |
| | | 003 | Umbraj | |
| 4 | Mali Eknath Sadashiv | 51654520181119110 | Mali Construction, | TPC/9110/2021/004 |
| | | 004 | Sangli | |
| 5 | Bichukale Suraj Nanaso | 51654520181119110 | Shrinath Construction, | TPC/9110/2021/005 |
| | _ | 005 | Phalton | |
| 6 | Randive Amol Sarjerao | 51654520181119110 | A AEntrprizes, | TPC/9110/2021/029/21/1 |
| | | 029 | Ghatkoper | 2/2021 |
| 7 | Jadhav Sanket Shashikant | 51654520181119110 | Rajweer Builder, | TPC/9110/2021/055 |
| | | 055 | Satara | |

Civil Engineering (2019-20)

| Sr. No. | Name of the student placed | Enrollment No. | Name of the Employer | Appointment letter reference No. with date |
|---------|--------------------------------------|-------------------|--|--|
| 1 | Shelar Nilesh Shivaji | 2017107854 | ICICI Bank, Mumbai | TPC/9110/2020/854/18/0 2021 |
| 2 | Bhosale Pratik Janardan | 2017109216 | NSIC Developers, Pune | TPC/9110/2020/216/01/0 2020 |
| 3 | JadhavVarsha Sandeep | 2017107811 | Shradha Construction, Pune | TPC/9110/2020/811 |
| 4 | Molawade Vinayak Raghunath | 2017107853 | Spectrum Industry, Pune | TPC/9110/2020/853 |
| 5 | Aatar Tanveer Hiralal | 2016102775 | Rajesh Deshmukh& Associate, Satara | TPC/9110/2020/775 |
| 5 | Desai Aniruddha Ashok | 2017107837 | PanditJawadekar Associate Pune | ,TPC/9110/2020/837 |
| 7 | Guruv Rupesh Nivrutti | 2017107846 | Pharande Spaces, Pune | TPC/9110/2020/846 |
| 3 | Nagkirti Sanghamitra Pandurang | 2017107791 | P.H. Infra Wakad, Pune | TPC/9110/2020/791 |
|) | Nikam Abhijeet Subhash | 2017107843 | Om Chidanand Developers Pune | TPC/9110/2020/843 |
| 10 | Rasal Kedar Hemant | 2017107828 | B.G. Shirke, Hadpsar | TPC/9110/2020/828 |
| 11 | Shinde Tejal Satish | 2017107814 | S.D.S. Component design, Pimpri, Pune | TPC/9110/2020/814 |
| 12 | Wadne Kaveri Gorakh | 2017107805 | ShashikantDhumal, Surveyers, Satara | TPC/9110/2020/805 |
| 13 | Shengane Mahesh Ashok | 2017107839 | Innovative Construction, Satara | TPC/9110/2020/854 |
| 14 | Shinde Anupsinh Virsinh | 2017107796 | JW Infra, Satara | TPC/9110/2020/855 |
| 15 | Jathar Ruturaj Krishnat | 2017107849 | Dhumal Construction, Satara | TPC/9110/2020/856 |
| | Entrepreneur in Ci | vil Engineering | g(2020-2021) | |
| Sr. No. | Name of the student placed | Enrollment no. | Name of the Company | Reference letter no. with date |
| 1 | Mane Sourabh Bajirao | 2017109227 | Shree Datta Construction, Mhaswad | TPC/9110/2020/227 |
| 2 | Shinde Anupsinh Virsinh | 2017107796 | Ratnprabha Construction, Bhuinj | TPC/9110/2020/796 |

| Civil E | ngineering Year(2018-1 | 9) | | |
|---------|---------------------------------|-----------------------|--|---|
| Sr. No. | Name of the student placed | Enrollm ent No. | Name of the Employer | Appointment letter reference No. with date |
| 1 | Shinde Mayuri A. | 2015016067 | Infosys Ltd. Banglore | HRD/3T/10033434 71/21-22 10/01/2022 |
| 2 | Jadhav Laxman Shankar | 2015016050 | Consulting Engineer Group Ltd.Jaipur Rajsthan | CEG/HR/2021Dec 06-55 6/12/2021 |
| 3 | Attar Rizwana Jainuddin | | G.S. Group, Karad | TPC/9110/2019/66 4 |
| 4 | Awad Sunil Kushappa | 2016100581 | Viraj, TNT, Mumbai | TPC/9110/2019/58 |
| 5 | Bailkar Dipak Ravindrnath | 2016100587 | FEAT Technology Mumbai | TPC/9110/2019/58 |
| 6 | Bhosale Madhavrao Jaywantrao | 2016100631 | Vistas Corporation, Mumbai | TPC/9110/2019/63 |
| 7 | Gadkari Pravin Krushna | 2016100589 | Jai Kumar, Navi Mumbai | TPC/9110/2019/58 |
| 8 | Gurav Nikhil Arun | 2016100634 | Alfa Level, Pune | TPC/9110/2019/63 |
| 9 | Kate Rajesh Bhalchandra | 2016100623 | Rail Vikas Nigam Ltd. Mumbai | TPC/9110/2019/62 |
| 10 | Kumbhar Mayur Mahadev | 2016100593 | BMC magrpatta, Mulund | TPC/9110/2019/59 |
| 11 | Mane Shantanu Sharad | 2016100553 | Shriganesh Construction, Satara | TPC/9110/2019/55 |
| 12 | Monde Abaso Sampat | 2016100551 | Nirmal Green, Baner, Mumbai | TPC/9110/2019/65 |
| 13 | Pati IShubham Sanjay | 2016100584 | D.R. Construction, Sangali | TPC/9110/2019/58 |
| 14 | Salokhe Vishal Dattatray | 2016100554 | B.J. Shirke, Mumbai | TPC/9110/2019/55 |
| 15 | Pawar Abhishek Suresh | 2015016064 | Infosis, Hingwadi, Mumbai | TPC/9110/2019/06 |
| 16 | Salunkhe Akshay Shamrao | 2015016061 | Sree Construction, Mulund, Mumbai | TPC/9110/2019/06 |
| 17 | | 2016100723 | Ramchya Construction, Satara | TPC/9110/2019/72 |
| 18 | Kumbhar Komal Chandrakant | 2016100595 | ShashikantDhumal, Surveyers, Satara | TPC/9110/2019/59 |
| 19 | Narkhedkar Mayur Rameshwar | 2016100591 | Sawant Construction, Satara | TPC/9110/2019/59 |
| 20 | Wagh Switi Pramod | 2015016051 | Shashikant Dhumal, Surveyers, Satara | TPC/9110/2019/05 |

| 21 | Salunkhe Suyash Sadanand | 2014016063 | Sawant Construction, Satara | TPC/9110/2019/06 3 |
|----|----------------------------------|-------------|---|-----------------------|
| 22 | Ghatage Vikramsingh Tanajirao | | Shashikant Dhumal, Surveyers, Satara | TPC/9110/2019/69 5 |
| 23 | Shedge Onkar Prakash | 2015016055 | Ramchaya Construction, Satara | TPC/9110/2019/05 |
| 24 | Sutar Ajay Anil | 2016100710 | Om Sai Construction, Mumbai | TPC/9110/2019/71 |
| 25 | Thorat Amol Ramchandra | 2016100731 | BMC Mumbai | TPC/9110/2019/73 |
| 26 | Patil Ajit Ashokrao | 2016100548 | | TPC/9110/2019/85 |
| 27 | Patil Dynaneshwar Raghunath | 2016100728 | Innovative Construction, Satara | TPC/9110/2019/85 |
| 28 | Patil Shrinivas Sadashiv | 2016100712 | JW Infra, Satara | TPC/9110/2019/85 |
| 29 | Swami Krutant Shivling | 2016100572 | Dhumal Construction, Satara | TPC/9110/2019/86 |
| | Entrepreneur in Civil | Engineering | g (2018-2019) | |
| 1 | More Pratik Ananda 2 | 2016100727 | Kshitij Construction, Pune | TPC/9110/2019/72 |
| 2 | Patil Dnyaneshwar 2 Raghunath | 2016100728 | Vighnhartha Foundation | TPC/9110/2019/72 8 |

Professional Activities (14/20)

4.6.1 Professional societies/chapters and organizing engineering events (05)

A) Availabilities of Professional Societies & Chapters'

YEAR 2021-22

| Sr. No. | Name of Members | Organization | Category | Reference No. |
|---------|---------------------|-----------------------------|--------------------|------------------|
| 1 | Dr. Prashant Bamane | Indian Geotechnical Society | Life Membership | 3041018 |

B) Events Organized at Institute

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. Mirajkar G. & Kadam Arjun A. | 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 | Mr. Sapkal R.N. | Project competition |
| 9 | Corporate Gromming | 21-02-2023 to 23-02- 2023 | Mr. George | Guest Lecture |
| 10 | Guest lecture on Software Testing | 05-05-2023 | Mr. Suraj Sawant | Guest Lecture |
| 11 | Hands on & Workshop on Auto Cad. | 2/12/2022 &03-12- 2022 | Ms. Shubhangi Hake Om Shree associates & Architects and landscape, Pune | Workshop |
| 12 | Expert lecture on "Bituminous binders for road pavements, their specifications, suitability etc.Slope stability, Foundation on expansive soil, soil reinforcing techniques. | 27-03-2023 | Mr. Ishwar Dayal | Expert lecture |
| 13 | Model developers and Chaitanya Residency, Satara. | 17-04-2023 | Mr. Makrand Dhavale Mr. Ranjit A Katkar Mr.Rajendra Sakpal | Visit |
| 14 | "Rachana Exhibition" | 25-11-2022 | Mr. R. N. Sakpal | Visit |

| 15 | How to create an effective resume | 11-05-2023 | Mr. Sharif Malik | Expert lecture |
|----|-----------------------------------|---------------------------------|--|----------------|
| 16 | C, C++ on Turbo C and HTML | 01/08/2023 to 14-08- 2023 | Mr. Swapnil Mapari Disha Computers, Satara | Workshop |
| 17 | C, C++ and Advance Java | 07/08/2023 to 11/08/2023 | Mr. Nilesh Sonawane Design Solution, Karad | Workshop |
| 18 | C, C++ and Python | 07/08/2023 to 18/08/2023 | Mrs. Pranali Nalwade, squirrel infotech satara | Workshop |
| 19 | PCB Design And manufacturing | 07/08/2023 to 18/08/2023 | Mr. Pravin Mohite, apron tech | Workshop |
| 20 | Automation in IOT | 1/08/2023 to 31/08/2023 | Mr. Tushar inamadar Squre wave automation pvt.ltd. Satara | Workshop |
| 21 | AUTOCAD | 10/08/2023 to 18/08/2023 | Mr. Mahesh Sathe Design Solution Satara | Workshop |

Year 2021-22

| Sr. No. | Name of Activity | Date | Resource Person | Type of activity (Guest Lecture/Quiz/Proje ct Competition/Works hop |
|------------|--|------------|-----------------------------|---|
| 1. | Expert lecture on Engineering Mathematics- III | 27-01-2022 | Asst. Prof. Amol Kalange | Guest Lecture |
| 2. | Expert lecture on soil mechanics | 27-01-2022 | Dr. S.T. Shinde | Guest Lecture |

| 3. | Expert lecture on infrastructural Engineering | 27-01-2022 | Mr. A.P. Bhalero | Guest Lecture |
|-----|---|------------|-----------------------|---------------|
| 4. | Expert lecture on Surveying | 28-01-2022 | Asst. Prof. H.U. Mule | Guest Lecture |
| 5. | Expert lecture on Design of steel structure | 28-01-2022 | Dr. A. G. Dhake | Guest Lecture |
| 6. | Expert lecture on Construction technique | 29-01-2022 | Mrs. U. A. Mahadik | Guest Lecture |
| 7. | Expert lecture on Mechanics of Solid | 29-01-2022 | Ms. P.P. Kamble | Guest Lecture |
| 8. | Expert lecture on Transportation Engineering | 29-01-2022 | Mr. S.S. Chavan | Guest Lecture |
| 9. | Expert lecture on Building Construction and drawing | 31-01-2022 | Prof. S.S. Nalawade | Guest Lecture |
| 10. | Expert lecture on Design of Concrete Structure | 31-01-2022 | Prof. A.P. Khatri | Guest Lecture |
| 11. | Expert lecture on Fluid Mechanics | 01-02-2022 | Dr. Mahesh Bhong | Guest Lecture |
| 12. | Expert lecture on Structure Mechanics-II | 01-02-2022 | Mr. Jadhav R.H. | Guest Lecture |
| 13. | Expert lecture on water resource management | 01-02-2022 | Dr. V.K. Naik | Guest Lecture |
| 14. | Expert lecture on Business Communication & presentation Skill | 02-02-2022 | Dr. Bindu Arora | Guest Lecture |
| 15. | Expert lecture on Business Environmental Engineering | 02-02-2022 | Mr. P.B. Bhagwati | Guest Lecture |
| 16. | Expert lecture on Professional Practices | 02-02-2022 | Mr. A.N. Chavan | Guest Lecture |

| 17. | Internal Hackthon of Smart India Hackthon 2022 | 28-04-2022 to 29-04-2022 | Dr Mirajkar Gayatri | Project Competition |
|-----|--|---------------------------------|---------------------|---------------------|
| 18. | Brand Yourself | 17-05-2022 to 19-05- 2022 | Mr. George | Workshop |

YEAR 2020-21

| Sr. No. | Name of Activity | Date | Resource Person | Type of activity (Guest Lecture/Quiz/ Project Competition |
|------------|---|------------|--|---|
| 1 | Online webinar on "Scope & Career in pile foundation engineering lecture on Software Online Development | 10-10-2020 | Dr. Sunil Basarkar (G.M. Afcon Infra. Ltd. Mumbai) | Online Guest Lecture |
| 2 | Online Guest lecture on Advance Infrastructure Engineering | 10-10-2020 | Mr. Amate R.A. (J.W. Infra Satara) | Online Guest Lecture |
| 3 | Online Guest lecture on recent techniques in Surveying | 15-01-2021 | Mr. Chafalkar Sir (JSPM Tathawade) | Online Guest Lecture |
| 4 | Online Guest lecture on Construction Management Career Opportunity | 29-01-2021 | Dr. Minde Sir (MIT Khothrud) | Online Guest Lecture |
| 5 | Online Guest lecture on Advanced Trends in Foundation | 13-02-2021 | Dr. Sorate Sir (JSPM Bawdhan) | Online Guest Lecture |
| 6 | Online Guest lecture on advanced development Waste water Treatment Plant | 18-02-2021 | Mr. Khatri A.P (JSPM Narhe) | Online Guest Lecture |
| 7 | Online Guest lecture on RCC Design | 12-03-2021 | Prof. Kakade Sir (COEP Pune) | Online Guest Lecture |
| 8 | Online Guest lecture on Architectural Design | 26-03-2021 | Mr. Milind Vasudev | Online Guest Lecture |

YEAR 2019-20

| Sr. No. | Name of Activity | Date | Resource Person | Type of activity (Guest Lecture/Quiz/Project Competition |
|------------|--|----------------------------------|--|--|
| 1 | Guest Lecture on site Knowledge | 03/02/2020 | Mr. Vasudeo | Guest Lecture |
| 2 | Yugam — Four Week Training Program on Structural Engineering | 29-7- 2020 to 24-8-2020 | 1)Dr. Sarote R.R. (J.S.P.M. Bavdhan) 2) Prof. Khatri A.P. (J.S.P. M. Narhe) 3) Prof. Kakade. (C.O.E.Pune) 4) Prof. Chafalkar. (J.S.P. M. Tathwade) 5) Prof. Ban. (Raisoni Nagpur) 6) Prof. Kakade. (Bits, Palani) 7) Prof. Vasudav Milind (Lax Acedemy) 8) Dr. Minde (MIT Kothrud) 8) Mr. Jojo Mathew (HIT Nidasoshi) 9) Prof. Khandekar (PVPIT PUNE) 10) Dr. Wagh (Zeal College PUNE) 11) Prof. Vipul Naidu (PVPIT PUNE) | Online Training Program |

| 3 | Alumni Guest Lecture 'Today's job opportunities in market' | 18/09/2019 | Mr. Ganesh Shinde | Alumni Guest Lecture |
|---|---|------------|--|----------------------|
| 4 | Online Guest Lecture on Professional Practice | 21/04/2020 | Dr. V.K. Naik (Sharad Institute of Technology Yadrav) | Online Guest Lecture |
| 5 | Online Guest Lecture on Civil Infrastructure | 30/04/2020 | Mr. A.P. Bhalerao (Project Management Consultant Lawyer & JRF at Delhi Technology University) | Online Guest Lecture |
| 6 | Online Guest Lecture on Recent Techniques in Transportation Engineering | 12/05/2020 | Ms. S.S. Chavan (Sardar Patel College of Engineering , Mumbai) | Online Guest Lecture |
| 7 | Online Guest Lecture on Presentation Skills | 20/05/2020 | Dr. Bindu Arora (National Skill Development Corporation) | Online Guest Lecture |
| 8 | Online Guest Lecture on Fluid Mechanics | 30/05/2020 | Mr. Vipul Naidu (PVPIT Pune) | Online Guest Lecture |
| 9 | One day workshop on Auto CAD | 3/06/2020 | Mr. Vikram Bagade | Workshop |

Year 2018-19

| Sr. No. | Name of Activity | Date | Resource Person | Type of activity (Guest Lecture/Quiz/Proje ct Competition |
|---------|--|------------|--------------------------------------|---|
| 1 | One day workshop on STAAD-PRO | 13/08/2018 | Mr. Vikram Bagade | Workshop |
| 2 | Guest Lecture on Recent Trends & new law involved in Construction Industry | 31/8/2018 | Mr. Salunkhe Sir & Mr. Kirdat Sir | Guest Lecture |
| 3 | Visit on Urmodi Dam | 18/1/2019 | Urmodi Dam, Satara | Site Visit |
| 4 | Visit on Heramb Construction, Satara | 18/1/2019 | Heramb Construction, Satara | Site Visit |

4.6.2 A) Publication of technical magazines, newsletters, etc.

(05)

(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 | Туре |
|-----------|---------------------------|-----------|-----------------------------|--|-------------|
| 1 | Wizard | 2018-2019 | Mr. Sapkal R.N. | Arvind Gavali College of Engineering Satara | Half Yearly |
| 2 | Wizard | 2019-2020 | Mrs. Jyoti Ramesh Mohite | Arvind Gavali College of Engineering Satara | Half Yearly |
| 3 | Wizard | 2020-21 | Dr. V.R. Thombare | Arvind Gavali College of Engineering Satara | Half Yearly |
| 4 | Wizard | 2021-22 | Dr. P. R. Bamane | Arvind Gavali College of Engineering Satara | Half Yearly |

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

YEAR 2022-23

Co-curricular activities

| SR. NO | NAME OF STUDENTS | RANK | NAME OF EVENT | LEVEL | EVENT ORGANIZED INSTITUTE | DATE OF EVENT |
|-----------|---------------------|-------------|------------------|-----------|---|------------------|
| 1 | Swapnali Chavan | WINNER | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 2 | Harshada Shinde | WINNER | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 3 | Abhay Chorage | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 4 | Akash Thorat | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 5 | Sayali Gaikwad | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 6 | Priyanka Kadam | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 7 | Mayuri Sawant | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 8 | Balram Kalbhor | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |

| 9 | Avadhut Patil | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
|----|-----------------|-------------|---------------------------|-------------------|---|------------|
| 10 | Sanjana Kumbhar | PARTICIPANT | AVISHKAR 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 18-11-2022 |
| 11 | Omkar Salgare | WINNER | AVISHKAR 2022 | ZONAL | SHRAD INSTITUTE OF TECHANOLOGY, YADRAV | 10-12-2022 |
| 12 | Swapnali Chavan | PARTICIPANT | AVISHKAR 2022 | ZONAL | SHRAD INSTITUTE OF TECHANOLOGY, YADRAV | 10-12-2022 |
| 13 | Harshada Shinde | PARTICIPANT | AVISHKAR 2022 | ZONAL | SHRAD INSTITUTE OF TECHANOLOGY, YADRAV | 10-12-2022 |
| 14 | Sushlok Madane | PARTICIPANT | eMBArk 2k23 | STATE LEVEL | KBP Management, Satara | 13-04-2022 |
| 15 | Sushlok Madane | PARTICIPANT | Yasho Techfest 2k23 | STATE LEVEL | YSPM's Yashoda Technical Campus, Satara | 11-04-2023 |
| 16 | Anirudhha Gurav | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 17 | Sayali Gaikwad | PARTICIPANT | Concrete Fest 2k23 | STATE LEVEL | SGI, Atigre, Kolhapur | 27-03-2023 |
| 18 | Priyanka Kadam | PARTICIPANT | Concrete Fest 2k23 | STATE LEVEL | SGI, Atigre, Kolhapur | 27-03-2023 |
| 19 | Mayuri Sawant | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 20 | Balram Kalbhor | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 21 | Avadhut Patil | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 22 | Sanjana Kumbhar | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |

| 23 | Omkar Salgare | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
|----|----------------------|-------------|----------------------------|-------------------|---|------------|
| 24 | Omkar Salgare | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 25 | Akash Thorat | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 26 | Abhay Chorage | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 27 | Avadhut Patil | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 28 | Shrikishna Chavan | PARTICIPANT | Milestone 2k23 | NATIONAL LEVEL | TKIT, WARANANAGER | 20-03-2023 |
| 29 | Atul Kadam | PARTICIPANT | DISTRICT'1 | STATE LEVEL | RIT,Islampur | 15-04-2023 |
| 30 | Atul Kadam | PARTICIPANT | eMBArk 2k23 | STATE LEVEL | KBP Management, Satara | 13-04-2022 |
| 31 | Swapnali Chavan | Runner Up | Spectrum 2k23 | STATE LEVEL | DACOE,Karad | 21-03-2023 |
| 32 | Atul Kadam | Winner | Concrete Fest 2k23 | STATE LEVEL | SGI, Atigre,Kolhapur | 27-03-2023 |
| 33 | Sushlok Madane | Runner Up | Poster Presentation | STATE LEVEL | YSPM's Yashoda Technical Campus,Satara | 20-04-2023 |
| 34 | Swapnali Chavan | PARTICIPANT | PROJECT COMPETITI ON | NATIONAL LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 16-04-2023 |
| 35 | Aniket Babar | PARTICIPANT | PROJECT COMPETITI ON | NATIONAL LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 16-04-2023 |
| 36 | Neha Sakunde | PARTICIPANT | PROJECT COMPETITI ON | NATIONAL LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 16-04-2023 |

| 37 | Sunny Shirke | PARTICIPANT | PROJECT COMPETITI ON | NATIONAL LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 16-04-2023 |
|----|--------------------------------|-------------|----------------------------|-------------------|---|--------------------------------|
| 38 | Talha Momin | PARTICIPANT | PROJECT COMPETITI ON | NATIONAL LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 16-04-2023 |
| 39 | Shajama Pathan | PARTICIPANT | PROJECT COMPETITI ON | NATIONAL LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 16-04-2023 |
| 40 | Swapnali Chavan | PARTICIPANT | ROTAREX 2023 | STATE LEVEL | ROTARY CLUB OF SATARA | 17 &18TH APRIL 2023 |
| 41 | Patil Jaydip Jaywant | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 42 | Pujari Vishal Vitthal | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 43 | Shirke Sani Rajesh | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 44 | Lokhande Shubham Bhimrao | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 45 | Shaikh Gouspak Allauddin | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 46 | Khare Omkar Dilip | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |

| 47 | Babar Aniket Anil | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
|----|------------------------------|-------------|------------------|-------------------|---|--------------------------------|
| 48 | Gaikwad Sushant Parashram | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 49 | Jagdale Sushant Bharat | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 50 | Sakunde Neha Jitendra | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 51 | Patil Prashant Dhanaji | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 52 | Jadhav Parth Chandrakant | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 53 | Roman Aniket Ramesh | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 54 | Shibe Sneha Tanaji | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 55 | Lingale Jeevan Shahaji | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 56 | Shelar Sagar Mahadev | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |

| 57 | More Saish Sandeep | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
|----|---------------------------------|-------------|------------------|-------------------|---|--------------------------------|
| 58 | Shinde Snehal Anand | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 59 | Bagwan Sahil Sameer | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 60 | Momin Talha Shahanwaj | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 61 | Ahire Shridhar Madan | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 62 | Jagtap Pravin Mohan | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 63 | Dhakal Nirmala Khadakbahadur | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 64 | Jadhav Rajat Shivaji | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 65 | Pathan Shajma Aslam | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 66 | Katkar Suchita bhausaheb | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |

| 67 | Bandal Aakash Sanjay | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
|----|--------------------------------------|-------------|------------------|-------------------|---|--------------------------------|
| 68 | Kamble Vikrant Tanaji | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 69 | Salunkhe Aniket Bhaskar | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 70 | Kale Manoj Kisan | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 71 | Jagtap Ganesh Devidas | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 72 | Patil Aadesh Dilip | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 73 | Kadam Vishwanath Rajendra | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 74 | Patil Vaibhav Vijay | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 75 | Bandal Sushilkumar Dnyaneshwar | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 76 | Lohar Kunal Pratap | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |

| 77 | Choudhari Omkar Sarjerao | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
|----|-------------------------------|-------------|------------------|-------------------|---|--------------------------------|
| 78 | Parmane Sourabh Kisan | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 79 | Chikane Shubham Suresh | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 80 | Ketan Parmar | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 81 | Kadam Rudal Pratap | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 82 | Hubale Kumar Dilip | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 83 | Aditya Sawant | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 84 | More Gaurav Vishwas | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 85 | Savant Gurudatt Jayprakash | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 86 | Shinde Aditya Vitthal | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |

| 87 | Bhosale Saurabh Dadaso | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
|----|------------------------------------|-------------|------------------|-------------------|---|--------------------------------|
| 88 | Kadam Rohan Netaji | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 89 | Ghorpade Prajjwal Ramchandra | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 90 | Salunkhe Siddheshwar Vilas | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 91 | Mohite Ankita Ashok | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 92 | Rutuja Narendra Dubal | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 93 | Raut Rohan Bapurao | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 94 | Patankar Priyanka Dilip | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 95 | Deokar Kiran Arun | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 96 | Bagalkot Faisal Nasirahmad | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |

| 97 | Taware Omkar Samadhan | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
|-----|--------------------------|-------------|------------------|-------------------|---|--------------------------------|
| 98 | Shinde Suraj Ananda | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 99 | Yadav Nikhil Vilas | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 100 | Patil Shubham Shivaji | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 101 | Patil Pratik Satish | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 102 | Chikane Kiran Sitaram | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 103 | Kalbhor Akshay Arun | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 104 | Patil Shubham Sanjay | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 105 | Detake Somesh Babaso | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |
| 106 | Samina Sayyad Mulani | PARTICIPANT | ICIRTES- 2023 | INTERNATI ONAL | ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA | 10/06/2023 TO 11/06/2023 |

YEAR 2022-23

NPTEL Certification

| Sr. No | Name of Students | Course ID | Course Name | Final Score | Certificate Type |
|-----------|-----------------------|--------------------------|---|----------------|--------------------------|
| 1 | Sakunde Neha Jitendra | NPTEL23CE06S 44600493 | Maintenance and Repair of Concrete Structures | 57% | SUCESSFULLY COMPLETED |

YEAR 2022-23

Extra Co-curricular activities

| Sr. No | Name of Students | Rank | Name of Event | Level | Event Organized Institute | Date of Event |
|-----------|------------------|-----------|-------------------------|----------|---------------------------------|------------------|
| 1 | Nikhil Wagh | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 2 | Rutuja Barge | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 3 | Sakshi Dhanawade | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 4 | Triveni Powar | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 5 | Mayuri Sawant | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 6 | Pravin Hadpad | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |

| 7 | Akash Thorat | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
|----|------------------|-----------------|-------------------------|-----------|---|------------|
| 8 | Omkar Salgare | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 9 | Pooja Kedare | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 10 | Guru Rathod | VOLUNTEER | SATARA HILL MARATHON | NATIONAL | SATARA RUNNERS FOUNDATION | 18-09-2022 |
| 11 | Nikhil Wagh | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 12 | Rutuja Barge | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 13 | Sakshi Dhanawade | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 14 | Triveni Powar | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 15 | Mayuri Sawant | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |

| 16 | Pravin Hadpad | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
|----|-----------------|-----------------|---------------------|-----------|---|------------|
| 17 | Akash Thorat | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 18 | Omkar Salgare | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 19 | Pooja Kedare | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 20 | Guru Rathod | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 21 | Harshada Shinde | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 22 | Sushlok Madane | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 23 | Sushlok Madane | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |

| 24 | Anirudhha Gurav | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
|----|-----------------|-----------------|---------------------|--------------------|---|------------|
| 25 | Sayali Gaikwad | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 26 | Priyanka Kadam | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 27 | Mayuri Sawant | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 28 | Balram Kalbhor | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 29 | Avadhut Patil | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 30 | Sanjana Kumbhar | PARTICIPAN T | SHIVJAYANTI 2022 | INSTITUTE | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 19-02-2023 |
| 31 | Nikhil Wagh | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |

| 32 | Rutuja Barge | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
|----|------------------|-----------------|--------------|--------------------|---|------------|
| 33 | Sakshi Dhanawade | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 34 | Triveni Powar | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 35 | Mayuri Sawant | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 36 | Pravin Hadpad | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 37 | Akash Thorat | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 38 | Omkar Salgare | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 39 | Pooja Kedare | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |

| 40 | Harshada Shinde | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
|----|-----------------|-----------------|--------------|--------------------|---|------------|
| 41 | Sushlok Madane | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 42 | Sushlok Madane | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 43 | Anirudhha Gurav | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 44 | Sayali Gaikwad | PARTICIPAN T | TARUNAI 2023 | INSTITUTE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 45 | Sushant Gaikwad | WINNER | KABBADI | STATE LEVEL | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 05-04-2023 |
| 46 | Nikhil Wagh | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
| 47 | Rutuja Barge | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |

| 48 | Sakshi Dhanawade | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
|----|------------------|-----------------|----------|----------|---|------------|
| 49 | Triveni Powar | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
| 50 | Mayuri Sawant | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
| 51 | Pravin Hadpad | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
| 52 | Akash Thorat | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
| 53 | Omkar Salgare | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
| 54 | Pooja Kedare | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
| 55 | Guru Rathod | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |

| 56 | Nikhil Wagh | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |
|----|--------------|-----------------|----------|----------|---|------------|
| 57 | Rutuja Barge | PARTICIPAN T | NSS CAMP | DISTRICT | ARVIND GAVALI COLLEGE OF ENGINEERING , SATARA | 09-03-2023 |

YEAR 2021-22

Co-curricular activities

| Sr. No | Name of Student | Rank | Name of the event | Level | Event organized Institute | Date of Event |
|--------|---------------------------------|---------------|--|-----------|---|-----------------------------|
| 1 | Momin Talha Shahanwaj | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 2 | Bagwan Sahil Sameer | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 3 | Pathan Shajma Aslam | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 4 | Dhakal Nirmala Khadakbahadur | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 5 | Shinde Snehal Anand | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 6 | Hubale Kumar Dilip | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 7 | Babar Aniket Anil | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 8 | Shirke Sani Rajesh | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |

| 9 | Sakunde Neha Jitendra | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
|----|------------------------------|---------------|--|-----------|---|-----------------------------|
| 10 | Shaikh Gouspak Allauddin | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 11 | Gaikwad Sushant Parashram | Participation | Internal Hackathon of Smart India Hackathon 2022 | Institute | Arvind Gavali College of Engineering, Satara | 28-04-2022 to 29-04-2022 |
| 12 | Mechkar Ashitosh A | Participation | Project Compitation | National | Dulatrao Aaher College of Engineering, Karad | 20-05-2022 |
| 13 | Jagtap Snehal Suresh | Participation | Project Compitation | National | Dulatrao Aaher College of Engineering | 20-05-2022 |
| 14 | Babar Aakanksha Vinayak | Participation | Project Compitation | National | Dulatrao Aaher College of Engineering | 20-05-2022 |
| 15 | Salunkhe Prathmesh S | Participation | Project Compitation | National | Dulatrao Aaher College of Engineering | 20-05-2022 |

YEAR 2021-22 Extra Co-curricular activities

| Sr No | Name of Student | Rank | Name of the event | Level | Event organized Institute | Date of Event |
|----------|---------------------------|---------------|-----------------------|-------------|---------------------------------|------------------|
| 1 | Patil Prashant Dhanaji | Participation | Speech Competition | State Level | SGM, College Karad | 30-03-2022 |

YEAR 2021-22

NPTEL Certification

| Sr. No | Roll Number | Course Id | Course Name | Name | Final Score | Certificate Type |
|-----------|-----------------|------------|---|--------------------------------|----------------|---------------------------|
| | NPTEL21CE14S190 | | Mechanical | | | |
| 1 | 4033 | Noc21-ce14 | Characterization of Bituminous Material | Dhobale Ajay Hemant | 62% | Successfully Completed |
| | NPTEL21CE14S141 | | Mechanical | | | |
| 2 | 5017 | Noc21-ce14 | Characterization of Bituminous Material | Sutar Omkar Sanjay | 50% | Successfully Completed |
| | NPTEL21CE26S130 | | | | | |
| 3 | 0363 | Noc21-ce26 | Soil Structure Interaction | Jadhav Rohit Sanjay | 49% | Successfully Completed |
| | NPTEL21CE26S163 | | | | | |
| 4 | 2537 | Noc21-ce26 | Soil Structure Interaction | Chavan Pallavi Dattareya | 49% | Successfully Completed |
| | NPTEL21CE13S129 | | Maintenance | | | |
| 5 | 5344 | Noc21-ce13 | Repair & Concrete Structure | Gurav Vaishnavi Laxman | 82% | Successfully Completed |
| | NPTEL21CE13S180 | | Maintenance | | | |
| 6 | 1849 | Noc21-ce13 | Repair & Concrete Structure | Dhokare Vikas Jaysingh | 83% | Successfully Completed |
| | NPTEL21CE36S148 | | Environmental | | | |
| 7 | 3133 | Noc21-ce36 | Remediation of Contaminated Site | Sathe Yashwant Pandharinath | 82% | Successfully Completed |
| | NPTEL21CE36S119 | | Environmental | | | |
| 8 | 7606 | Noc21-ce36 | Remediation of Contaminated Site | Sutar Sujit Hariram | 74% | Successfully Completed |

YEAR 2021-22 Extra Co-curricular activities

| Sr No | Name of Student | Rank | Name of the event | Level | Event organized Institute | Date of Event |
|----------|--------------------------------|---------------|----------------------------|-----------|--|------------------|
| 1 | Jadhav Rohit Sanjay | Participation | Satara Hill Marathon | State | Satara Hill Marathon | 13/2/2021 |
| 2 | Sathe Yashvant Pandharinath | Participation | Satara Hill Marathon | State | Satara Hill Marathon | 13/2/2021 |
| 3 | Dhobale Ajay Hemant | Participation | Satara Hill Marathon | State | Satara Hill Marathon | 13/2/2021 |
| 4 | Chavan Vikram Bhagavan | Participation | Satara Hill Marathon | State | Satara Hill Marathon | 13/2/2021 |
| 5 | Lad Nikhil Bharat | Participation | Blood Doanation Camp | Institute | Varad Charitable and Medical Trust,Satara (Balaji Blood Bank, Satara) | 22/2/2021 |
| 6 | Shaikh Goushpak Allauddin | Participation | Blood Doanation Camp | Institute | Varad Charitable and Medical Trust,Satara (Balaji Blood Bank, Satara) | 22/2/2021 |

YEAR 2019-20

Co-curricular activities

| Sr. No | Name of Student | Rank | Name of the event | Level | Event organized Institute | Date of Event |
|-----------|------------------------------|---------------|------------------------------|-----------|--|------------------|
| 1 | Sutar Omkar Sanjay | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 2 | Sankpale Pooja Parshuram | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 3 | Patil Vaishanavi Vittal | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 4 | Patil Komal Ankush | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 5 | Shinde Sonali Suresh | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 6 | Daphale Sayali Dattatry | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 7 | Katkar Swaranjali Shankar | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 8 | Gurav Vaishanvi Laxman | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 9 | Kodag Vikas Pandurang | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 10 | Kumbhar Rohit Mohan | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
| 11 | Desai Sunil Shivaji | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |

| 12 | Dhokare Vikas Jaysing | Participation | Internal Avishkar 2019-20 | Institute | Arvind Gavali College of Engineering, Satara | 19-10-2019 |
|----|----------------------------|---------------|---|---------------|---|----------------------------|
| 1 | Shinde Anupsinh Virsinh | Participation | IJSRET 2020 | International | International Journal of Scientific Research and Engineering Trends | 18/5/2020- 23/05/2020 |
| 2 | Nikam Abhijeet Subhash | Participation | IJSRET 2020 | International | International Journal of Scientific Research and Engineering Trends | 18/5/2020- 23/05/2020 |
| 3 | Aatar Tanveer Hiralal | Participation | IJSRET 2020 | International | International Journal of Scientific Research and Engineering Trends | 18/5/2020- 23/05/2020 |
| 4 | Shinde Abhishek v. | Participation | IJSRET 2020 | International | International Journal of Scientific Research and Engineering Trends | 18/5/2020- 23/05/2020 |
| 5 | Desai Aniruddha Ashok | Participation | National Level E- Conference on Science & Technology | National | S. B. Patil College of Engineering, Indapur | 15/6/2020 to 16/06/2022 |
| 6 | Jathar Ruturaj Krishnat | Participation | National Level E- Conference on Science & Technology | National | S. B. Patil College of Engineering, Indapur | 15/6/2020 to 16/06/2022 |
| 7 | Mohite Pratik Janardan | Participation | National Level E- Conference on Science & Technology | National | S. B. Patil College of Engineering, Indapur | 15/6/2020 to 16/06/2022 |
| 8 | Patil Raj Manik | Participation | National Level E- Conference on Science & Technology | National | S. B. Patil College of Engineering, Indapur | 15/6/2020 to 16/06/2022 |

YEAR 2019-20

NPTEL Certification

| S.no | Roll Number | Course Id | Course Name | Name | Final Score | Certificate Type |
|------|----------------------|----------------|---|------------------------|----------------|---------------------------|
| 1 | NPTEL19CE36S11550107 | Noc19- ce36 | Geotechnical Engineering Laboratory | Sawant Sachin Suhas | 53% | Successfully Completed |
| 2 | NPTEL19CE36S11550111 | Noc19- ce36 | Geotechnical Engineering Laboratory | Jadhav Rohit Sanjay | 60% | Successfully Completed |

YEAR 2019-20

Extra Co-curricular activities

| Sr No | Name of Student | Rank | Name of the event | Level | Event organized Institute | Date of Event |
|----------|------------------------------|---------------|----------------------|-------------|--|---------------------------|
| 1 | Sakunde Neha Jitendra | Participation | Kho-Kho (Women) | State Level | Punyashlok Ahilyadevi Holkar Solapur University, Solapur | 26/12/2019- 30/12/2019 |
| 2 | Katkar Swaranjali Shankar | Participation | Kho-Kho (Women) | State Level | Sawkar Pharmacy College, Satara | 11/10/2019- 13/10/2019 |
| 3 | Sankpale Pooja Parshuram | Participation | Kho-Kho (Women) | State Level | Sawkar Pharmacy College, Satara | 11/10/2019- 13/10/2019 |
| 4 | Gurav Vaishanvi Laxman | Participation | Kho-Kho (Women) | State Level | Sawkar Pharmacy College, Satara | 11/10/2019- 13/10/2019 |
| 5 | Chavan Pallavi Dattatray | Participation | Kho-Kho (Women) | State Level | Sawkar Pharmacy College, Satara | 11/10/2019- 13/10/2019 |

YEAR 2019-20

Extra Co-curricular activities

| Sr No | Name of Student | Rank | Name of the event | Level | Event organized Institute | Date of Event |
|----------|------------------------------|---------------|---------------------------|--------------------|--|----------------------|
| 1 | Aattar Tanveer Hiralal | Participation | Satara Hill Marathon | State Level | Satara Hill Marathon | 21/09/2019 |
| 2 | Mane Sourabh Bajirao | Participation | Satara Hill Marathon | State Level | Satara Hill Marathon | 21/09/2019 |
| 3 | Shinde Anupsinh Virsinh | Participation | Satara Hill Marathon | State Level | Satara Hill Marathon | 21/09/2019 |
| 4 | Desai Aniruddha Ashok | Participation | Satara Hill Marathon | State Level | Satara Hill Marathon | 21/09/2019 |
| 5 | Chaitanya Shashikant Raut | Participation | Blood Donation Camp | Institute Level | Varad Charitable and Medical Trust,Satara(Balaji Blood Bank, Satara) | 20/2/2020 |
| 6 | Ajay Hemant Dhobale | Participation | Blood Donation Camp | Institute Level | Varad Charitable and Medical Trust,Satara(Balaji Blood Bank, Satara) | 20/2/2020 |

| CRITERION | Faculty Information and Contributions | 200 |
|-----------|---------------------------------------|-----|
| 05 | | |
| | | |

Academic Year: 2022 – 2023

| Name of the Faculty Member | Degree (Highest Degree) | University | Year of Attaining Highest Qualification | Association with the Institution | Designation | Date on which designated as Professor/Associate Professor | Date of joining the Institution | Department | Specialization | Research Paper Publications | PhD Guidance | Faculty receiving PhD during the assessment years | Currently Associated (Y/N) Date of Leaving (In case currently | Nature of Association (Regular/Contract) |
|---|-------------------------|-------------------------------------|---|----------------------------------|---------------|--|---------------------------------|---------------|---|-----------------------------|--------------|---|--|--|
| ABHAY VIDYAS AGAR GUJAR | ME | Shivaji Universi ty | 1994 | Y | ASST PROF | | 25/06/201 | Civil Engg | Structural Engg | 2 | - | - | Y | Regular |
| PRIYAN KA HANMA NTRAO JAGDAL E | ME | Shivaji Universi ty | 2011 | Y | ASST PROF | | 02/07/201 | Civil Engg | Structural Engg | 2 | - | - | Y | Regular |
| RAJEND RA NANDK ISHOR SAPKAL | MTECH | Shivaji Universi ty | 2013 | Y | ASST PROF | | 19/12/201 6 | Civil Engg | Civil Constructi on Manageme nt | 4 | - | - | Y | Regular |
| DIKSHA SANJAY JADHA V | MTECH | Shivaji Universi ty | 2019 | Y | ASST PROF | | 22/07/201 9 | Civil Engg | Constructi on Manageme nt | 2 | - | - | Y | Regular |
| SHARA YU SHIVAJI RAO JEDHE | MTECH | Shivaji Universi ty | 2019 | Y | ASST PROF | | 22/08/201 | Civil Engg | Structural Engg | 0 | - | - | Y | Regular |
| VIJAY RAMCH ANDRA THOMB ARE | PhD | Bharati Deemed Universi ty | 2014 | Y | PROFE SSOR | | 31/12/201 | Civil Engg | Hydraulics Engg | 0 | - | - | Y | Regular |
| SNEHA L SHIVAJI TODKA R | MTECH | VIT Universi ty | 2018 | Y | ASST PROF | | 17/03/202 1 | Civil Engg | Structural Engg | 0 | - | - | Y | Regular |

| ASMITA RAMCH ANDRA MAHAJ AN | МТЕСН | Shivaji Universi ty | 2019 | Y | ASST PROF | 02/08/202 | Civil Engg | Constructi on Manageme nt | 0 | - | - | Y | Regular |
|--|-------|---|------|---|-----------------------|-----------|---------------|------------------------------------|---|---|---|---|---------|
| PRASH ANT RAMES H BAMAN E | Ph.D | Shri Jagadish prasad Jhabarm al Tibrewa la Universi ty Jhunjhu nu | 2014 | Y | ASSOCI ATE PROF | 01/9/2021 | Civil Engg | Constructi on Manageme nt | 5 | 1 | • | Y | Regular |
| SANJAN A BHIMG OUDA PATIL | MTECH | Shivaji Universi ty | 2020 | Y | ASST PROF | 02/08/202 | Civil Engg | Constructi on Manageme nt | 0 | - | - | Y | Regular |
| GOURA V SUNIL TAMBO LI | ME | SPPU | 2018 | Y | ASST PROF | 01/09/202 | Civil Engg | Structural Engg | 0 | - | - | Y | Regular |
| MOSIN SHEREK HUDA SHIKAL GAR | ME | Shivaji Universi ty | 2020 | Y | ASST PROF | 12/11/202 | Civil Engg | Constructi on Manageme nt | 0 | - | - | Y | Regular |
| SURAJ SHIVAJI SHINDE | ME | SPPU | 2018 | Y | ASST PROF | 02/12/202 | Civil Engg | Constructi on Manageme nt | 2 | - | - | Y | Regular |
| PALLA VI MACHC HHA | M.SC | SOLAP UR | 2009 | | ASST PROFF | 04/05/202 | Civil Engg | Geology | - | - | - | Y | Regular |

Academic Year: 2021 – 2022

| Name of the Faculty Member | Degree (Highest Degree) | University | Year of Attaining Highest Qualification | Association with the Institution | Designation | Date on which designated as | Date of joining the Institution | Department | Specialization | Research Paper Publications | PhD Guidance | Faculty receiving PhD during the assessment years | Currently Associated (Y/N) Date of Leaving (In | Nature of Association (Regular/Contract) |
|---|----------------------------|---|--|----------------------------------|-------------------------------|-----------------------------|---------------------------------|-------------------|---|-----------------------------|--------------|---|---|--|
| ABHAY VIDYASA GAR GUJAR | ME | Shivaji University | 1994 | Y | ASS T PRO F | | 25/06/ 2010 | - | Structural Engg | 3 | - | - | Y | Regula r |
| PRIYANK A HANMAN TRAO JAGDALE | ME | Shivaji University | 2011 | Y | ASS T PRO F | | 02/07/ 2012 | Civil Eng g | Structural Engg | 2 | - | - | Y | Regula r |
| RAJEND RA NANDKIS HOR SAPKAL | MTECH | Shivaji University | 2013 | Y | ASS T PRO F | | 19/12/ 2016 | Civil Eng g | Civil Constructi on Managem ent | 4 | - | - | Y | Regula r |
| DIKSHA SANJAY JADHAV | МТЕСН | Shivaji University | 2019 | Y | ASS T PRO F | | 22/07/ 2019 | Civil Eng g | Constructi on Managem ent | 6 | - | - | Y | Regula r |
| SHARAY U SHIVAJIR AO JEDHE | MTECH | Shivaji University | 2019 | Y | ASS T PRO F | | 22/08/ 2019 | Civil Eng g | Structural Engg | 1 | - | - | Y | Regula r |
| VIJAY RAMCHA NDRA THOMBA RE | PhD | Bharati Deemed University | 2014 | Y | PRO FES SOR | | 31/12/ 2019 | Civil Eng g | Hydraulic s Engg | 5 | - | - | Y | Regula r |
| SNEHAL SHIVAJI TODKAR | MTECH | VIT University | 2018 | Y | ASS T PRO F | | 17/03/ 2021 | Civil Eng g | Structural Engg | - | - | - | Y | Regula r |
| ASMITA RAMCHA NDRA MAHAJA N | MTECH | Shivaji University | 2019 | Y | ASS T PRO F | | 02/08/ 2021 | Civil Eng g | Constructi on Managem ent | 2 | - | - | N | Regula r |
| PRASHA NT RAMESH BAMANE | Ph.D | Shri Jagadishp rasad Jhabarmal Tibrewala University Jhunjhunu | 2014 | Y | ASS OCI ATE PRO F | | 01/9/2 021 | Civil Eng g | Constructi on Managem ent | 16 | - | - | Y | Regula r |

| SANJAN A BHIMGO UDA PATIL | MTECH | Shivaji University | 2020 | Y | ASS T PRO F | 02/08/ 2021 | Civil Eng g | Constructi on Managem ent | 2 | - | - | N | Regula r |
|--|-------|-----------------------|------|---|----------------------|----------------|-------------------|------------------------------------|---|---|---|---|-------------|
| GOURAV SUNIL TAMBOL I | ME | SPPU | 2018 | Y | ASS T PRO F | 01/09/ 2021 | Civil Eng g | Structural Engg | 1 | - | - | Y | Regula r |
| MOSIN SHEREK HUDA SHIKALG AR | ME | Shivaji University | 2020 | Y | ASS T PRO F | 12/11/ 2021 | Civil Eng g | Constructi on Managem ent | 2 | - | - | Y | Regula r |
| SURAJ SHIVAJI SHINDE | ME | SPPU | 2018 | Y | ASS T PRO F | 02/12/ 2020 | Civil Eng g | Constructi on Managem ent | 2 | - | - | Y | Regula r |

Academic Year 2020–2021:

| Name of the Faculty Member | Degree (Highest Degree) | University | Year of Attaining Highest Qualification | Association with the Institution | Designation | Date on which designated as | Date of joining the Institution | Department | Specialization | Research Paper Publications | PhD Guidance | Faculty receiving PhD during the assessment | Currently Associated (Y/N) | Nature of Association (Regular/Contract) |
|--|-------------------------|---------------------------|--|----------------------------------|--------------|-----------------------------|---------------------------------|-----------------------|---|-----------------------------|--------------|---|----------------------------|--|
| ABHAY VIDYASAGAR GUJAR | ME | Shivaji Universi ty | 1994 | Y | ASST PROF | | 25/06/20 10 | Civi 1 Eng g | Structural Engg | 3 | - | - | Y | Regular |
| PRIYANKA HANAMANTRA O JAGDALE | ME | Shivaji Universi ty | 2011 | Y | ASST PROF | | 02/07/20 12 | Civi 1 Eng g | Structural Engg | 2 | - | - | Y | Regular |
| RAJENDRA NANDKISHOR SAPKAL | MTech | Shivaji Universi ty | 2013 | Y | ASST PROF | | 19/12/20 16 | Civi 1 Eng g | Civil Constructi on Managem ent | 4 | - | - | Y | Regular |
| JYOTI RAKESH MOHITE | ME | SPPU | 2018 | Y | ASST PROF | | 02/07/201 8 | Civi 1 Eng g | Structural Engg | 2 | - | - | N | Regular |
| NIKITA PRAKASH NANAWARE | MTech | SPPU | 2018 | Y | ASST PROF | | 01/04/201 9 | Civi 1 Eng g | Constructi on Managem ent | - | - | | N | Regular |

| AJAY BHIMRAO KOLEKAR | MTech | Shivaji Universi ty | 2018 | Y | ASST PROF | 01/01/201 9 | Civi 1 Eng g | Constructi on Managem ent | 1 | - | - | N | Regular |
|---------------------------------|-------|-------------------------------------|------|---|---------------|----------------|-----------------------|------------------------------------|---|---|---|---|---------|
| PRIYANKA GANESH MHETRAS | ME | SPPU | 2019 | Y | ASST PROF | 01/07/201 9 | Civi 1 Eng g | Structural Engg | 1 | - | - | N | Regular |
| DIKSHA SANJAY JADHAV | МТЕСН | Shivaji Universi ty | 2019 | Y | ASST PROF | 22/07/20 19 | Civi 1 Eng g | Constructi on Managem ent | 6 | 1 | - | Y | Regular |
| SHARAYU SHIVAJIRAO JEDHE | МТЕСН | Shivaji Universi ty | 2019 | Y | ASST PROF | 22/08/20 19 | Civi 1 Eng g | Structural Engg | 1 | - | - | Y | Regular |
| VIJAY RAMCHANDRA THOMBARE | PHD | Bharati Deemed Universi ty | 2014 | Y | PROFE SSOR | 31/12/20 19 | Civi 1 Eng g | Hydraulic s Engg | 5 | - | - | Y | Regular |
| SURAJ SHIVAJI SHINDE | ME | SPPU | 2018 | Y | ASST PROF | 02/12/20 20 | Civi 1 Eng g | Constructi on Managem ent | 2 | - | - | Y | Regular |

5.1 Student – Faculty Ratio (SFR)

(20)

(To be calculated at Department Level)

No. of UG Programs in the Department (n): 01

No. of PG Programs in the Department (m): 00

No. of Students in UG 2^{nd} Year = u1

No. of Students in UG 3^{rd} Year = u2

No. of Students in UG 4th Year = u3

No. of Students in PG 1^{st} Year = p1

No. of Students in PG 2^{nd} 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 = Number of students in the department = UG1 + UG2 + UG3 + PG1 + PG2

F = Total Number of Faculty Members in the Department (excluding first year faculty)

Student Teacher Ratio (STR) = S/F

Table B.5.1

| Year | CAY(22- 23) | CAYm1(21- 22) | CAYm2(20- 21) |
|---|-----------------------|---------------------------|-----------------------|
| u1.1 | 23 | 65 | 63 |
| u1.2 | 57 | 65 | 68 |
| u1.3 | 58 | 67 | 86 |
| UG1 = u1.1 + u1.2 + u1.3 | 138 | 197 | 217 |
| Total no.of students in the department(S) = UG1 + UG2 + + UGn + PG1 + + PGn | 138 | 197 | 217 |
| No. of Faculty in the Department (F) | F1 = 14 | F1 = 13 | F2 = 11 |
| Student Faculty Ratio(SFR) | SFR1=S1/ F1 = 9.85 | SFR2=S1/ F1 = 15.15 | SFR3=S2/F2 = 19.72 |
| Average SFR | | | |

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

Table 5.1.1

| | Total number of regular faculty in the department | Total number of contractual faculty in the department |
|------------------|---|---|
| CAY (22-23) | 14 | 0 |
| CAYm1 (21-22) | 13 | 0 |
| CAYm2 (20-21) | 11 | 0 |

5.2 Faculty Cadre Proportion

(20)

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

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

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

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

Table B.5.2

| Year | I | Professors | Associate 1 | Professors | Assista | nt Professors |
|---------------------------|----------------|------------|-------------|------------|-------------|---------------|
| 1 ear | Required F1 | Available | Required F2 | Available | Required F3 | Available |
| CAY(22 -23) | 1.08 | 1 | 2.16 | 1 | 6.5 | 12 |
| CAYm1 (21-22) | 1.07 | 1 | 2.15 | 1 | 6.46 | 11 |
| CAY <i>m</i> 2(20-21) | 1.11 | 1 | 2.22 | 0 | 6.66 | 10 |
| Average Numbers | RF1=1.08 | AF1=1 | RF2=2.17 | AF2=0.67 | RF3=6.54 | AF3=10.67 |

Cadre Ratio Marks =
$$\left[\left[\frac{AF1}{RF1} \right] + \left[\frac{AF2}{RF2} \times 0.6 \right] + \left[\frac{AF3}{RF3} \times 0.4 \right] \right] \times 12.5$$

= $\left[\left[\frac{1}{1.08} \right] + \left[\frac{0.67}{2.17} \times 0.6 \right] + \left[\frac{10.67}{6.54} \times 0.4 \right] \right] \times 12.5 = 21.91$

If AF1 = AF2 = 0 then zero marks

Maximum marks to be limited if it exceeds 25

Institute Marks: 21.91

Example: Intake = 60 (i.e. total no. of students= 180); Required number of Faculty: 9; RF1= 1, RF2=2 and RF3=6

Case 1: AF1/RF1= 1; AF2/RF2 = 1; AF3/RF3 = 1; Cadre proportion marks = (1+0.6+0.4) x 12.5 = 25

Case 2: AF1/RF1= 1; AF2/RF2 = 3/2; AF3/RF3 = 5/6; Cadre proportion marks = $(1+0.9+0.3) \times 12.5$ = limited to 25

Case 3: AF1/RF1=0; AF2/RF2=1/2; AF3/RF3=8/6; Cadre proportion marks = (0+0.3+0.53) x 12.5 = 10.4

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)

Table B.5.3

| Years | x | Y | F | FQ=2.5x[(10X+4Y)/F)] |
|-------------------|---|--------------|-------|----------------------|
| CAY | 2 | 12 | 9.75 | 17.43 |
| CAYm 1 | 2 | 11 | 9.7 | 16.49 |
| CAY <i>m</i> 2 | 1 | 10 | 10 | 12.5 |
| | A | verage Asses | sment | 15.47 |

5.4 Faculty Retention

(25)

No. of regular faculty members in CAYm1=11

CAY=13

| Year | CAY m2 (2019 – 2020) | CAY m1 (2020- 2021) | CAY (2021-2022) | CAY (2022- 2023) |
|---|----------------------|------------------------|-----------------|---------------------|
| No. of Faculty Retained | 7 | 10 | 7 | 13 |
| No. of Faculty in the base year (2020 – 2021) | 15 | 11 | 13 | 14 |
| Faculty Retention (%) | 46.66 | 90.90 | 53.84 | 92.85 |
| Average | | 61.23% | | |

| Item | Marks |
|--|-------|
| (%offacultyretainedduringtheperiodofassessme ntkeepingCAYm2asbaseyear) | |
| >=90%ofrequiredFacultymembersretainedduringthep eriodofassessmentkeepingCAYm2asbaseyear) | 25 |
| >=75%ofrequiredFacultymembersretainedduringthep eriodofassessmentkeepingCAYm2asbaseyear) | 20 |
| >=60%ofrequiredFacultymembersretainedduringthep eriodofassessmentkeepingCAYm2asbaseyear) | 15 |
| >=50%ofrequiredFacultymembersretainedduringthep eriodofassessmentkeepingCAYm2asbaseyear) | 10 |
| <50%ofrequiredFacultymembersretainedduringthepe riodofassessmentkeepingCAYm2asbaseyear) | 0 |

5.5 Innovations by the Faculty in Teaching and Learning

(20)

Contributions to teaching and learning are activities that contribute to the improvement of student learning. These activities may include innovations not limited to, use of ICT, instruction delivery, instructional methods, assessment, evaluation, and inclusive class rooms that lead to effective, efficient, and engaging instruction.

The faculty members of the Civil 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

MOODLE (Modular Object-Oriented Dynamic Learning Environment)

The institute has configured learning platform which is available 24×7 to faculty and students. Using MOODLE, faculty can create courses in their respective program. Faculties can upload assignment questions, course material, presentations, and other material needed by the students for study purpose. Students can be automatically enrolled to the course with access rights given by them faculty as per their role in the course. Using MOODLE, faculty can maintain attendance of students, monitor their progress in exams, and maintain student assignments, internal exam data.

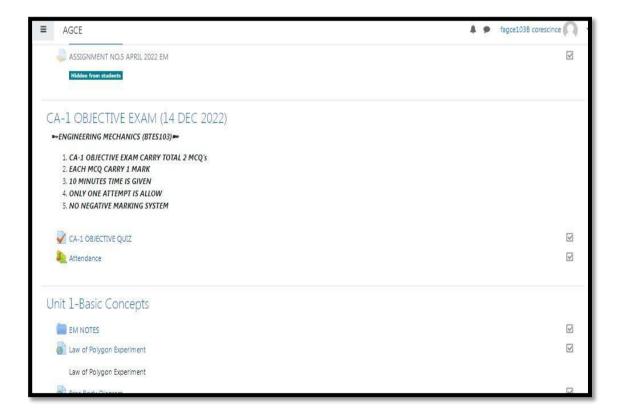


Fig.5.5.1. Screenshot of MOODLE page of Engineering Mechanics (F.Y. Btech)

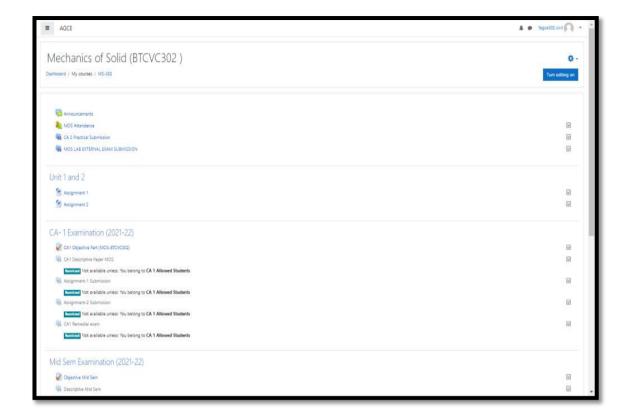


Fig.5.5. 2. Screenshot of MOODLE page of Mechanics of Solid (S.Y. Btech)

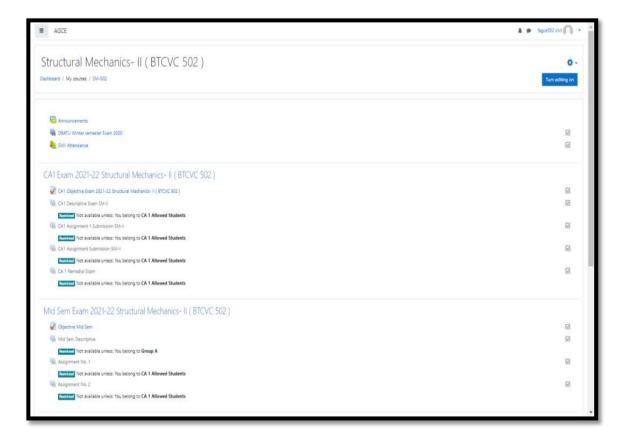


Fig.5.5. 3. Screenshot of MOODLE page of Structural Mechanics- II(T.Y. Btech)

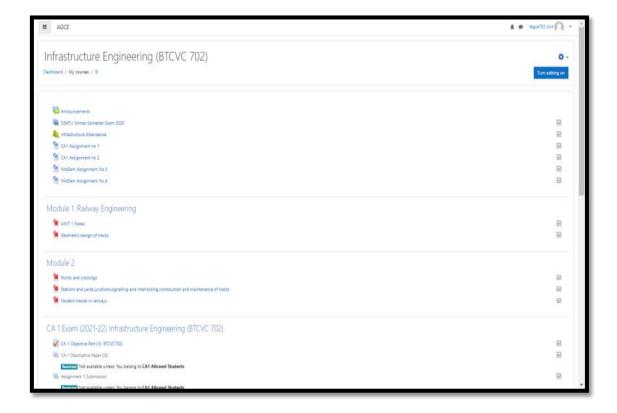


Fig.5.5. 4. Screenshot of MOODLE page of Infrastructure Engineering (Final year Btech)

Timetable:

The institute academic calendar which is accordance with the Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra, India, is made available on the institute website, displayed on department and laboratory notice boards, and also distributed to the students via student What Sapp groups.

The timetable for the weekly lectures and practicals is made available to the students well in advance and displayed on the department notice boards. Course syllabus is displayed and made available to the students via posts on the student Whatsapp groups.

| Se 6 6 2 1: 9 2:6 2 | 3 14 | D TH | U F | Ri S | | | ommencement of Classes and Admissions; B.Tech Second, Third and Final Year; M.Tech Second |
|---------------------|--|---|---|--------|---------|--|--|
| 5 6 2 1 9 2 | 7 3 14 0 2 | D TH | U F | RI S | | | |
| 5 6 2 1 9 2 | 3 14 | 1 8 | | Rt 5 | 200 100 | 11 | ear PTEL/SWAYAM/Coursera Certification |
| 9 2 | 3 14 | 8 | | | _ | | t.Tech Dissertation Exam of A.Y. 2021-22 |
| 9 2 | 3 14 | - | - | - | | | escher's Day Celebration & Nirmalya collection activity |
| 9 2 | 0 2 | | _ | - | - | repri | iuest Lecture/Industrial Visit/ Statutory Committee meeting |
| - | - | | - | - | _ | | nduction Program |
| 6 2 | 7 2 | _ | - | - | - | | ormation of Project Batches & Domain Selection |
| | | 8 2 | 9 | 30 | _ | -16 Sept. | Ingineers Day Celebration and Convocation Ceremany |
| | | | | | - | THE COURT OF THE C | Satara Hill Half Marathon |
| | | | | | - | s nather | Synopsis Submission |
| | | | | | - | | Synopsis Approval |
| | | | | | - | , own | No Vehicle Day |
| | | | | | - | 19895 | CA1 Objectice and Descriptive Examination |
| | | | | | 2 | 6-30 Sept. | 09 September: Anant Chaturdashi |
| : Days: 2 | | | _ | _ | - | | Swachh Bharat Abhlyan |
| - | _ | er-2022 | - | em: T | _ | # Oct | Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| ION T | UE W | /ED T | HU | FRI | | Oct | Display of Attendance, List of defaulter students and Letter dispatching |
| - | - | - | | - | - | - | International Conference |
| _ | - | - | - | - | - | | Workshop on Entreprenuership Development Phases |
| _ | _ | - | - | - | - | | Mid Semester Examination |
| _ | - | - | - | - | - | | Submission of M.Tech Dissertation Proposal to University |
| 24 | 25 | 26 | 27 | 28 | _ | | No Vehicle Day |
| 31 | | | | | _ | | F Market |
| | | | | | | Probable Holidays | 2 October: Mahatma Gandhi Jayanti; 5 October: Dussehra, 9 October: Eld-E-Milad, 24 October: |
| ic Days: | 23 | | | | | Diwali Laxmi Pujar | n. 26 October: Diwali Balipratipada |
| | Noven | nber-20 | 322 | | | | Scrutiny of Master's Level Dissertation Work Proposal |
| MON | TUE 1 | WED | THU | FRI | SAT | 1-5 Nov. | Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| - | _ | 2 | 3 | 4 | 5 | 5 Nov. | Display of Attendance, List of defaulter students and Letter dispatching |
| 7 | 8 | 9 | 10 | 11 | 12 | 1-8 Nov. | Exam Form Filling for Regular & Supplimentary Examination |
| | 15 | 16 | 17 | 18 | 19 | 5 Nov. | Parents Meet |
| - | 22 | 23 | 24 | 25 | 26 | 9-15 Nov. | Exam Form Filling for Regular & Supplementary Examinations with Late Fee |
| - | 29 | 30 | | | | 10-12 Nov. | Yugam 2022 |
| | | | | | 3 | 17-19 Nov. | University Tech Fest |
| | | | | | | 26 Nov. | No Vehicle Day |
| nic Days | : 25 | | | | | Probable Holiday | s: 8 November: Guru Nanak Jayanti |
| | Dece | mber-2 | 022 | | | 5-10 Dec. | Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| MON | TUE | WED | THU | FRI | SAT | 12-17 Dec. | CA2 Objectice and Descriptive Examination |
| | | | 1 | 2 | 3 | 19 Dec. | End of Classes Display of Final Attendance, List of defaulter students and Letter dispatching |
| 5 | 6 | 7 | - B | 9 | 10 | 19 Dec. | |
| 12 | 13 | 14 | 15 | 16 | 17 | 20-23 Dec. | Practical/Project/Seminar Examinations Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal |
| 19 | 20 | 21 | 22 | 23 | 24 | 22-24 Dec. | |
| 26 | 27 | 28 | 29 | 30 | 31 | 24 Dec. | Parents Meet |
| | | | | | - | 26 Dec21 Jan. | End Semester & Supplementary Examination |
| | | | | | | 31 Dec. | No Vehicle Day |
| enic Da | | | | | | Probable Holida | ys: 25 December: Christmas |
| | Jar | - | - | | | | End Semester & Supplementary Examination |
| MON | TUE | WED | THU | - | - | | End Semester & Supplementary Estimateur Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| 2 | 3 | 4 | 5 | 6 | - | | |
| 9 | 10 | 11 | 12 | - | - | | Insdustrial Training |
| 16 | 17 | 18 | 19 | _ | - | | Republic Day Celebration |
| 23 | 24 | 25 | 26 | 2 | 28 | 28 Jan. | No Vehicle Day |
| 30 | 31 | | | | | | The second secon |
| and Di | ys: 24 | - | - | | | Probable Holid | ays: 14 Jan: Makar Sankrati, 26 Jan: Republic Day Celebration |
| | 3 3 1 10 17 24 31 1 24 31 1 28 MON 2 12 19 26 MON 2 23 30 30 30 0 17 16 12 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | 3 4 1 10 11 17 18 24 25 31 10 11 17 18 24 25 31 10 11 17 8 11 15 11 15 12 12 12 12 12 12 12 12 13 19 19 20 26 27 MON TUE 10 17 23 24 19 10 16 17 23 34 19 30 31 19 10 16 17 23 3 31 19 10 16 17 23 30 31 19 20 16 17 23 30 31 18 emic Days: 24 | 3 4 5 5 5 5 5 5 5 5 5 | A | A | 1 | 1 |

Figure 5.5.5. Academic Calendar for the Academic Year 2022 – 23 (Odd Semester)

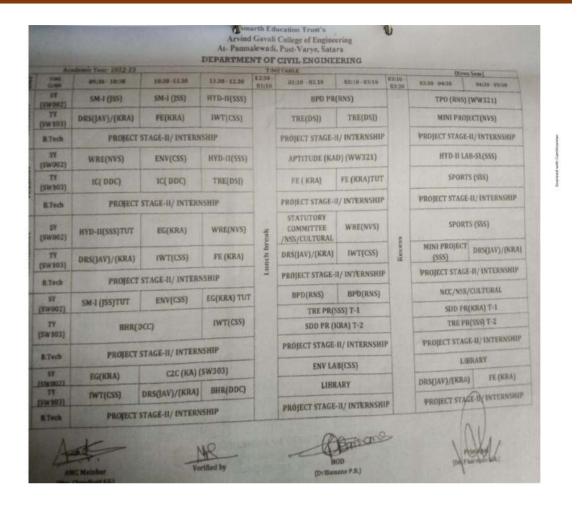
| | | | sawa stiit | AR | | | | | Samarth Educational Trust's Arvind Gavali College of Engineering, Satara Academic Calendar 2022-23 Term-II |
|------|------------------|---------------------|---------------------|----------|---------------------|---------|---------|--------------------|---|
| Т | | | Febr | ruary-2 | 023 | | | 1 Feb. | Commencement of Classes |
| /eek | sun | MON | TUE | WED | THU | FRI | SAT | 1 Feb27 May | NPTEL/SWAYAM/Coursera Certification |
| 1 | | | | 1 | 2 | 3 | 4 | 6-11 Feb. | Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| 2 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12-18 Feb. | NSS Camp |
| 3 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 12-18 Feb. | Cultural Days |
| 4 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 19 Feb. | Celebration of Shivjayanti |
| 5 | 26 | 27 | 28 | - | | | | 20-25 Feb. | Faculty appriciation and Trust day celebation |
| , | 20 | | 2.00 | | | | | 21 Feb3 Mar. | Remedial Examination |
| | | | | | | | | 25 Feb. | No Vehicle Day |
| | | | | | | | | 27 Feb 4 Mar. | CA1 Objectice and Descriptive Examination |
| - | Acador | nic Day | m: 24 | _ | | | | Probable Holiday: | : 18 February Mahashivratri; 19 February: Cha. Shivaji Maharaj Jayanti |
| - | Acader | nic Day | | arch-20 | 123 | | | 21 Feb3 Mar. | Remedial Examination |
| 100 | | | 1000 | WED | THU | FRI | SAT | 27 Feb 4 Mar. | CA1 Objectice and Descriptive Examination |
| Week | SUN | MON | TUE | 1 | 2 | 3 | 4 | 4 Mar. | Display of Attendance, List of defaulter students and Letter dispatching |
| 5 | | - | - | - | 9 | 10 | 11 | 6-11 Mar. | Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| - | 5 | 6 | 7 | 8 | 16 | 17 | 18 | 11 Mar. | Alumni Meet |
| ~ | 12 | 13 | 14 | 15 | 23 | 24 | 25 | 18 Mar. | No Vehicle Day |
| 8 | 19 | 20 | 21 | 22 | - | - | 23 | 20-24 Mar. | Sports week |
| 9 | 26 | 27 | 28 | 29 | 30 | 31 | | 25 Mar. | Annual Gathering |
| | | SPE | | | | | | | s: 8 March:Dhulivandan, 22 March:Gudhi Padwa |
| | Acade | mic Da | | | 22 | | | r (obable holiday | |
| | | | | April-20 | - | - | | 1 Aneil | Display of Attendance, List of defaulter students and Letter dispatching |
| Week | SUN | MON | TUE | WED | THU | FRI | - | 1 April | Mid Sem Exam |
| 9 | | | | - | | | 1 | 3-8 April | Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| 10 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 3-8 April | Celebration of Dr. Babasaheb Ambedkar Jayanti |
| 11 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 14 April | Display of Mid Semester Marks to Students |
| 12 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 12-15 April | - Address Control of the Control of |
| 13 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 15 April | Parents Meet |
| 14 | 30 | | | | | | | 29 April | No Vehicle Day ys: 7 April: Good Friday, 14 April: Dr. Babasheb Ambedkar Jayanti, 22 April:Ramzan Eid |
| | Acade | emic Da | ys: 22 | | | | | _ | ys. 7 April: Good rriday, 14 April: Ur. dalesties Arthuruka, as yarin, as a priling as a priling for Parties 2. Supplementary Evaminations |
| | | | | May-20 | - | 1 | | 2-8 May | Exam form filling for Regular & Supplementery Examinations Display of Attendance, List of defaulter students and Letter dispatching |
| Week | SUN | MON | TUE | WED | THU | - | SAT | The second second | Display of Attendance, List of defaulter students and Letter displacement Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| 14 | | 1 | 2 | 3 | 4 | 5 | 6 | 8-13 May | Guest Lecture/Industrial Visity Statutory Committee Meeting Exam form filling for Regular & Supplementery Examinations with late fees |
| | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | |
| 16 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | - | No Vehicle Day |
| 17 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | | CA2 Objectice and Descriptive Examination |
| 18 | 28 | 29 | 30 | 31 | | | | 27 May | End of Classes Display of Final Attendance, List of defaulter students and Letter dispatching |
| | | | | | | | | 27 May | |
| | | | | | | | | 27 May | Parents Meet |
| | | | | | | | | 29 May- 3 June | University Practical/ Project/ Seminar Examinations |
| | | | | | | | | 31 May- 6 June | Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal |
| | Acad | lemic D | ays: 25 | 5 | | | | Probable Holld | rys: 1 May: Maharashtra Day, 5 May: Buddha Pournima |
| | | 14 | | June-2 | 2023 | | | | |
| Wee | k sur | N MO | N TU | E WE | D THU | FRI | SA | T 29 May- 3 June | University Practical/ Project/ Seminar Examinations |
| 18 | | | | | 1 | 2 | 3 | 31 May- 6 June | |
| 19 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 5-10 June | Guest Lecture/Industrial Visit/ Statutory Committee meeting |
| 20 | 11 | | | - | | 16 | 17 | 8-30 June | End Semester & Supplementary Examination |
| 21 | - | | - | - | | - | + | The second second | Yoga Day |
| | | - | | - | _ | - | - | 24 June | No Vehicle Day |
| 22 | - | demic I | | | - | 1 -0 | | | |
| Ever | v dens | rtmen | t Shall | conduc | t the fol | lowing | progra | ams for the currer | it semester |
| 10 | reer G emedia | iuidano il/ Acad | e by In- lemical | dustry E | xperts & t & wea | & Alumr | ni etc. | | 2. Seminar, Conference, Workshop, STTP 4. Industry-frastiture interaction Activities Principal Arvind Cayli College of |

Figure 5.5.6. Academic Calendar for the Academic Year 2022 – 23 (Even Semester)

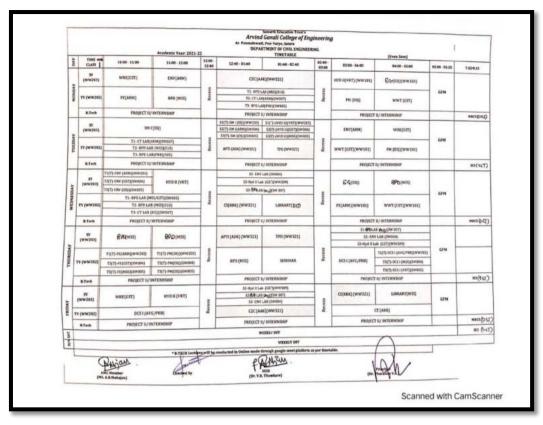
| Bhagwan I Registrar | | | Student Helpli | | डॉ. भगवान फ. जोगी कुलसचिव |
|---|--|---|---|---|--|
| ATU /Æij/ | Subject: Academic Calendar Din Academic Calendar Direct | rect Second Year Sec et Second Year Se | mester-III (AY 20 | 22-2023) 2022-20 | Dated: 11 / 11 / 20 |
| Sr. No. | Activity | Commencement Date | Concluding Date | Total Days | Level |
| 1 | Commencement of Classes | 14th November 2022 | 20 th February 2023 | 86 | Direct Second Year |
| 2 | Mid Semester Examination | 19th January 2023 | 21 st January 2023 | 03 | Direct Second Year |
| 3 | End of Classes | : | 20 th February 2023 | - | Direct Second Year |
| 4 | Practical Examination | 21st February 2023 | 22 nd February 2023 | 02 | Direct Second Year |
| 5 | End Semester Examination | 06 th March 2023 | 11 th March 2023 | 06 | Direct Second Year |
| 6 | Result Declaration | | 17th April 2023 | | Direct Second Year |
| 7 | Commencement of Classes for Next semester | 13 th March 2023 | | The same | Direct Second Year |
| Holidays | 25th Dec. 2022 Christmas 26th Jan. 2023 Republic Day 18th Feb. 2023 Mahashivratri 19th Feb. 2023 Chhatrapati Shivaji | Maharaj Jayanti | 07th Mar. 2023 Dhulivandan 22rd Mar. 2023 Gudi Padwa 30th Mar. 2023 Ram Navami 04th Apr. 2023 Mahavir Jayanti | vandan far. 2023 Padwa far. 2023 Ambedkur Jayanti | |
| * Regular * SY Reg Copy Sub Copy to: 1. | ect Second Year students all Saturda SY & DSY Exams will be conducted ular students will have to complete to mitted to: Hon'ble Vice-Chancello All Heads of Departments Affiliated Institutes Academic Section | ed at the same time their internship requ | from 6 th – 11 th Mairement before ex | arch 2023. ams. basaheb A | Dr. B. F. Jogi REGISTRAR mbedkar lechnological Ur LONERE 402 103. n, Dist. Raigad, (Maharash |

Scanned with CamScanner

5.5.7. University academic calendar (Academic Year 2022 - 2023)



5.5.8. Department Time table 2022-23



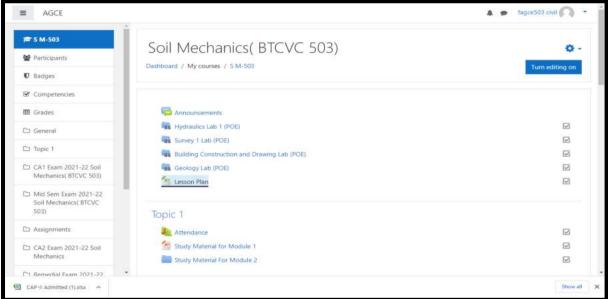
5.5.9. Department Time table 2021-2022

Lesson Plan:

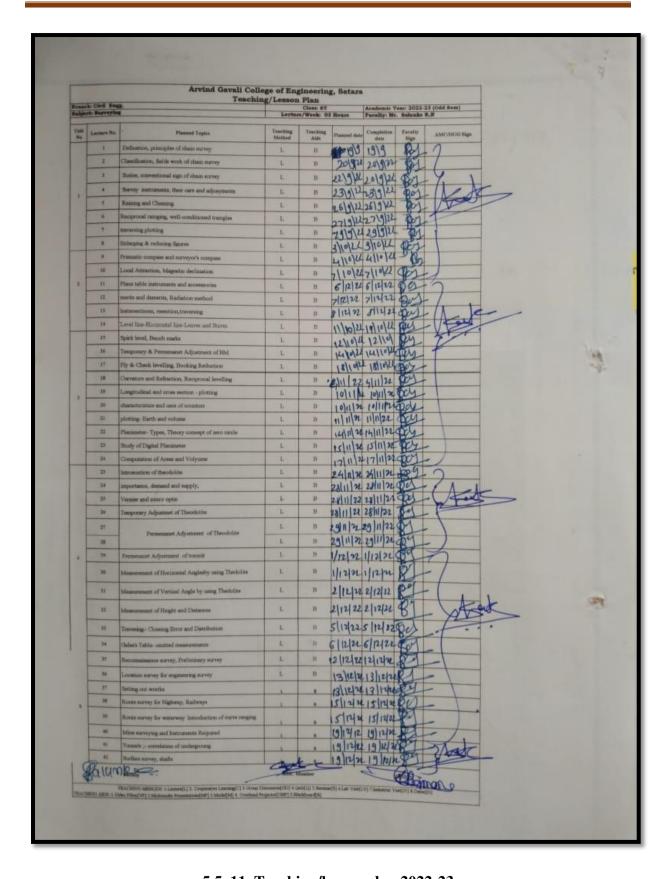
The lesson plan for the individual subject is prepared by the individual teacher, approved by the HoD and the corresponding Academic Monitoring Committee member of that department. The lesson plan is then conveyed to the students via MOODLE. This allows the students to understand the course structure.

The innovative methods employed by the faculty members help the students to get actively involved in the classroom.

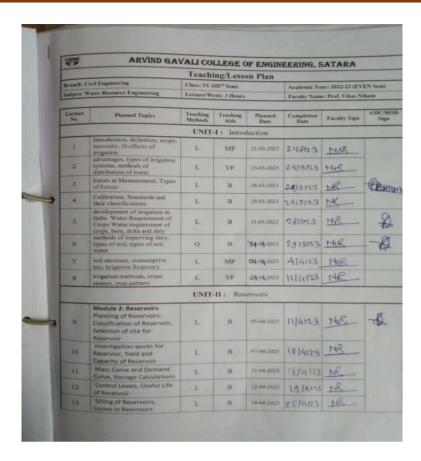


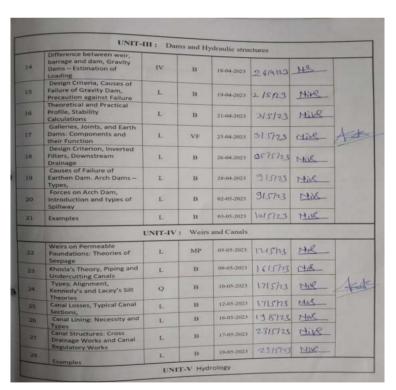


5.5. 10. Lesson plan uploaded on moodle

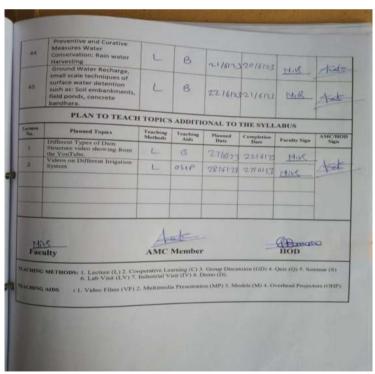


5.5. 11. Teaching/lesson plan 2022-23





| | Introduction to hydrology: | _ | | | | | |
|----|---|-------|------------|------------|----------|------------|-----|
| 29 | hydrologic cycle, rain, surface and ground water | L | VF | 23-05-2023 | 241 (713 | NIK | a i |
| 30 | measurement of rainfall, peak flow, base flow, precipitation and its measurement | L | В | 24-05-2023 | 2415773 | MIK | |
| 31 | average depth of precipitation, water losses | £ | В | 26-05-2023 | 2615113 | MIK | |
| 32 | flood frequency, catchment area formulae, flood hydrograph | L | В | 30-05-2023 | 3015723 | MX | No. |
| 33 | rainfall analysis, infiltration, run off, estimation of runoff | L | В | 31-05-2023 | 31/5723 | MK | |
| 34 | unit hydrograph and its determination, s- hydrograph | L | В | 02-06-2023 | 21617.3 | NR | |
| 35 | Examples | L | В | 02-06-2023 | 616123 | MR | |
| | | UNIT- | VI Lift In | rigation | | | |
| 36 | Lift irrigation, wells and tube wells, introduction | L | В | 00-00-2023 | 716123 | MR | 7 |
| 37 | classification of well, specific yield, deep and shallow wells | L | В | 07-06-2023 | 316125 | <u>chs</u> | 1 |
| 38 | comparative advantage of well and canal irrigation, duty of well water | L | В | 09-06-2023 | 916113 | HK | A |
| 39 | types of tube wells, types of strainers, boring methods | L | В | 09-06-2023 | 1316123 | 1.055 | |
| 40 | Darcy's law, permeability, safe yield of basin | L | В | 13-06-2023 | 1316123 | MIN | |
| 41 | Lift Irrigation schemes: Various components and their design principles (Only concepts). | L | В | 13-06-2023 | 1416123 | HIK | 1 |
| 42 | Water logging and drainage Causes of water logging, preventive and curative measures | L | MP | 14-06-2023 | 1616123 | MIN | 4 |
| 43 | drainage of irrigation of lands, reclamation of water logged, alkaline and saline lands | L | В | 16-06-2023 | 20/6/13 | HIK | |



5.5. 12. Teaching/lesson plan 2022-23(Even sem)

In-house Internships:

In-house internships are organized for skill development and technical proficiency. The three-week internship is called "YUGAM" and is conducted during the month of November which is also the vacation period of the odd semester. The Yugam Course offered by civil department. The Guest lecturers organized by civil department during Yugam.

The department is organized by workshop on autocad to get knowledge of all command in drawing, this will helpful in future after graduation.





Figure 5.5. 13(a) and (b) Two Days Hands-on Workshop on Autocad software



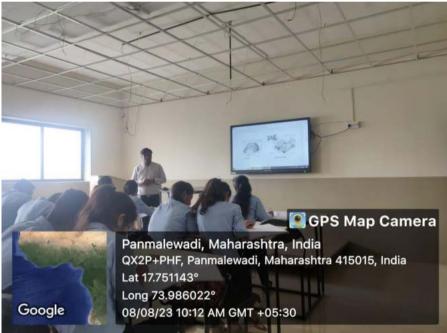


Figure 5.5. 13(c) and (d) Seven Days Hands-on Workshop Autocad sketchup of making building



Figure 5.5.14 Pamphlet of YUGAM 2020

Open Book Tests:

To improve the analytical skills of the students, open book tests are conducted during library hours by the individual faculty member. It allows analytical thinking and discourages rote learning.



Figure 5.5.15 Open Book Test

Interactive Panel:

The faculty members of the department are encouraged to conduct lectures using smart boards. This enables a more vivid representation of the concept by the incorporation of videos to simplify the concepts.



Figure 5.5.16 Faculty Member of the Department Using Interactive Panel while Conducting the Lecture

Industrial Visits

Industrial visits are carried out to make students aware of current advances and requirements in the industry.



Fig.5.5.17. Industrial Visit to Krushnkunj Appartment, RMC plant (Kangralkar Associate)



Fig. 5.5. 18. Industrial Visit to Model Developers building



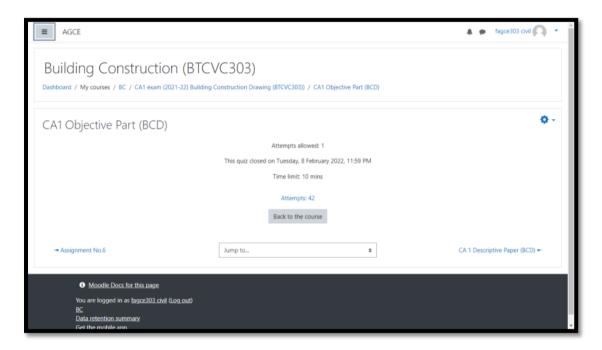
Fig. 5.5. 19. Industrial Visit to Chaitanya residence Satara.



5.5.20 . Industrial Visit to Water Treatment Plant in Pimpari Chinchwad

Quiz

Faculty members conduct quiz based on objective questions to assess the understanding of concepts by the students. The quiz is conducted using MOODLE platform. Objective Multiple-Choice Questions (MCQs) formulated using Bloom's taxonomy as a tool is employed in the quiz.



5.5. 21. Screenshot of Quiz uploaded on Moodle of subject Building Construction

NPTEL Courses:

Students are encouraged to enroll for National Programme on Technology Enhanced Learning (NPTEL) and Massive Open Online Course (MOOC) courses to enhance self-learning. These courses are further incorporated in the syllabus itself by the university. The students are choosing the course as per our convenience.

Table 1. NPTEL Courses Chosen by Students of TY B.Tech and Final Year B.Tech (Civil) for 2022-23

| Sr. | Timeline | Year | Courses Chosen by the Students |
|-----|-----------------------------|------------------------------|--|
| No. | | | - |
| 1 | 2022-23 Odd Semester | Final Year B.Tech (Civil) | Geotechnical Engineering Laboratory Geotechnical Engineering-II Housing Policy & Planning |
| | 2022-23 Odd Semester | Final Year B.Tech (Civil) | Building Materials and Composites Maintenance Repair & Concrete Structure Soil Structure Interaction |
| 2 | 2022-23 Even Semester | TY B.Tech (Civil) | An Introduction to Artificial Intelligence Maintenance and Repair of Concrete Structures Geographic Information Systems Soil Structure Interaction Introduction to Civil Engineering Profession Environmental Impact Assessment Applied Environmental Microbiology Advanced Foundation Engineering Artificial Intelligence: Knowledge Representation And Reasoning Probability Methods in Civil Engineering |
| | 2022-23 Even Semester | TY B.Tech (Civil) | Soft Skill Development Development and Applications of Special Concretes Advanced Computer Architecture |

| | 4. Scheduling Techniques in Projects |
|--|--|
| | 5. Remote Sensing Essentials |
| | 6. Geosynthetics and Reinforced Soil Structures |
| | 7. Mechanical Characterization of Bituminous Materials |
| | |

Table 2. NPTEL Courses Chosen by Students of TY B.Tech and Final Year B.Tech (Civil) for 2021-22

| Sr. | Timeline | Year | Courses Chosen by the Students |
|-----|-----------------------------|---------------------------|--|
| No. | | | |
| 1 | Odd Semester | Final Year B.Tech (Civil) | Basic construction materials Maintenance and Repair of Concrete Structures Mechanical Characterization of Bituminous Materials Advanced Soil Mechanics Advanced Foundation Engineering |
| | 2021-22 Odd Semester | Final Year B.Tech (Civil) | 1.Hydraulic Engineering 2.Geology and Soil Mechanics 3.Environmental Remediation of Contaminated Sites 4.Soil Structure Interaction 5.Enhancing Soft Skills and Personality |
| 2 | 2021-22 Even Semester | TY B.Tech (Civil) | Soil Mechanics/Geotechnical Engineering I Wastewater Treatment and Recycling Foundation Engineering |
| | 2021-22 Even Semester | TY B.Tech (Civil) | 1.Design of Steel Structures 2.Design of Reinforced Concrete Structures 3.Fluid Mechanics |



5.5. 22. Image of NPTEL online certification

Detailed Course Contents (Notes/PPTs, etc.):

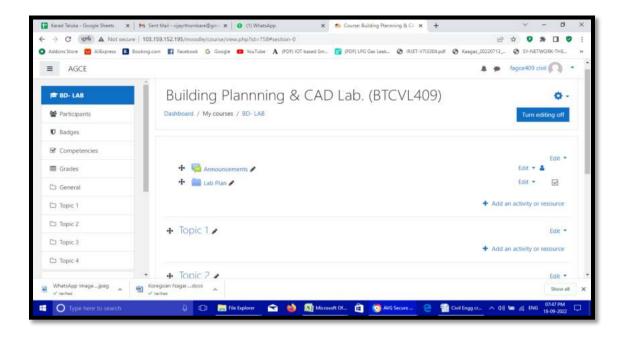
Reference books, notes, PowerPoint presentations, videos explaining concepts are uploaded by the faculty on MOODLE platform and made available to the enrolled students. Along with these, links to NPTEL course material are also provided on MOODLE.



5.5. 23. Screenshot of Notes/PPT's uploaded on Moodle of subject Infrastructure Engg.

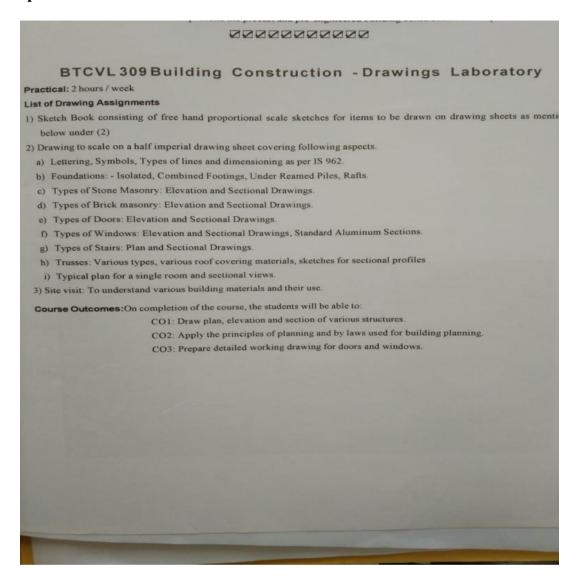
List of Experiments:

The list of experiments for the concerned subject as prescribed in the university syllabus is uploaded on the MOODLE platform by the concerned faculty member and made available to the enrolled students. The same list is also posted in student WhatsApp groups.



5.5. 24. Screenshot of list of experiments on MOODLE

List of experiments



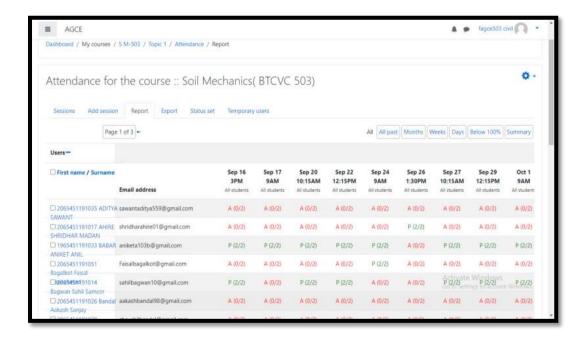
5.5. 25. Image of list of experiments

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 of the department. The GFM is responsible for counselling the students who have poor attendance, collecting feedback from the students for a difficult subject, etc.



Figure 5.5.26 Faculty conducting GFM Meeting with students(Btech Final year students)



a. 27. Moodle attendance

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. The uploaded assignments are assessed by the faculty members and marks are given to them. These assignment marks are considered for internal term work calculations.

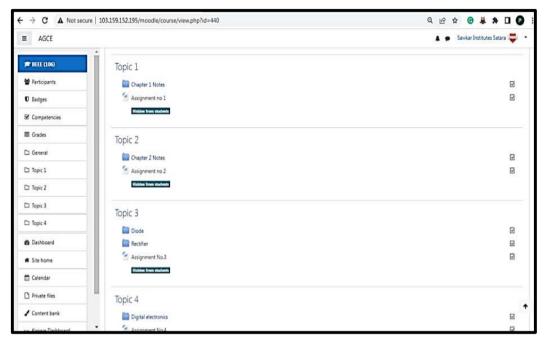


Figure 5.5.28 Screenshot of Assignment folders on Moodle

Continuous Assessment Report:

The continuous assessment report is generated based on the student attendance and the assessment grades defined by the faculty members.

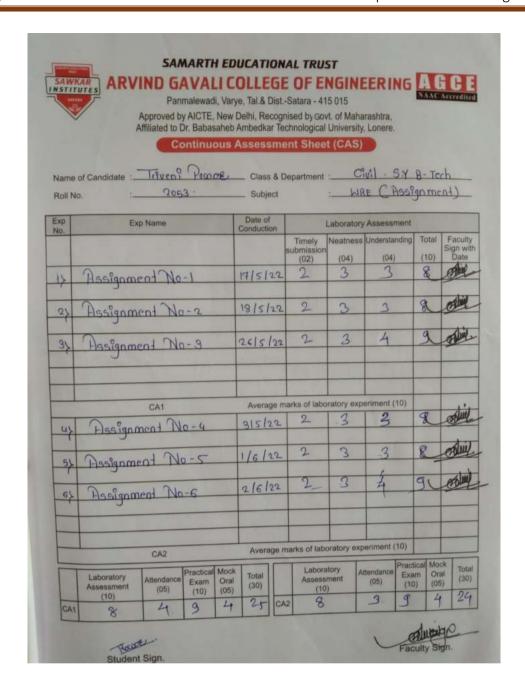
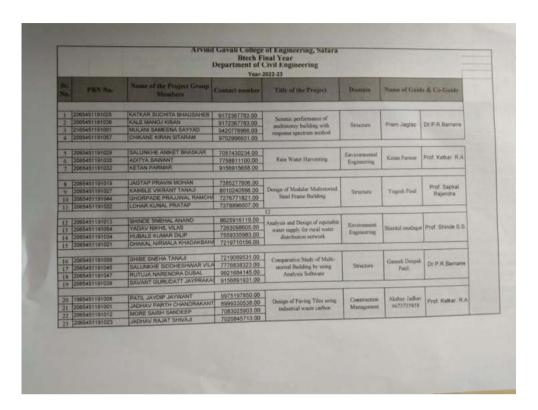


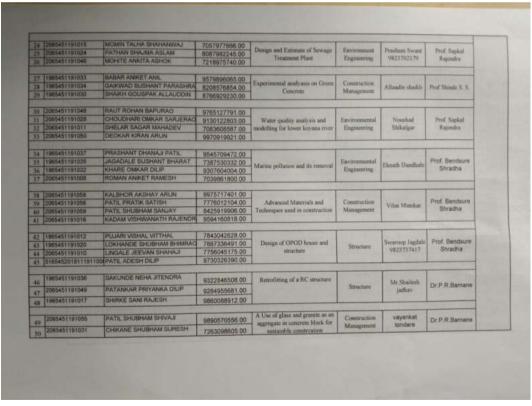
Figure 5.5.29 Photograph of CAS Sheet for WRE assignment

Project-based and Self-learning:

Students are encouraged to group in various domains such as Structure, Environmental Engineering, Construction Management, etc. and work in the development of projects in that domain. Emphasis is given on industry-based projects, innovative ideas, and research-paper based projects.

The lists of the Final Year Projects B.Tech (Civil) for the assessment years, 2022-23, 2021-22, 2020-21 are as given below:





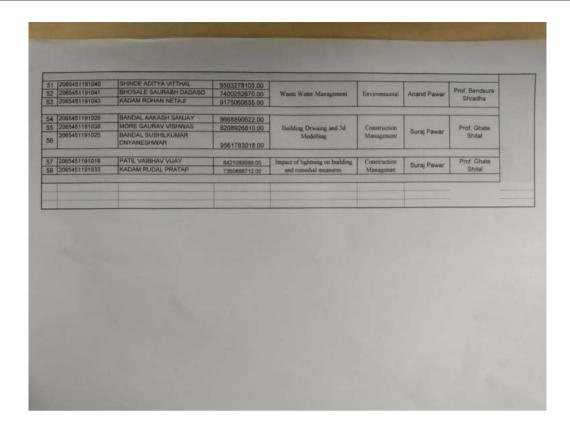
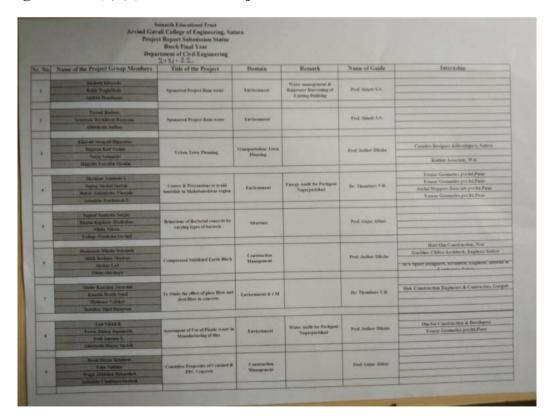


Figure 5.5.30(a,b,c) Final Year Project List for the Academic Year 2022 – 2023



| | | Btech | rt Submission Statu t Final Year of Civil Engineering | | |
|------|--|--------------------------------|---|---------------------|--|
| No. | Name of the Project Group Members | Title of the Project | Domain | Name of the Guide | |
| 10 | Raut Samrat | | | AND STATE STATES | Interaship |
| | Madane Shaut | Manufacturing of Bricks by | | | |
| | Chavan Mahesh | using foundry waste sand & its | Enviorances | Prof. Jaffur Dikoha | |
| | Malari Sampanna | comparison with burnt clay | | COS- OMINET APRIME | |
| | | DESCR. | | | |
| 11 | Musale Harsholp | | | | Value |
| | Bhandary Alphay | Utilisation of Tier rubber | Enviorament | Dr. Thumbare V.R. | Yesaar Geomatics per.int.Pune |
| | Patil Tejasvini | CRUMB for water Proofing | E.Oriorament | Dr. Thombare V.R. | Vestar Geometics pyr. Ind. Punc |
| | | | | | School Community BATTERING |
| 12 | Smita Swami | | | | |
| | Bhagy asheer Chavan | | 100 | 202222 222 | VNS Developers & Buildiry, Satura |
| | Shrurangan Khot | Building Information Modelling | Structure | Prof. Jadhav Diloha | |
| | Adhik Jadhay | | | | |
| 13 | Abhishekh Sanas | | Construction Management | Prof. Shinde S.S. | |
| | Vikram Nalawade | Effect of RERA on construction | | | |
| | Thorat Prajwal | and GST on Construction | | | |
| | Abbijest Dhanak (Shiyaji to DBATU) | | | | |
| | | | | | |
| 14 | Alit Mane | | | | MAB Construction & Associares Setters |
| (19) | | Custilated Beam | Structure | Prof. Shinde S.S. | MAR Construction & Associates Salara |
| | Nerraj Randove Mahesh Gaikwad | | | | MAB Construction & Associates Surara |
| | Materia Ganware | | | | The second second |
| 15 | Ajinky a Desait | Road Power Generation by | Transportation | Dr. Thombare V.R. | Mahendra Construction, Satura Mahendra Construction, Satura |
| - | Athury Juditory | Mechanical mechanism | Atamportación | | Mahemira Construction, Salara |
| | The state of the s | | | | Adirya Construction, Solapur |
| 16 | Rauschandra Patil | | | | |
| | Ashurosh Patole | Sewage Treatment Plant | Environment | Dr. Thombare V.R. | |
| | Suraj Kadam | JENAGE TOTAL | COMMUNICATION STATES | | |
| | Shubbarn Khalatkar | | | | |
| | | | | | |

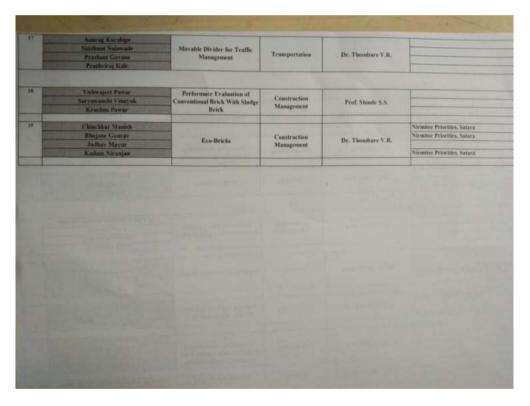


Figure 5.5.31(a,b,c) Final Year Project List for the Academic Year 2021-2022

| | Last Year Black | | Civil Engineering Project Group Details AY 2020-2021 | | |
|-------|--------------------------------------|-------------|--|--------------------------------|-------------------|
| No. I | Name of Student | Contact No. | Topic | Domain | Project Guide |
| - | Jacmor Nan Ashok | 8956069841 | | | |
| - | Phanesa Akshay Krishnat | 8180985511 | | | |
| | Medne Shantaram | 9021105418 | | | |
| _ | Randow Amol Sarjerao | 9004949388 | 500 m | the second second | |
| 9 | Kadam Anket Tatyaso | 7700445087 | A case study of Kolmba river analysis | Mydraulica | Dr. Thombare V.R. |
| | Patri Varatustavi Vittat | 9325105268 | | | |
| - 1 | Santosis Poola Paranuram | 7030502091 | | | |
| - 1 | Paratis Aboli Vilias | 9119583173 | | | |
| 2 | Saturaba Supriya Surwati | 7350161494 | Structrual audit of exenting building | Structural Analysis and Design | Prof. Gujar A.V. |
| | Jadhay Trupti Vijay | 0088308100 | | | |
| - 4 | Patil Suchitra Vitas | 9923706813 | | | |
| | Whandande Nikita Madhukar | 7385502029 | Planning and Distribution of Pipe | | 12. 20.00000000 |
| 3 | Kathar Swittenjali Shaniotr | 8793299430 | Dotobution Network | Environmental Engag- | Dr. Thurmana V.R. |
| | Jachusy Saurady Suresh | 9766762110 | | | |
| | Pulari Sachin Vittal 7028418344 | | | | |
| | Phalke Shubbarn Villay | 9850494479 | Experimental study on effect of glass fibre in | | - IV |
| 4 | Bécsaire Aniket Dadu | 7387595359 | gless poweder cement concrete | Structural Analysis and Design | Prof. Guar A. V. |
| | Pawar Mayur Rajendra | 7709084849 | | | |
| | Mane Omkur Suryakant | 7387107363 | | | |
| | Chayan Jay Larman | 9552139499 | Contract State Sta | | |
| | Mahale Bhushan Raghurush | 7887798230 | Retrofitting of ill detailed beam column | | Prof. Guine A.V. |
| 5 | Gurav Vittal Excusts | 8308477014 | connection | Structural Analysis and Design | Print degr. mit. |
| | Jangan Sakat Abhijeet 7068956199 | | | | |
| | Sathe Yashvard Paridharinath | 7040709590 | | | |
| | Charan Mahesh Shankar | 8600322928 | Otification of plastic in manufacturing of | Construction Management | Prof. Sephal RN. |
| 60 | Lokare Pradrywsh Baliram | 7507359153 | payer block | Construction Numagement | |
| | cinkar kambale | 7218823872 | | | |
| | Pawar Rushisesh Chandrakant | 7350868548 | | | |
| | Prasad Phisrande 9762239573 | | | | |
| | Jamdade Ranjit Dhanaji | 8830230199 | 200000000000000000000000000000000000000 | Construction Management | Prof. Sapkal R.N. |
| 2 | Valishay sapkal | 9112912077 | Ferra Cement Construction | CONTRACTOR MANAGEMENT | 100 |
| | Kalyanahatti Srushal | 8855940359 | | | |
| | Kaltinar Anixet Subhash | 9503687276 | | | |
| | Mone Abhumak Mukund | 9595225410 | | | |
| - 6 | Guray Prayin Sureeh | 7770090369 | | helication. | Ms. Todkar S.S. |
| | Shinde Akahay Amruta | 9158556503 | Concrete blocks using waste material | W. Establish | |
| | Yaday Abhay bhimrao | 9604298804 | | | 1/ |
| | Descript Artist Bajiran 8483668596 | | | | |
| | | | | tengation | Ms. Todker 5.5 |
| * 1 | Awate Propent Preshard | 7028661444 | Condition assessment of building | at Sanda | |

| + | Chadage Gurian Santoch | 7709250913 | | | |
|-----|----------------------------------|------------|--|---------------------------------|--|
| | Judhay Sanket Shashikant | 7058777007 | | | |
| | Raut Chaitanya Shasbikant | 9561207620 | The second secon | | |
| | Mane Ewarrop Anil | 9657970402 | Experimental investigation of modified | | |
| 101 | More Kalyani Suril | 9049604968 | bitumen with plastic | Construction Management | Prof. Septot V.N. |
| | Sutar Sujit Hartrany | 7219173466 | | | |
| | Shinde Prajwal Pradipicenar | 9146488328 | | | |
| | Sidar Omilar Sanjay | 8237236337 | | | |
| | Chavan Vikram Bhagavan | 7218893084 | Effect of granite and marble waste to | 1000000 | NAME OF THE OWN |
| | Jadhev Rohit Sanjay | 7757986961 | enhance the properties of ulty soil | Hydraulics | Dr. Trembani V.R. |
| | Chavan Pragati Sanjay | 8806342171 | | | |
| | Jaglap Prajycs Ramchandra | 7776806464 | | | |
| | Ohadge Salash Shivaji 9011198396 | | | | |
| 17 | Tarde Valbhay Abaso | 9112614213 | Control of the Contro | Construction Management | Prof. Suplat R.N. |
| | Kathole Suvarna Pandurang | 7420019448 | Analysis and design of G+15 Building | Construction Management | |
| | Daphale Sayal Dattatry | 7410567580 | | | |
| 13 | Kamphar Rolst Morum | 8888015536 | | | |
| | Chavan Pallare Dattatray | 7083079474 | | | |
| | Guray Valshanvi Lasman | 7057603039 | Reuse and recycle of construction and | Hydraules | Dr. Thombara V.R. |
| | Jadhav Kalyani Sunti | 9119436157 | demolition of waster | Hydrausca | AND COMMISSION OF |
| E | Desai Sunt Shivaji | 9370668285 | | | |
| | Kodag Vikus Pandurang | 9049420342 | | | |
| | Saward Sachin Suhas | 9975264951 | | | |
| | Patil Abhijit Bhikaji | 7261969641 | | livigation: | Ms. Todkue S.S. |
| 86 | Dhokare Vikas Jaysing | 9623995670 | Study of watershed management | ariginam. | |
| | Gallowad Vikram Laxman | 6308270730 | | | |
| | Judhev Parag Jathav | 8850018753 | | | |
| | Trimbake Akshay Kahor | 8329783845 | | Hydraulics | Dr. Thombare V.R. |
| | Bhalder Soneb Dantgir | | Palm Island Dubai | regurantes | |
| | Malk Aditya Kristuarif | 8888333641 | | Hydraulics | Dr. Thombare V.H. |
| | Shinde Sonali Suresh | 9970779795 | Lightguage still structure | Maranes. | |
| | Varat Rahul Sopan | 7558859953 | | | |
| | Lohar Rohit Namdoo | 9130208374 | | | |
| 2 | Jagtap Nondkamar Narayan | 7558555613 | | Hydraulics | Dr. Thombare V.R. |
| | Kadam Arjun Sulesh | 9404357528 | Reinwater harvesting | - III | |
| | Dhobate Ajay Hemant | 8796376760 | | | |
| | Bichukala Sura Nariaso | 9284733612 | | | |
| | Bandgar Santosh Rayumam | 7559203077 | The second secon | | and the same of th |
| | Outumkar Mayur Baiu | 7928777480 | Strenghtening of beam and column by | Construction Management | Prof. Suplint R.N. |
| 10 | Mail Expath Sadashiv | 9130409830 | carbon fiber reinforced polymer | Control of the State of Control | |
| | Mulia Altaf Ashok | 8530041656 | | | The same of the sa |
| - | Paramans Abhimanyu Véas | 8976207171 | | Construction Management | Prof. Sapkal R.N. |
| -2 | Amate Mayur Balkrushan | 7972707457 | Future scope in construction industry | CONSTITUTION STATES | |
| | Mane Dhanashree Dhanajay | 9766434076 | To study the effect of carbon lamination on | Hydraubin | Dr. Thombare V.S. |
| | Ladhay Pratiksha Prakash | 7387396905 | the strength of concrete structures | Hydrauter | |

Figure 5.5.32(a,b,c) Final Year Project List for the Academic Year 2020-2021

5.6 Faculty as Participants in Faculty Development/ Training Activities/ STTPs (15)

A faculty scores maximum five points for participation Participation in 2 to 5 days Faculty Development Program: 3 Points Participation > 5 days Faculty Development Program: 5 Points

| Name of the Equality | CAV | CAV1 | CAV2 |
|---|--------------------|---------------------------|----------------------|
| Name of the Faculty | CAY 2021 – 2022 | CAY <i>m1</i> 2020 - 2021 | CAYm2 2019 - 2020 |
| Dr.PRASHANT RAMESH BAMANE | 6 | 5 | 3 |
| RAJENDRA NANDKISHOR SAPKAL | 6 | 4 | 9 |
| VIJAY RAMCHANDRA THOMBARE | 0 | 1 | 1 |
| PRIYANKA HANMANTRAO JAGDALE | 0 | 1 | 4 |
| DIKSHA SANJAY JADHAV | 1 | 5 | 2 |
| SHARAYU SHIVAJIRAO JEDHE | 1 | 3 | 1 |
| SNEHAL SHIVAJI TODKAR | 0 | 1 | 1 |
| ASMITA RAMCHANDRA MAHAJAN | 0 | 1 | 1 |
| Sum | 14 | 21 | 22 |
| RF= Number of Faculty required to comply with 20:1 Student-Faculty ratio as per 5.1 | 9.75 | 9.70 | 10 |
| Assessment = $3 \times (\text{Sum/0.5RF})$ | 17.23 | 12.98 | 13.2 |
| (Marks limited to 15) | | | |
| Average assessment over three years (| Marks limited | 1 to 15) = 14.4 | 47 |

Table B.5.6

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. (06)

Ph.D. guided / Ph.D. awarded during the assessment period while working in the institute (04)

All relevant details shall be mentioned.

5.7.1 Academic Research:

Following is the list of research papers published by the faculty members in the reputed journals and conferences.

| | Academic | Year 2022-23 | |
|-----------|----------------------------------|---|-----------------------------------|
| Sr. No | Faculty name | Title of paper | Name of the Journal |
| 1 | RAJENDRA NANDKISHOR SAPKAL | Review paper on design and estimate of sewage treatment plant | /Conference IJARSCT |
| | | Watershed management in AGCE, Satara with special reference to Khodjaiwadi Karad | TROI |
| | | Design Of Modular Multi- Storied Steel Frame Building | ICIRTES- International conference |
| | | Study and suggestive measures of landslides | ICIRTES- International conference |
| | | Utilization of plastic waste for making plastic bricks | ICIRTES- International conference |

| 2 | | Study paper on use of eco bricks | IJARSCT |
|-----------|----------------------------|---|-----------------------------------|
| | | Review Paper on design of rain water harvesting system for new shirgao villlage | IJARSCT |
| | Dr.PRASHANT RAMESH | Study on an innovative time cost quality treadoff modelling of building construction project based on resource allocation | IJARSCT |
| | BAMANE | Review paper on Design and Estimate of sewage treatment plant | IJARSCT |
| | | RETROFITTINING OF RC STRUCTURE | ICIRTES- International conference |
| | | A Research on Green Building's in India | ICIRTES- International conference |
| 3 | | Analyse and Design of Equitable Water Supply for | ICIRTES- International conference |
| | Mr. Suraj Shinde | Rural Water Distribution Network | |
| | | Academic Year 2020-21 | |
| | | | Name of the |
| Sr. No | Faculty name | Title of paper | Journal |
| 110 | | | /Conference |
| | | Analysis of factors causing cost overturns in residential building construction project | IJRESM |
| 1 | DIKSHA SANJAY JADHAV | Effect of time and cost overrun on building construction project | IJCRT |
| | | Factors Affecting on flooring labor productivity | IJRESM |
| | | Influence of build ability factors on flooring labor productivity | IJRESM |

| Academic Year 2019-20 | | | | |
|-----------------------|----------------------------------|---|---|--|
| Sr. No. | Faculty name | Title of paper | Name of the Journal | |
| | | Watarahad Managamant in | /Conference International Journal of | |
| 1 | RAJENDRA NANDKISHOR SAPKAL | Watershed Management in arvind Gavali College of Engineering Satara with special reference to khodjaiwadi karad | Current Engineering and scientific research | |
| 2 | VIJAY RAMCHANDRA THOMBARE | A Study on hollow core foam concrete wall | International Journal of Scientific Research and Engineering Trends | |
| 3 | Diksha Sanjay Jadhav | Impact of cost and time overruns on building construction project | ICACSE | |
| 4 | Prof Ajay Bhimrao Kolekar | AGCE Amphitheatre | IJSRET | |

5.7.2 Sponsored Research

(05)

Funded research:

(Provide a list with Project Title, Funding Agency, Amount and Duration)

Funding amount (Cumulative during CAYm1, CAYm2, and CAYm3)

Amount > 20 Lakh

- 5 Marks

Amount \geq 16 Lakh and \leq 20 Lakh

- 4 Marks

Amount >=12 Lakh and < 16 Lakh

- 3 Marks

Amount >= 8 Lakh and < 12 Lakh

- 2 Marks

Amount >= 4 Lakh and < 8 Lakh

- 1 Mark

Amount < 4 Lakh

- 0 Marks

2022-23 (CAYm1)

| Sr.No | Project Tiitle | Funding Agency | Amount |
|-------|---|------------------------------|--------|
| 1 | Seismic performance of multistorey building with friction damper | Skyline Construction, Satara | 20,000 |
| 2 | Rain Water Harvesting | Ananda Constructin, Satara | 10,000 |
| 3 | Design of Modular Multistoried Steel Frame Building | Ananda Constructin, Satara | 20,000 |
| 4 | Analyze & design of equitable Water supply for rural water Distribution network | Skyline Construction, Satara | 20,000 |
| 5 | Analytical investigation on mitigation of short column effect in partia; infilled frame | Shresha Construction, Satara | 15,000 |
| 6 | Design and Estimate of | Skyline Construction, Satara | 8,000 |

| | Sewage Treatment Plant | | |
|----|---|------------------------------|----------------------------------|
| 7 | Experimental analyasis on Green Concrete | Shresha Construction, Satara | 15,000 |
| 8 | Water quality analysis and modelling for lower koyana river | Ananda Constructin, Satara | 20,000 |
| 9 | Design of OPOD house and structure | Skyline Construction, Satara | 20,000 |
| 10 | A develop duel media filter model by usin pumic stone | Ananda Constructin, Satara | 20,000 |
| 11 | Retrofitting of RC structure | Shresha Construction, Satara | 20,000 |
| | | Total Amount | Total Amount(X): 1,88000/- |

2020-21 (CAYm2)

| Sr.No | Project Tiitle | Funding Agency | Amount |
|-------|---|---|----------------------------------|
| 1 | Retrofitting of ill detailed beam column connection | All India Council for Technical Education, Mumbai | 500000.00 |
| 2 | Experiment on pervious concrete using titanium dioxide | Dhumal Construction,Pvt.Ltd. Satara | 20000.00 |
| 3 | Effect of granite and marble waste to enhance the properties of silty soil | JW Infra Pvt. ltd Satara | 15000.00 |
| 4 | Strenghtening of beam and column by carbon fiber reinforced polymer | Innovative Construction Pvt. Ltd Satara | 28000.00 |
| | | | Total Amount(X): 563000.00 |

2019-20 (CAYm2)

| Sr.No | Project Tiitle | Funding Agency | Amount |
|-------|--|--|---------------------------------|
| 1 | A Study on Hollowcore foam Concrete Wall | JW Infra Pvt. Ltd. Satara, Maharashtra | 25000.00 |
| 2 | Beam Colunm Connection Under Monotonic & Cyclic Loading | Dhumal Construction Pvt. Ltd. Satara | 32000.00 |
| 3 | AGCE Rainwater Harvesting System | Arvind Gavali College of Engineering, Satara | 35000.00 |
| 4 | A Study on Hollowcore foam Concrete Wall | JW Infra Pvt. Ltd. Satara, Maharashtra | 25000.00 |
| | | | Total Amount(Y): 92000.00 |

Cumulative Amount (X + Y) = 843000/-

5.7.3 Development Acticities

(10)

Product Development:

- 1) Innovative teaching aids:
- A) Water Audit for Nagar Panchayat Koregoan"

Problem Statement: To provides convincing overview of the water use trends, effectiveness of conservation measures and potential cost and water savings.

Conclusion- This Water Audit report has been prepared under the Mazi Vasundhara Abhiyan 2.0 being implemented by the State Government to promote the five most important principles related to the Environment and their proper use and means, the report finds that:

Water audit is an essential part in saving and conserving your money and water and makes its essential for other water users.

Due to water audit, deep detail about the organization and its workings of water supply system was understood.

Nagar Panchayat's network of water supply pipes has generally performed well to date.

The Koregoan Nagar Panchayat Building has taken proper care of the use of water being used properly. Water is not wasted anywhere.

Overall Water Consumption-:

Therefore, based on the Water Audit Report the total water consumption for Nagar Panchayat building is 3551.6 liters per day and the per capita use is 32.17 lpcd.

Suggestions-:

- 1. Use of automatic shut-off valves.
- 2. Use of flow control valves.
- 3. Use of Push tap in basins and bathrooms.

Instructional Material:

1. 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 environment.

In every course, a teacher can store the instructional materials 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.

2. 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 for study and presentation purposes.

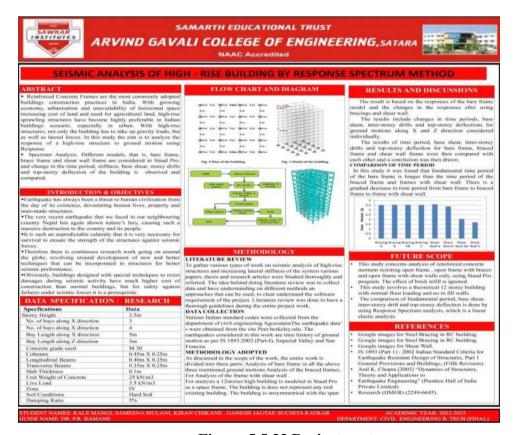
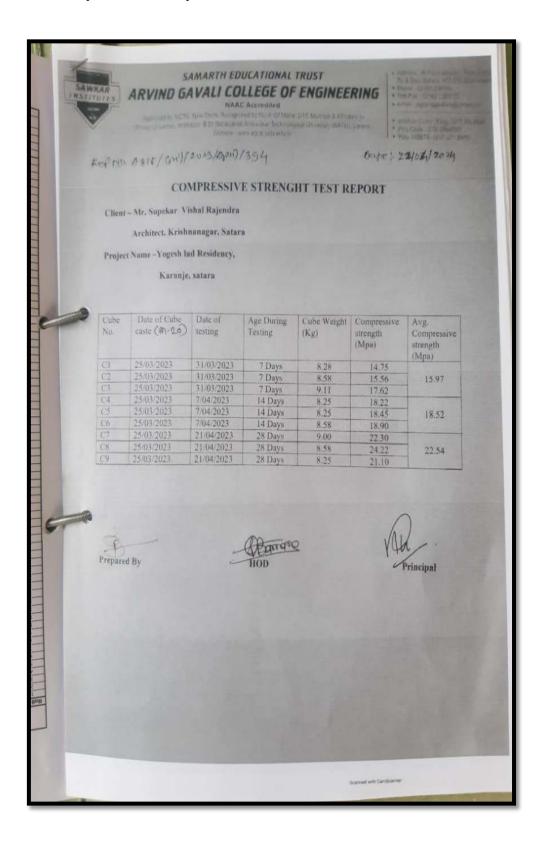


Figure 5.5.33 Project poster

5.7.4 Consultancy from industry



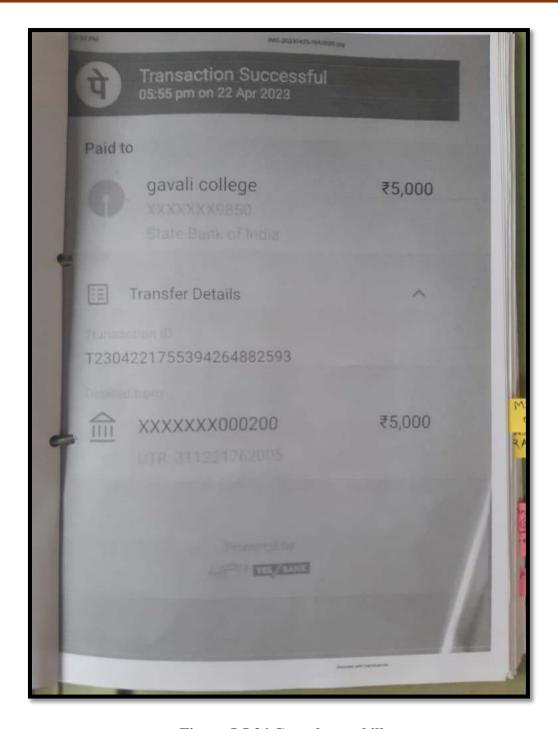


Figure 5.5.34 Consultancy bill

2022-23 (CAYm3)

| Sr. No | Project Title | Duration | Funding Agency | Amount |
|-----------|---|----------|------------------------------------|----------|
| 1. | Retrofitting of RC structure | 1Year | Shresha Construction, Satara | 20,000 |
| 2 | Seismic performance of multistorey building with friction damper | 1Year | Skyline Construction, Satara | 20,000 |
| 3 | Design of Modular Multistoried Steel Frame Building | 1Year | Ananda Constructin, Satara | 20,000 |
| 4 | Analyze & design of equitable Water supply for rural water Distribution network | 1Year | Skyline Construction, Satara | 20,000 |
| 5 | Analytical investigation on mitigation of short column effect in partia; infilled frame | 1Year | Shresha Construction, Satara | 15,000 |
| 6 | Design and Estimate of Sewage Treatment Plant | 1Year | Skyline Construction, Satara | 8,000 |
| 7 | Experimental analyasis on Green Concrete | 1Year | Shresha Construction, Satara | 15,000 |
| 8 | Compressive strength test report | | Supekar Architect | 5000 |
| | | | Total = | 123000/- |

2021-22 (CAYm2)

| Sr. No | Project Title | Duration | Funding Agency | Amount |
|-----------|--|----------|-------------------------------|----------|
| 1. | AICTE Margadarshan Mentor-Mentee Scheme | 1 Year | AICTE | 500000 |
| 2 | Analysis and compression of RCC building at various zone factors | 1 Year | Aditi Bildcon, Satara | 10000 |
| 3 | Constitutive properties of crush sand and PPC concrete | 1 Year | Aditi Bildcon, Satara | 12000 |
| 4 | Utilization of tire rubber crumb for waterproffing | 1 Year | PC Construction, Satara | 11000 |
| 5 | To develop a dual media filtering using pumice stone | 1 Year | Rudhra builders, Satara | 12000 |
| 6 | Rain water harvesting | 2 Months | Shresha Construction, Satara | 13000 |
| 7 | Stress ribbon bridge | 1 Year | Gammon india, Delhi | 10000 |
| | | | Total | 568000/- |

2020 – 21 (CAYm1):

| Sr. No | Project Title | Duration | Funding Agency | Amount |
|-----------|--|----------|------------------------------------|---------|
| 1. | A case study of Kolmba river analysi | 1 Year | AICTE | 20000 |
| 2 | Structrual audit of exisiting building | 1 Year | Shresha Construction, Satara | 10,000 |
| 6 | Rain water harvesting | 2 Months | Shresha Construction, Satara | 15,000 |
| 7 | Stress ribbon bridge | 1 Year | Gammon india, Delhi | 15,000 |
| | | | Total = | 60000/- |

Cumulative Amount (X + Y + Z) = 751000/-

5.8 Faculty Performance Appraisal and Development System (FPADS)

1. Performance appraisal system of the faculty:

Annual self-assessment for the performance based appraisal system is adopted as per the UGC notification 30th June2010 approved by Govt. Of Maharashtra state vides GR dated 15th Feb 2011. Hence it is ensured that information on multiple activities is appropriately captured.

<u>CATEGORY I</u>: TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES

Based on the teacher's self-assessment, API scores are propose (a)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.

<u>CATEGORY II</u>: CO-CURRICULAR, EXTENSION AND PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES.

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

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. Performance appraisal system of the non teaching staff:

Annual assessment for the performance based appraisal system is dopted as per guidelines by

Government of Maharashtra. Hence it is ensured that information on multiple activities is appropriately captured.

The information includes

Part A (Self appraisal): General information and academic background, courses/training programs attended/ notable achievements during the year.

Part B (Appraisal by reviewing officer(s)): Performance in Technical work and administration related activities, Co curricular, extension, professional, development related activities, academic contributions, general conduct and qualities, aptitude.

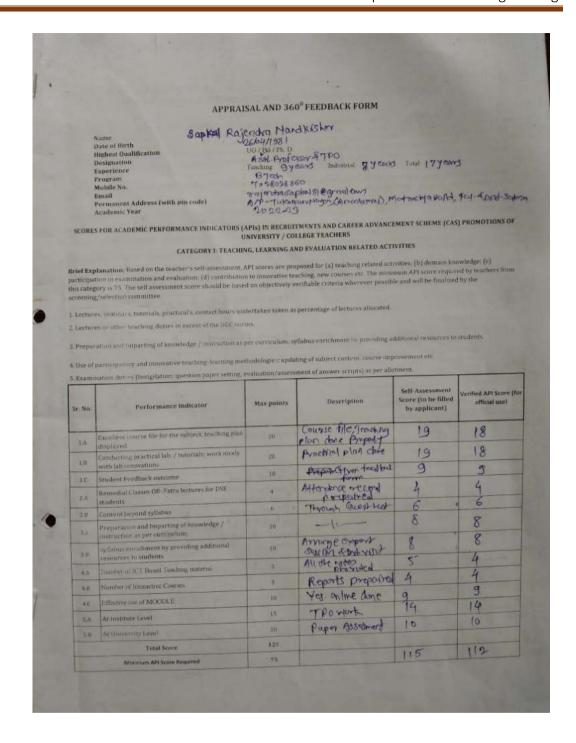
For review of performance appraisal:

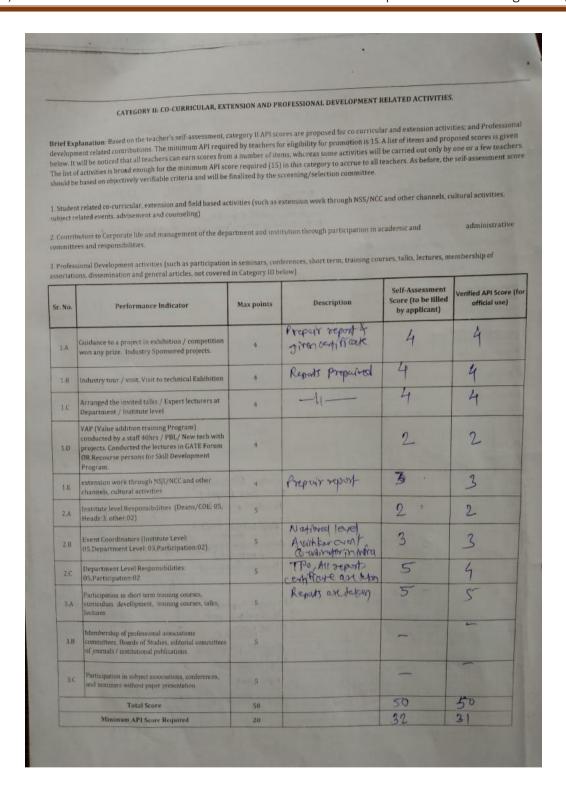
The Performance based appraisal system (PBAS) forms are submitted through Head of the Department to the staff academic committee which is also the review committee.

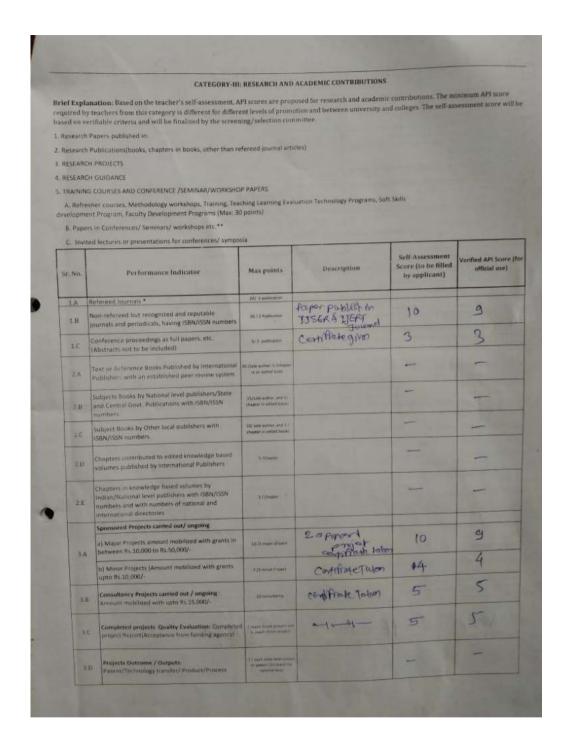
The outcome: The best part of the PBAS is that each faculty becomes aware of self weaknesses and tries to improve oneself in those areas so that he/she can score better in the next year.

Major decision taken: The score/ category obtained in the PBAS contribute to the decision about faculty appreciation. Faculty with low score is personally counseled by the Principal/Director.

Communication with stakeholders: PBAS score of faculty is available to stakeholders as per their requirement/ request.







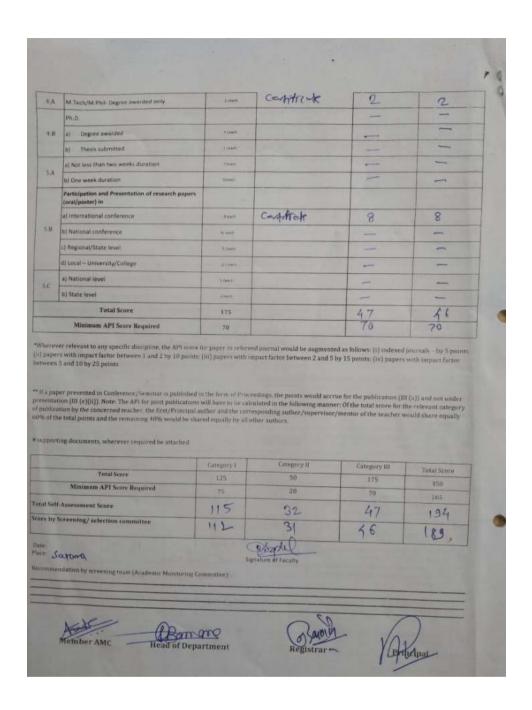
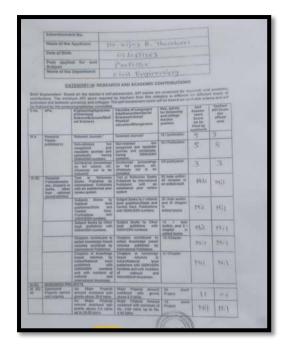
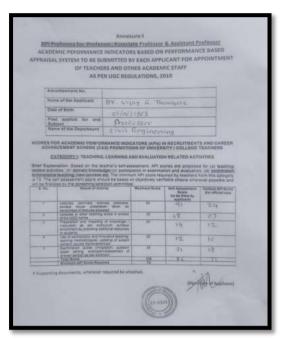


Figure 5.5.35 Faculty apprisal form





| | ortisement No. | | | | |
|---|---|--|--|---|--|
| Nam | ne of the Applicant | pr vi | icy B. Tho | mbare | |
| Date | n of Dieth | 01/00 | 11963 | | |
| Pos Sub | t applied for and | | Person | | |
| | ne of the Department | civil | Enginee | aring . | |
| urricular and equired by to will be notice arried out on equired (15) | ation. Based on the trace of extension activities, and sactions for eligibility for plants that all teachers can easily by one or a few teacher in this category to aucruscitively verifiable criteria. | Professional romation is 11 am scores froms. The list of set of leach | development rela 5. A list of items a on a number of it activities is bross ers. As before, th | ited contributions, and proposed sco ems, whereas sor denough for the n as self-assessmen | The minimum A res is given belo me activities will ninimum API sco st score should |
| 3.80. | Makare of Activi | | Maximum Score | Self Agenument Store (to be filled by applicant) | Verified API Sco (for official use |
| 1 | Statent related to-currector, field traited activities (such as biclogic 1655/16CC and at cultural activities, subject a advancement and countering) | estimation work ther sharehalls. | 2 | 12 | 09 |
| | | | | | |
| 2 | Contribution to Corpura numagement of the dis- restriction through participative and administrative con- responsibilities. | partment and in in academic milities and | -14 | 9 | 07 |
| 3 | Contribution to Corpera management of the dis methodish through participates and administrative con | partnerni and at in academiz- mittees and firstes (such az forances, short sixs, lectures, decembation | 15 | 10 | 07 |

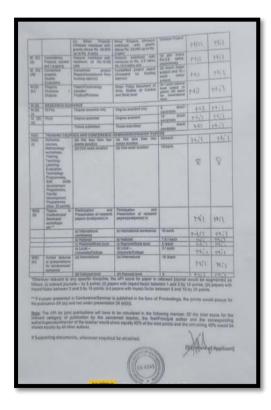


Figure 5.5.36 Faculty apprisal form

5.9: Visiting/Adjunct/Emeritus Faculty etc.

(10)

Adjunct faculty also includes Industry experts. Provide details of participation and contribution in teaching and learning and/or research by visiting/adjunct/Emeritus faculty etc. for all the assessment years.

- Provision of inviting/having visiting/adjunct/emeritus 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 \times 3 years = 9 marks)

The following are the details for the Visiting faculty in the department:

| Academic Year | Name of Visiting Faculty | Class | Duration in Hrs |
|------------------|--------------------------------|--------------------------|--------------------|
| 2022-23 | Mr. Sohel Khan | Btech. (Civil Engg.) | 54 |
| 2021-22 | Snehal Prathamesh Pawar | SY Btech (Civil) | 54 |
| 2020-21 | Ms. Jayashree Khatal | SY & TY Btech (Civil) | 54 |
| 2019-20 | Mr. Ghanshyam Matkar | TY Btech (Civil) | 54 |

| CRITERION | FACILITIES AND TECHNICAL | 80 |
|-----------|--------------------------|----|
| 06 | SUPPORT | |

6.1 Adequate and well equipped laboratories, and technical manpower (30)

A. Adequate well-equipped laboratories to run all program-specific curriculum (20)

Civil 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

| | Name of the | No. of students | Name of the | Weekly utilization status (all the courses | Techni | cal Manpower | support |
|------------|--------------------------------------|-------------------------------------|--|--|-----------------------------------|---------------|---------------|
| Sr. No. | Laboratory | per setup (Batc h Size) | Important equipment | for which the lab is utilized) | Name of the technical staff | Designation | Qualification |
| 1. | Environment Engineering Lab | 20 | 1.PH Meter, 2.BOD Incubator 3.Turbidity Meter 4. Jar Test Apparatus | SY(Sem-IV) ENV Lab – 6 hours Btech (Sem-VII) PP Lab 6 hours | Ms. Sankpale P.P. | Lab Assistant | BTech Civil |
| 2 | Mechanics of Solid lab | 20 | 1.Universal Testing Machine, 2.Hardness Testing m/c 3. Impact Testing m/c, | SY (Sem-III) Mos- 6 hours Btech (Sem-VII) – 6 hours | Ms. Patil S.V. | Lab Assistant | BTech Civil |
| 3 | Transportation Engineering Lab | 20 | 1.Abrasion TestApparatus,2.Softening Point | TY (Sem-V) TRE Lab - 6 hours Btech (Sem-VII) – DDRS | Ms. Sankpale P.P. | Lab Assistant | BTech Civil |

| | | | Test apparatus, | Lab 6 | | | |
|---|-------------------------------|----|--|--|----------------------|---------------|---------------|
| | | | 3.Flash & FirePoint Testapparatus,4.PenetrationTest Apparatus, | hours | | | |
| 4 | Soil Mechanics Lab | 20 | 1.Standard Proctor, 2.Direct Shear Test Apparatus 3.Unconfined Compression Test 4.Triaxial Test Apparatus | TY (Sem-V) Soil Mech Lab- 6 hours TY (Sem-V& VI) Seminar - 2 hours | Ms. Sankpale P.P. | Lab Assistant | BTech Civil |
| 5 | Concrete Technology Lab | 20 | 1.Compression Testing Machine, 2.Compaction Factor Test Apparatus, 3.Vee-Bee Consistometer Test Apparatus, | hours | Ms. Hake S.V. | Lab Assistant | Diploma Civil |
| 6 | Hydraulics-II Lab | 20 | Calibration of V-Notch & Rectangular Notch Centrifugal Pump Pelton Wheel Turbine Francies Turbine Reciprocating Pump Apparatus | SY (Sem –IV)- Hydraulics lab II - 6 hours | Ms. Patil S.V. | Lab Assistant | Diploma Civil |

Department of Civil Engineering

| 7 | Surveying & Building Planning Lab | 20 | 1. Dumpy Level 2. Theodolite 3. Total Station 4. Auto Level | SY (Sem-III) Surveying lab - 6 hours TY (Sem-VI) Mini Project - 6 hours SY (Sem-IV) BPD Lab - 6 hours | Ms. Sankpale P.P. | Lab Assistant | BTech Civil |
|---|---|----|---|---|----------------------|---------------|---------------|
| 8 | Engineering Mechanics Lab | 20 | Law of Polygon of forces Jib Crane Apparatus Support Reaction of Beam Bell Crank lever apparatus | FY (Sem-I & II)=18 hours | Ms. Hake S.V. | Lab Assistant | Diploma Civil |

6.2 Additional facilities created for improving the quality of learning experience in laboratories (25)

Civil 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. | Internet Facility | Internet facility with Bandwidth 300 Mbps and Wi-Fi of 3 Mbps/User is provided. | Seminar/Mini- projects/Assign ments/Self Learning | 36 Hours/ Week | Courses specified in Curriculum, to access Moodle, | PO5, PO8,PO10 & PO12 PSO2 |
| 2. | Smart Class Room | Intelligent Interactive Panel& projector facility with the seating capacity of 32 | Smart class room are utilized for animation and video lectures. These digital teaching learning is more effective than traditional teaching | 36 Hours/ Week | Courses specified in Curriculum like Artificial Intelligence, Deep Learning, Big Data Analytics, Business Intelligence etc. | PO5, PO8,PO10 PSO 1 |

| | | | | | <u>.</u> | |
|----|-----------------|------------------|--------------------------------|-------------|------------------------|------------|
| 3. | | | • To keep | 36 | To grasp important | |
| | | Institute having | student abreast | Hours/Week | concept of various | |
| | | NPTEL Local | with latest | | subjects and modern | |
| | NPTEL Local | Chapter & | technology | | tools used in computer | |
| | Chapter | server of | | | science and | |
| | T. T. | NPTEL | To provide | | engineering. | |
| | | Content | national level | | | PO 1, PO2, |
| | | | platform to | | | PO3, PO5 |
| | | | student | | | DCO2 |
| | | | | | | PSO2 |
| 4. | | | • To keep | 36 | | |
| | | | student abreast | Hours/Wee | | |
| | | | with latest | k | | PO1, PO2, |
| | | | technology | | | PO3, PO5, |
| | Digital Library | Del Net | | | Project work | PO12 |
| | Digital Bierary | Berriet | - To masside | | Troject work | PSO1 |
| | | | To provide | | | |
| | | | national level | | | |
| | | | platform to | | | |
| | X7* . 1 X 1 | | student | | | |
| 5. | Virtual Lab | Under Virtual | Integrate class | Virtual lab | Better Understanding | PO1, PO4, |
| | | Labs project, | room learning | experiment | of the subject, | PO5 |
| | | over 100 | with virtual | conduction | parametric analysis | PSO1, |
| | | Virtual Labs | experimentation | | over wide range and | |
| | | consisting of | | range of | knowledge beyond | |
| | | approximately | | parameters | syllabus. | |
| | | 700+ web- | | | | |
| | | enabled | | | | |
| | | experiments | | | | |
| | | were designed | | | | |
| | | for remote | | | | |
| | | operation and | | | | |
| | | viewing which | | | | |
| | | is co-ordinate | | | | |
| | | by IIT | | | | |
| | l | l | l . | l . | l . | 1 |

| | | Hyderabad &NITK Surathkal through the initiative of Ministry of Human Resource Development (MHRD) | | | | |
|---|--|--|---|------------------|------------------------------------|---|
| 6 | Surveillance Cameras for exam rooms | IP cameras | • To enhance the security of the department | 36 Hours/Week | Security purpose | PO5 PSO1 |
| 7 | 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 | | Courses specified in Curriculum | PO5, PO8,PO10 PSO 1 |
| 8 | Departmental Library | Program Specific text books and reference books | To provide additional support for students | | Courses specified in Curriculum | PO1, PO2, PO3, PO5, PO12 PSO 1 |

6.3 Laboratories: Maintenance and overall ambiance

(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.

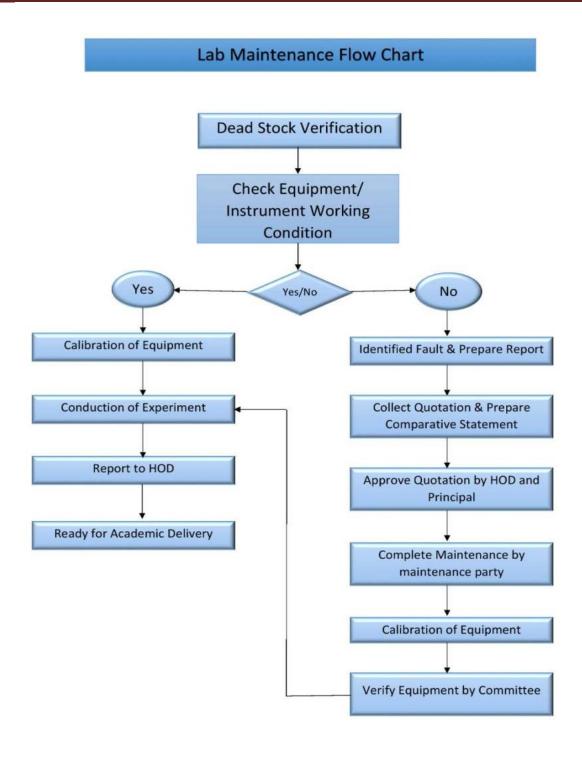


Fig. 6.3.1 a Flow Chart of Lab Maintenance Process

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.

F) Calibration Records-:

- 1) To regulate the calibration of equipment and facility for achieving desired accuracy, precision and performance.
- 2) Maintained calibration certificate in maintenance record file.

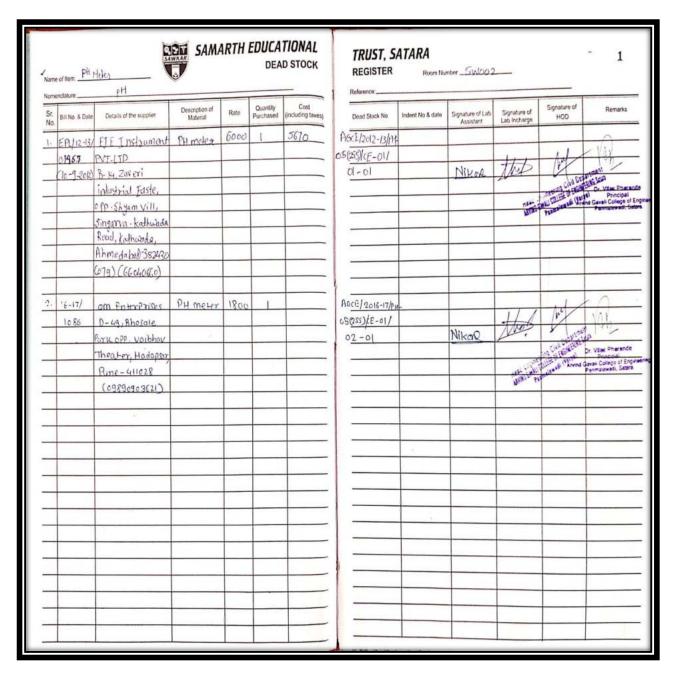
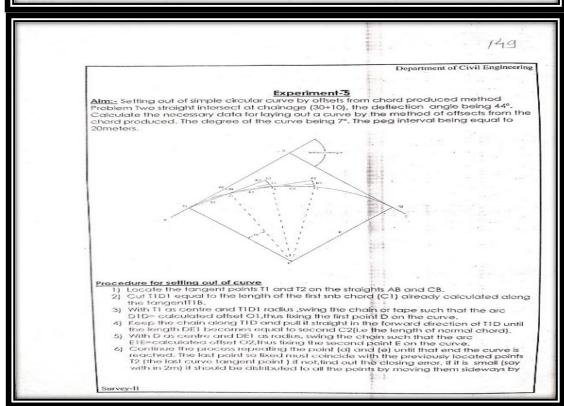


Fig. 6.3.1 b Sample of Dead Stock Register

Arvind Gavali College of Engineering Department of Civil Engineering Lab Name-: Surveying Laboratory - II Lab No. 003 LIST OF EXPERIMENT 1. Tacheometry a) Determination of tachometric constants, b) Determination of grade of a line. 2. Use of subtense bar for distance measurement. 3. Setting out of curves a) Simple circular curves, b) Transition curves 4. Study of topo sheets 5. Study of Aerial Photographs under Stereoscope 6. Traversing by Total Station. Projects: 1) Road Project 2) Radial Contouring. 3) Block Contouring Project 4) Theodolite Traversing



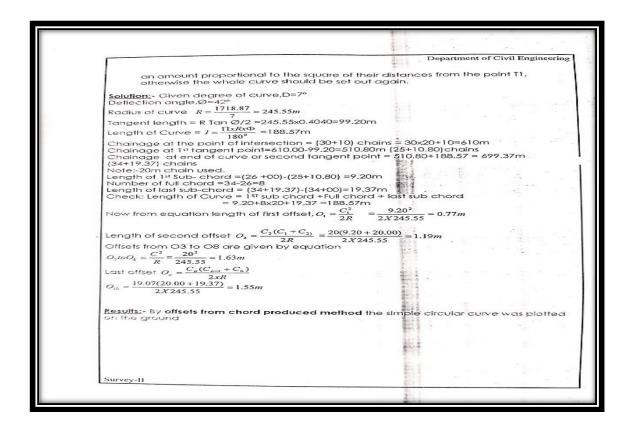


Fig. 6.3.1 c Sample of Lab Manual

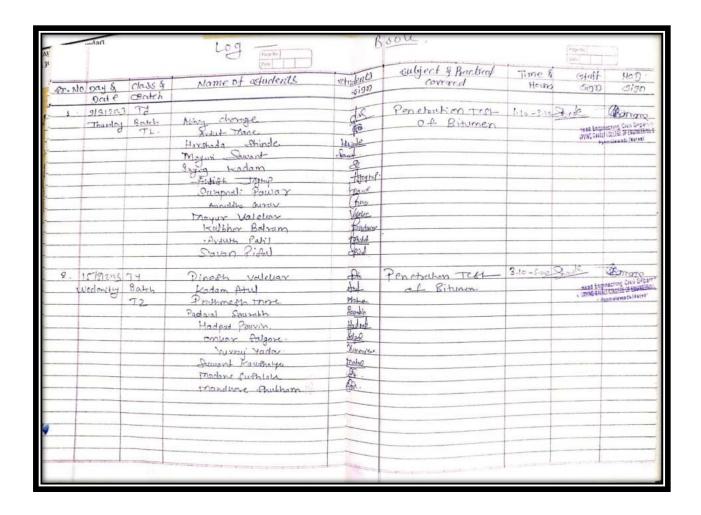


Fig. 6.3.1 d Sample Logbook

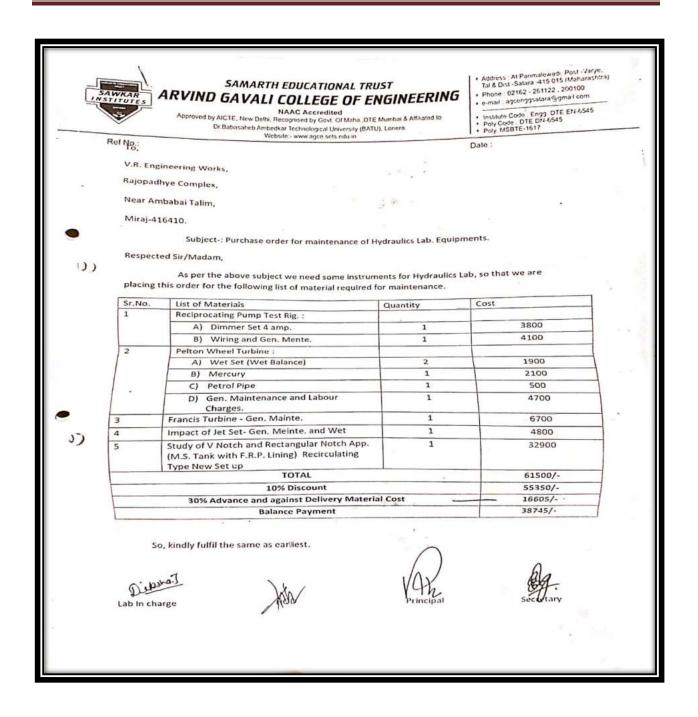


Fig. 6.3.1 e Sample of Purchase Order

| No. : M/s. / | CASH / CREDIT V. R. ENGINEER "Rajopadhye Complex", Near Amba Manufacturers of: Critical Jobs Machin Equipment, Building Model's, An 178 TAX INVO | ING V bai Talim, Mi ning, Fabri atomy Mo | WORKS RAJ-416410. ication & Er del's & Trac Date: | ngineering |
|---|---|---|--|---|
| Sr. No. | Particulars | Quantity | Rate | Amount Rs. Ps. |
| 3 41 | Reciprocating Pimp Test Rig: Al Dimmer Set 4 amp. Bl Wixing and Gen Mente. I Petton wheel Turbine.: Al Wet Set (wet Bollance) Bl Mercury cl Petrol Pipe Dl Gen. Maintenance & Labour che I Francis Turbine-Gen. Meintes & Impact of Tet Set-Gen-Meintes & I Study of V Notch & Rectangular IV APP (M. S. Tank With F.R.P. Lining) Recirculating Type New Set up | wet 1 | Total 10/0 Piscon Material | 3800=00 4100=00 1900=00 2100=00 500=00 4,700=00 4,800=00 32,900=00 55,350=00 16,605=00 |
| | Balance | | | 38,745=00 |
| VAT TIN N CST TIN N * I/We hereby cer is in force on the | Rs. Threety Figit thousand SC No. 27720213631 V No. 27720213631 C nity that mylour Registration certificate under the Maharashtra Value Added Tax A date on which the sale of goods specified in this Tax Involce is made by melus it sale covered by this Tax Invoice has been effected by melus and it shall be act or of soles while filling of return and the due tax, if any, payable on the sale has be | or 2002, and that counted en paid | V. R. ENG | Five Ohly. |

Fig. 6.3.1 f Sample of Purchase Bill

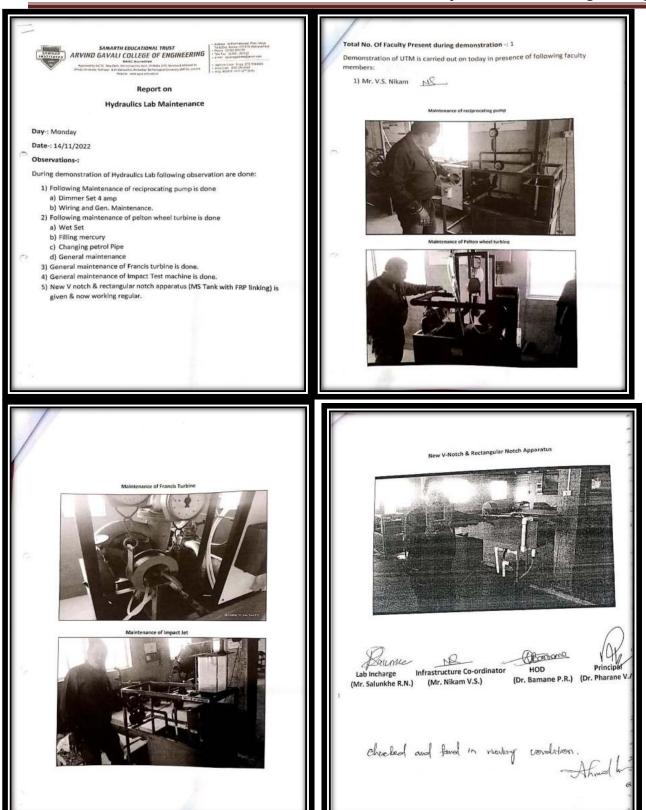


Fig. 6.3.1 g Report of Equipment Working after Maintenance

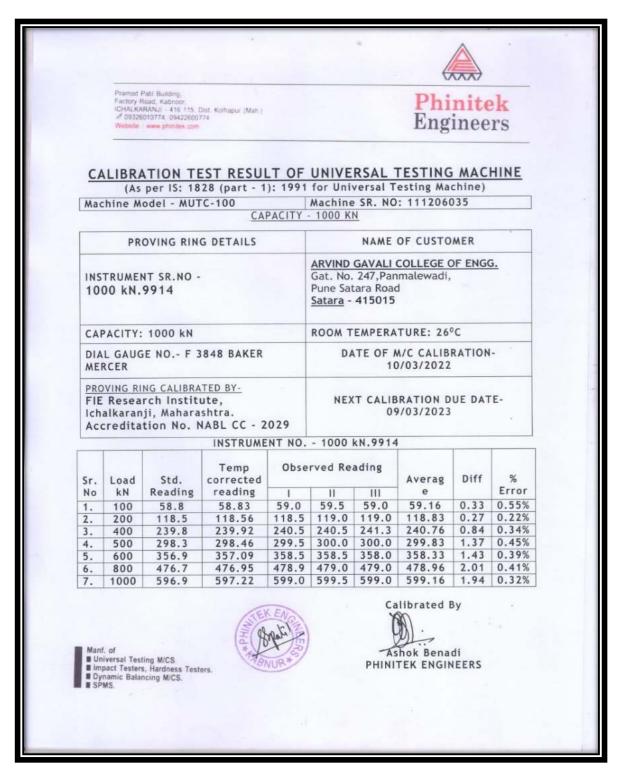


Fig. 6.3.1 h Sample of Calibration Certificate

| | | 2 | 0 | | | |
|-------------------------|--------------------|--------------------|---|--|---|--|
| | avali College of | | Satara | | | |
| | Department of Civ | | | | | |
| L | ab Timetable (Ever | | | | Class | e-TV |
| 10.30-11.30 11.30-12. | 10 12.30-01.10 | 1.10-2.10 | 2.10-3.10 | 3.10-3.30 | 3.30-4.30 | 4.30-5.30 |
| | | Mini-Project(TY) | | | | 100 |
| | | | | | | |
| | | | | | TRE PR (| SSS) T-2 |
| | | TRE PR | (SSS)T-1 | | | |
| | | | | | | |
| 7 | , | AM | Co-ordinato | ı | HO Head Engined INVINO BAVALL CO Panm | Borrono Pring Civil Department NLEGE OF ENGINEERING SAMP alewadi (Varve) |
| | U | Lab Timetable (Eve | Lab Timetable (Even Sem)2022-2 Year- 2 0.30-11.30 11.30-12.10 12.30-01.10 1.10-2.10 Mini-Pro | Lab Timetable (Even Sem)2022-23 Year- 2022-23 0.30-11.30 11.30-12.10 12.30-01.10 1.10-2.10 2.10-3.10 Mini-Project(TY) TRE PR (SSS)T-1 | Lab Timetable (Even Sem)2022-23 Year- 2022-23 0.30-11.30 | Lab Timetable (Even Sem)2022-23 Year- 2022-23 Clas 0.30-11.30 11.30-12.10 12.30-01.10 1.10-2.10 2.10-3.10 3.10-3.30 3.30-4.30 Mini-Project(TY) TRE PR (SSS)T-1 TRE PR (SSS)T-1 |

Fig. 6.3.1 j Laboratory Timetable

| | SAWKAR | A A | RVIND GAVALI COLL | EDUCATIONAL THE LEGE OF ENG AAC Accredited ORY CARD | INEERING | , SATARA Card No. 0 | í |
|-----------|--|--------------------------|---|--|--------------------------------------|--------------------------------|--|
| Na Tot | ime of Depar me of Equipri al Cost ad Stock No. | 96.18 | ingineering. It Testing Machine. | Laboratory Date of Purc | :: hase : fress of Supplier :: | Solid Mech 22-09- | anic <u>s</u> (009 2011 ion Inc. 208 |
| Sr No. | Bill No. & Date | Nature of Maintenance | Particulars of Maintenance | Name of the Maintenance Party | Expenditure (Rs.) | Sign. of Concerned Staff | HOD Sign |
| 1 | 188 | 1 2 4 | (4) O Load Points plead/Unload leaver c) Load striker dit- spanner e) Load centre gage 11 Break Assembly 3) dero albration | V.R. Engineering Works, Miraj. | 16,900/_ | Kul (ap) | (8) Amoro |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | 17 11 | | |
| 5 | | | | | | | |
| 6 | | | | | | | |

Fig. 6.3.1 k Maintenance History Card

2) Overall Ambiance:

Equipment:

- 1. All laboratories are well furnished with all equipment/ instruments as per requirements of curriculum of courses and to meet the correct performance of the test and measurements.
- 2. All equipment are maintained in good working condition.

Accommodation and Environment:

- 1. The laboratories are provided with adequate working space.
- 2. Do's and Don'ts and Safety measures rules are displayed in each laboratory.
- 3. Required amount of seating arrangement are provided in instructional area.
- 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)

The project laboratory offers the opportunity to gain valuable hands-on experience with adequate facilities and equipment. Separate Space is provided for project lab & some different equipment are provided for the project work.

a) Advanced Construction Material Laboratory:

Recent trends in construction demands the use of new and sophisticated materials in building construction, road construction and in bridge construction etc. Like variety of tiles which is used for flooring that accommodate the environment conditions like cool in summer days are available in market. Students are need to aware about all this advanced construction materials. Advanced construction material laboratory give access to students to get hands-on experience of all these materials. This laboratory consists of various advanced construction materials. In addition to this students are made to be aware of types of bricks and other construction materials. This laboratory is also helpful in understanding of construction materials which are useful in on site generally.

b) Micro Irrigation Laboratory

- 1. Field Capacity Kit Fe212 A-field capacity (Cc) corresponds to the superior limit of available water and represents the moisture of the soil after drainage of the water contained in the macrospores by gravity action
- 2. Permanent Wilting Point Kit Fe12 B The permanent wilting point is the point when there is no water available to the plant.
- 3. Falling Head Permeability Measure Instrument osk 2796- The falling head permeability test involves flow of water through a relatively short soil sample connected to a standpipe which provides the water head and also allows measuring the volume of water passing through the sample.
- 4. Slant infiltrometer infiltration Frame Osk 2821-An infiltrometer measures the infiltration of water into a substrate such as soil. Or another definition for an infiltrometer is a measure of the movement of water into, and through, soils.
- 5. Dielectric automatic Soil Moisture Measuring Instrument Osk 2801- measure the water content in the soil and can be used to estimate the amount of stored water in the soil horizon.

- 6. Sprinkler Irrigation System Sk 10 L- water is carried is through a network of pipes under medium to high. Pressure and is forced through a nozzle of small diameter and sprayed on the ground or crop. Like a rain.
- 7. Drip Irrigation System T170-Drip irrigation is the most efficient water and nutrient delivery system for growing crops. It delivers water and nutrients directly to the plant's roots zone,

c) Plumbing Laboratory

- 1. Hand Drill Machine- Widely used in construction, carpentry, metalworking, assembly, and maintenance
- 2. Slide Wrench-It used to hold or turn pipes or circular bars.
- 3. Parrot Plier to eliminate nut and bolt failure, patented reinforcing edge to minimize stress breakage and laser-hardened teeth to provide a better, longer lasting grip.
- 4. Wheel Pipe cutter A wheel pipe cutter (also known as a tubing cutter) is a circular-shaped pipe cutter that utilizes a cutter wheel to cut pipes.
- 5. CPVC Pipe Cutter- Pipe cutters are tools used for slicing or cutting pipes.
- 6. Allen Key set placing one of the ends inside a fastener with a hexagonal socket head and turning it.

d) Safety Laboratory

- 1. Safety goggles- Safety goggles are the ideal form of lab safety gear for your eyes because they shield both sides of your face to prevent materials from entering your eyes.
- 2. Safety showers- In the case of hazardous chemicals coming into contact with your skin, it is extremely important to have a way to promptly rinse off the substances. As such, all laboratories should include a safety shower.

- 3. Lab coat- Long white coats help prevent dangerous liquids and particles from contacting your skin. For ideal protection, lab coats should always be buttoned closed.
- 4. Protective gloves- When you're working in a lab, your hands are often at the most risk for coming into contact with hazardous chemicals. By wearing suitable protective gloves, you can reduce your risk of injury.
- 5. Fire extinguishers- Fires can occur whenever electrical equipment and flammable materials are being handled, so a fire extinguisher is a very important piece of lab safety equipment.



Fig.6.4 a Project Demonstration

6.5 Safety measures in laboratories

(10)

The department has followed all safety rules & regulations as per the norms. The lab In charges & Lab assistant are responsible for providing safety policy in our lab. General safety measures in each lab are mentioned in table no.6.4.

Table 6.4: Details of Safety Measures in Laboratories

| Sr. No. | Laboratory Name | Safety Measures |
|---------|--------------------------------|---|
| 1 | Environmental Engineering Lab | 1. Do's & Don'ts are displayed in lab. |
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab. |
| | | 4. Safety gloves are kept in lab. |
| 2 | Building Planning & Design Lab | 1. Do's & Don'ts are displayed in lab. |
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab. |
| | | 4. Good condition drawing table are kept in lab. |
| | | |
| 3 | Mechanics of Solid Lab | 1. Do's & Don'ts are displayed in lab. |
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab. |
| | | 4. Wear proper safety shoes in concrete/materials |
| | | labs. |
| | | 5. Fire extinguishers are placed in lab. |
| | | 6. Electrical Safety Instructions are displayed. |
| | | |

| 4 | Transportation Engineering Lab | 1. Do's & Don'ts are displayed in lab. |
|---|--------------------------------|---|
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab |
| | | 4. Fire extinguishers are placed in lab. |
| | | 5. Bitumen are handled carefully. |
| 5 | Soil Mechanics Lab | 1. Do's & Don'ts are displayed in lab. |
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab |
| | | 4. Wear proper safety shoes in concrete/materials |
| | | labs. |
| | | 5. Fire extinguishers are placed in lab. |
| | | 6. Hand gloves are kept in lab. |
| 6 | Concrete Technology Lab | Do's & Don'ts are displayed in lab. |
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab. |
| | | 4. Wear proper safety shoes in |
| | | concrete/materials labs. |
| | | 5. Hand gloves are kept in lab. |
| | | |
| 7 | Hydraulics Lab | Do's & Don'ts are displayed in lab. |
| | Trydiaulies Lau | |
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab |
| | | 4. Fire extinguishers are placed in lab |

| 8 | Surveying Lab | 1. Do's & Don'ts are displayed in lab. |
|---|---------------------------|---|
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab |
| 9 | Engineering Mechanics Lab | 1. Do's & Don'ts are displayed in lab. |
| | | 2. First aid box, are kept in the lab. |
| | | 3. Safety Postures displayed in the lab |
| | | 4. Labeling is done on every equipment. |

| CRITERION | CONTINUOUS IMPROVEMENT | 50 |
|-----------|------------------------|----|
| 07 | | |
| | | |

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: 2021-22

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Target | 2.15 | 1.85 | 1.99 | 1.82 | 1.91 | 1.95 | 1.89 | 1.92 | 2.14 | 2.24 | 2.07 | 2.09 | 1.90 | 1.66 |
| Attainment | 2.21 | 2.03 | 1.93 | 1.79 | 1.83 | 1.82 | 1.74 | 1.76 | 1.74 | 1.90 | 1.97 | 2.04 | 2.00 | 1.68 |

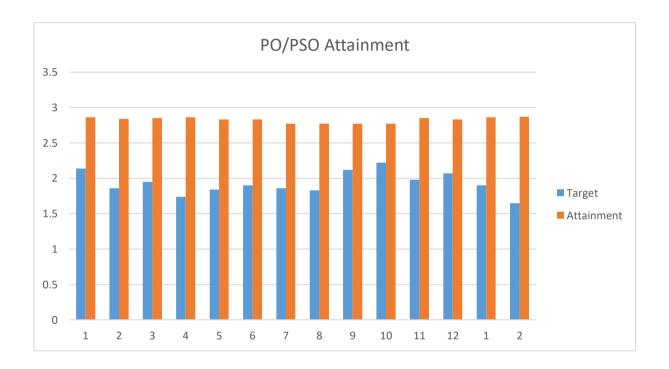


Fig. 7.1a PO Target vs. PO Attainment for year 2021

7.1. Actions taken based on the results of evaluation of each of the COs, POs & PSOs POs Attainment Levels and Actions for improvement (2021-2022)

| POs | Target Level | Attainment Level | Observations |
|------|-----------------|---------------------|---|
| | tals and an | | the knowledge of mathematics, science, engineering cialization to the solution of complex engineering |
| PO 1 | 2.15 | 2.21 | The technical knowledge acquired by the students in the subject need to be enhanced further. After analyzing results and interacting with students, it was attributed that still they need more practice on design related problems with the help of fundamental knowledge of mathematics and science. |

Action Taken:

- 1. Additional guest lectures were conducted to address the technical knowledge required as prerequisite for the subject.
- 2. Extra classes were conducted to give thorough practice in problem solving.
- 3. Arrangement of site visit for improvement of technical knowledge.

| POs | Target Level | Attainmen tLevel | Observations |
|-----------|-----------------|---------------------|---|
| PO-2. | Problem an | alysis: Identify, | formulate, review research literature, and analyze |
| complex e | engineering p | roblems reaching | g substantiated conclusions using first principles of |
| mathemat | tics, natural s | ciences, and engi | neering sciences. |
| PO 2 | 1.85 | 2.03 | 1. Target was reached. |
| | | | 2. Able to understand mix proportioning techniques |
| | | | for field applications. |
| A .: T . | | | |

Action Taken:

- 1. Additional classes were conducted on mix proportioning techniques.
- 2. Additional workshops were conducted for field applications.

| POs | Target | Attainment | Observations |
|-----|--------|------------|--------------|
| | Level | Level | |

PO-3. 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.

| | | 0.0.0.0. | |
|------|------|----------|---|
| PO 3 | 1.99 | 1.93 | Difficulty was observed in preparing the drawings and documents for client that details the project scope, quality, and design. |
| | | | |

Action Taken:

- 1. More number of classes/tutorials were conducted for the courses that contribute thedesign and development of solutions.
- 2. Importance was given in the selection of projects that include drawings and design part.

| POs | Target Level | Attainment Level | Observations |
|-------------|-----------------|---------------------|--|
| research r | nethods inclu | uding design of e | nplex problems: Use research-based knowledge and xperiments, analysis and interpretation of data, and valid conclusions. |
| PO 4 | 1.82 | 1.79 | Target was exactly reached but needs improvement. |
| Action Take | nn: | | |

- 1. To improve practical knowledge, hands-on sessions/demonstration classes were conductedbefore executing the experiment.
- 2. Conducted industrial visit on new innovative technology in construction field.

| POs | Target Level | Attainment Level | Observations |
|----------|-----------------|---------------------|--|
| modern e | ngineering an | _ | t, and apply appropriate techniques, resources, and ng prediction and modeling to complex engineering mitations. |
| PO 5 | 1.91 | 1.83 | Target achieved. Usage of additional software's, latest testing tool |

Action Taken:

- Hands-on session were conducted to learn new tools.
- Conducted Extra practical session.

| POs Target Attainment Level Observ |
|------------------------------------|
|------------------------------------|

PO-6. 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.

| PO 6 | 1.95 | 2.80 | 1. Target was reached |
|------|------|------|--|
| | | | 2. Profession Practice attainment is improve |

Action Taken:

- 1. Expert session on Professional practice were arranged.
- 2. Students were suggested to emphasize more on social issues in their project work designed to serve society.

| POs | Target Level | Attainment Level | Observations | | |
|-------|-----------------|---------------------------------------|---|--|--|
| PO-7. | Environme | nt and sustainab | vility : Understand the impact of the professional | | |
| | | n societal and e d for sustainable | environmental contexts, and demonstrate the development. | | |
| PO 7 | 1.89 | 1.74 | Following is the observation for the difference between attainment and target 1. Students should pay special attention while applying principles of preventive engineering and sustainable development to an engineering activity during lab works and project works | | |

Action Taken:

- 1. Students were advised to select final year projects that develop an ability to apply principles of sustainable design and development.
- 2. Use principles of preventive engineering in laboratories to enhance sustainability.

| POs | Target Level | Attainment Level | Observations | | | |
|------------|-----------------|---------------------|--|--|--|--|
| PO-8. | Ethics: Ap | ply ethical prin | ciples and commit to professional ethics and | | | |
| responsibi | lities and nor | ms of the engine | ering practice. | | | |
| PO 8 | 1.92 | | Following are the observations for the difference between attainment and target: 1. A constructive approach of students is required to be developed toward ethical practices in engineering education. 2. Students should pay special attention to ethical practices while doing project works | | | |

Action Taken:

- 1. Additional classes on professional ethics and norms of the engineering practice were conducted.
- 2. Maximum care was taken to include professional ethics during the execution of project work.

| POs | Target Level | Attainment Level | Observations | | |
|-------------|-----------------|---------------------|--|--|--|
| | | | ion effectively as an individual, and as a member or | | |
| leader in o | diverse teams | , and in multidisc | iplinary settings. | | |
| | 2.14 | 1.74 | 1. Courses like seminar, miniproject, | | |
| PO 9 | | | and projects involve individual and | | |
| | | | team work. | | |

Action Taken:

- 1. Continues presentations were kept for seminar and project to enhance individual and tem work.
- 2. Students were encouraged to participate more in the activities like NSS and industrial visits etc.

| POs | Target Level | Attainmen tLevel | Observations |
|-----|-----------------|---------------------|--------------|
|-----|-----------------|---------------------|--------------|

PO-10. 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.

| PO 10 2.24 1.90 | After interacting with students, it was identified that additional focus required on development ofcommunication skills. |
|-----------------|--|
|-----------------|--|

Action Taken:

- 1. Communication Soft Skills (CSS) classes were conducted.
- 2. Student Association activities were carried out.

| POs | Target Level | Attainment Level | Observations | | | | |
|-------------|---|---------------------|---|--|--|--|--|
| PO-11. Proj | PO-11. Project management and finance: Demonstrate knowledge and understanding of | | | | | | |
| theenginee | ring and ma | anagement princi | ples and apply these to one's own work, as a | | | | |
| member an | id leader in a | a team, to manag | e projects and in multidisciplinary environments. | | | | |
| PO 11 | 2.07 | 1.97 | It was observed that still few courses are required to be improved. | | | | |

Action Taken:

- 1. Focus was given to motivate the students by explaining the importance of doing internship and project work.
- 2. Awareness on project management was created by forming project assessment and evaluation committee.

| POs | Target Level | Attainment Level | Observations | | |
|-------|-----------------|---------------------|---|--|--|
| | _ | • | need for, and have the preparation and ability to ning in the broadest context of technological change. | | |
| PO 12 | 2.09 | 2.04 | Target was reached Through the analysis reports, it is observed that many of the students need to be improved in the knowledge base of the country's engineers and our capacity for innovation and competition. | | |

Action Taken:

- 1. Pre-requisite topics to ensure the continuity in learning for analytical courses were conducted.
- 2. Along with the course notes, the video contents were developed to enhance learning experience. Use of online media was encouraged.

| PSOs | Target Level | Attainment Level | Observations | |
|------------|---|---------------------|---|--|
| PSO1: Cap | PSO1: Capability of collaborative learning to provide optimal solution to various onsite | | | |
| problems l | keeping sensi | tivity towards so | ciety and environment. | |
| | | | 1. Target was reached | |
| PSO 1 | 1.90 | 2.00 | 2. It was observed that still few courses | |
| | | | requiredimprovement. | |

Action Taken:

- 1. More number of classes /tutorials were conducted to strengthen the courses.
- 2. Conducted workshop on MS office.

2.

| PSO2: Acquire art of effective communication to pursue lifelong learning and leadership skill at workplace. PSO 2 1.66 1.68 2. It was observed that still few courses requiredimprovement. | PSOs | Target Level | Attainment Level | Observations | |
|--|---------------|-----------------|---------------------|--|--|
| PSO 2 1.66 1.68 1.68 1. Target was reached 2. It was observed that still few courses | • | t of effective | communication | to pursue lifelong learning and leadership skill | |
| PSO 2 1.66 1.68 2. It was observed that still few courses | at workplace. | | | | |
| | PSO 2 | 1.66 | 1.68 | 2. It was observed that still few courses | |

Action Taken:

- 1. Expert lectures on business communication, and training on software like Primavera (for planning, managing and executing of project work) were conducted.
- 2. Students were motivated to learn design and analysis software's like STAD PRO and Ansys to work on real life problems during their project work.

Academic audit and actions taken thereof during the period of assessment (10)

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 session plan, notes, assignments, lab manual, question banks etc. are checked and academic monitoring checklist 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

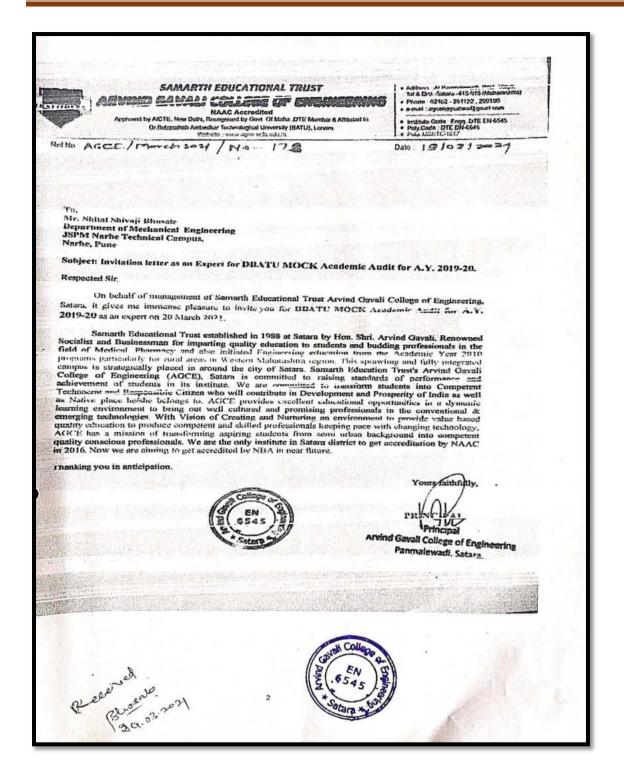


Figure 7.2.a Sample Invitation Letter for External Academic Audit

Dr. Babasaheb Ambedkar Technological University Academic Audit of Engineering Colleges Format - II (To be filled individually by Faculty Member)

| | Centre/SubCentre: District: District: | | | | |
|-------|--|--|---|----------------------|--|
| 1 | Arvind Gavali College of Engineering, Panimalewam, Post | | | | |
| 2 | Name of the Faculty Member | Mr. R. M. Salanuhe. | | | |
| 3 | Name of the Subject taught during academic year | BALLIS | | 12-23) | |
| 4 | Date of Joning in Degree College/Date of Joning in the present Institution | 2022 . | Date of Retirement: | Recommendation/Sug | |
| S.No. | Activity | Status (Give Details, not just Yes/No) | stong with grade Alfanoth/Bl Anislatorry/C (poor) after Observation | gestions by Academic | |
| | | Curricular Aspec | 15 | | |
| 5 | Annual Curricular plan | Arudenic calenderated | A | | |
| 6 | Curriculum enrichment / Value addition | Mo | ~ | | |
| 7 | Whether conducting Add on Courses & role in conduct of course | HPTEL Recon | B | | |
| 8 | Feedback from students | Fredbackath | - A | | |
| | Tea | ching, Learning and | Evaluation | | |
| 9 | Teaching Diary & Teaching Plan | Making plan attacked | A | | |
| 10. | Coverage of syllabus so far (%) | muhu Report | A | | |
| 11 | Record of students attendance | altendancesher | | | |
| 12 | Use of ICT - PPT & Audio-video Aids | Usage Percon | B | | |
| 13 | Record of students assignments | Asc monent- | R | | |
| 14 | Record of field trips | Sold hipme | | | |
| 15 | Record of student seminars conducted | MO | _ | | |
| 16 | Record of academic competitions conducted if any (Quiz, Role play) | Mo | _ | | |
| 17 | Other Student centric learning Methods | Mo | - | | |
| 18 | Record of Extension Lectures given | Mo | _ | | |
| 19 | Record of invited lectures arranged | Craut Irum Ryon-attack | | | |
| 20 | Record of internal examinations and University Exams | Bran Pupar | 0 | | |
| 21 | Pass percentage of University Exams / Semester in respective subject for the last three years.(paper wise) | Driversty Reall- attacked | A | | |
| 22 | Record of remedial classes conducted for slow learners | Mo | _ | | |
| | Res | earch, Extension and | 1 consultancy | | |
| 23 | Record of Research work (,Paper publication, Book publication, Articles) | Paper attack | 0 | | |
| 24 | Record of Student Projects | project in | | | |
| 25 | Record of seminars / workshops attended / organized /Papers presented | No | _ | | |
| 26 | Record of extension work undertaken | No | _ | | |
| 27 | Record of MoUs, if any | mon april | d a | | |
| 28 | Record of Consultancy work | Mo ' | | | |

Page 1 of 2

| S.No. | Activity | Status (Give Details, not just Yes/No) | Impression of Academic Advisor along with grade A(Good)/B(Serialactory)/C (poor) after Clineracion | Recommendation/Sug gestions by Academic Advisors | | | | |
|-------|---|--|--|--|--|--|--|--|
| | Infrastructure and learning Resources | | | | | | | |
| 29 | Unligation of Departmental Library | Otilizukan Recordattudua | A | | | | | |
| 30 | Availability of CDs,Videos | 140 | _ | | | | | |
| 31 | Virtual labs / Open Educational Resources (OERs) | No | - | | | | | |
| | Development of any educational | Mi | _ | | | | | |
| | Str | ident support and pre | gression | | | | | |
| 32 | Record of Activities conducted to contribute to the students' career opportunities | 140 | ~ | | | | | |
| 33 | Mentoring / Counselling to students for curricular and co-curricular activities | attachd | A | | | | | |
| 34 | Newspaper clippings or other materials as additional resource | Mo | _ | | | | | |
| | Any Student team project for Technology Development | Mo | - | | | | | |
| | | Governance and Lead | dership | | | | | |
| 35 | Record of additional administrative responsibilities performed | Mo | - | | | | | |
| 36 | Record of innovative practices | 140 | _ | | | | | |
| 37 | Any ourstanding contribution | Mo | _ | | | | | |
| 38 | Whether above(related activities)entered in into Departmental Activities Register | Mo | _ | | | | | |
| 39 | Maintenance of Departmental Activities Register | Mainteline | B | | | | | |
| 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 was API Jormans along | yes. attacked | 0. | | | | | |
| | 1112 | Barras | Si | gnature of the Princip | | | | |
| | Note: the Format is to be filled by all the faculty and certified by the Principal and submitted to the Academic Audit Team. | d Engineering Civi | I Mineral | | | | | |

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. | | 70 |
| 3.3 | The faculty member developed materials for achieving student mastery of learning objectives. | | 68 |
| 4.0 | STUDENT LEARNING ASSESSMENT | 16-20- | |
| 4.1 | The Faculty member has announced the method of continuous assessment at the beginning of the course and followed it throughout. | | 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 | | | |
|-------|--|---------|------------|
| 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 | I here is an initiative to understand the parameters of quality | | 0.000 |
| | of teaching and learning processes, if not existing | Met | 70 |
| 5.3 | There is commitment to making continuous quality | Met | 3.425 |
| 5.4 | improvements in the program a top priority | 1.000 | 72 |
| 3,4 | The performance of students in Internal Assessment and | Met | 78 |
| 5.5 | University Examinations is comparable. There is sufficient feedback obtained from stakeholders in | - 3772 | 78 |
| | development of academic processes in the College. | Met | 74 |
| 5.6 | There is sufficient evidence of attempts to understand the | 0.0 | 1.5 |
| | industries/ Society's need in delivery of appropriate course | Met | 100 |
| | content to the students | | 64 |
| 6 | OVERALL ASSESSMENT | | |
| 6.1 | The Academic Audit process was Faculty driven. | Met | |
| 6.2 | | I Truck | 80 |
| Una. | The Academic Audit process (self-study and visit) included | Met | 9-55 |
| | descriptions of the program's quality processes including all five focal areas. | Street | 80 |
| 6.3 | The Audit resulted in a candid description of weaknesses in | | |
| 200 | program processes and suggestions for improvements. | Met | 80 |
| 6.4 | There is openness and thoroughness of the faculty members in | 14. | |
| | completing the academic audit of this program | Met | 75 |
| 6.5 | The Academic Audit process included involvement of and | Met | 775300 |
| | inputs from stakeholder groups identified by the program's | mer | 85 |
| | faculty members | | 0.3 |
| 7 | FOLLOW-UP OF PREVIOUS AUDIT | | |
| 7.1 | An action plan was developed as a result of the previous Met | | Yes |
| - | Academic Audit. | 2000 | 52.0 |
| 7.2 | There is documented evidence that recommendations made by | Met | Yes - |
| | the previous Academic Audit Team have been considered and, | band | |
| 7.0 | when feasible and appropriate, implemented and tracked. | | |
| 7.3 | There is documented evidence that the program has been | Met | Yes |
| | implemented and tracked the progress of and use of results | | |
| 3 | from improvement initiatives cited by the faculty its self-study. SUPPORT | | |
| 3.1 | | | |
| ** | The program regularly evaluates its library, equipment and facilities, encouraging necessary improvements within the | Met | |
| | context of overall college resources. | | 74 |
| 3.2 | The program's operating budget is consistent with the needs of | | - 10.11.1 |
| 100 | the program. | Met | 76 |
| 3.3 | The program has a history of enrolment rates sufficient to | Met | 910.0 |
| | sustain high quality and cost-effectiveness. | paet | 78 |
| 3.4 | The program has a history of graduation rate sufficient to | Met | 88.0 |
| | sustain the quality of the program. | Met | 72 |
| 3.5 | The program has a history of placement rate sufficient to | | - |
| | sustain high quality of program outcome. | LASSES | 67 |
| 1.6 | The Program has a history of generating support from | Met | |
| | industries and alumni to sustain itself. | | 69 |
| Signa | industries and alumni to sustain itself. tures of Academic Advisors | Met | 69 |
| 1. | Dr. Uday A. Dabade, Professor, | | |
| | Walchand College of Engineering, Sangli | | COLUN CO |
| 2. | Dr. Kumthekar Madhav Bhalchandra, | | 8 |
| | Retired Professor, | | 1 03.1.345 |
| | | | |
| | Variet Countries at Callana Vand | 121 | 1 |

Figure 7.2.b Sample Audited Course File 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

Areas for improvement are identified and fulfilled

Academic Audit Summary Sheet

Institution/University Department: Arvind gavli College of Engineering, Satara Program Title: Engineering
Degree Level: Undergraduate
Academic Audit Status: _____ First Academic Audit _____ Second Academic

Second Academic Audit

Evaluation Results

| | A) | 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 | 60 | |
| 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 | 60 | |
| 1.3 | The faculty member documented specific benchmarks of his course to account for learning objectives | Met | 45 | |
| 2. 2.1 | CURRICULUM AND CO-CURRICULUM 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 | 50 | |
| 2.2 | The faculty member documented a plan for analyzing the course content in terms of achieving program objectives. | Met | 55 | |
| 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 | 45 | |
| 3 | TEACHING AND LEARNING PROCESSES | | | |
| 3.1 | The faculty member analyzed his/her own methods for improving teaching and learning throughout the program and practiced them. | Met | 60 | |
| 3 2 | The faculty member developed and promoted effective instructional methods, other than lecturing, so that student achieve the learning objectives. | Met | 65 | |
| | The faculty member developed materials for achieving student mastery of learning objectives. | Met | 60 | |
| 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 | | 65 | |
| 4.2 | The faculty member developed techniques, other than written test, for the student learning assessments to improve the program. | Met | 60 | |
| 4.3 | The faculty member has documented assessments of student learning | Met | 65 | |
| 4.4 | The faculty member has developed measurable indicators of student | Met | 60 | |
| 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 | 50 | |
| 4.6 | The Student has put in his/her own efforts in the learning process from resources outside the Institute. | Met | 55 | |
| 4.7 | The students are challenged enough to use their knowledge creatively | Met | 55 | |
| 5.0 | QUALITY ASSURANCE | | | |
| 5.1 | There is an existing process in the Institute to understand the | Met | 65 | |
| 5.2 | There is an initiative to understand the parameters of quality of teaching and learning processes, if not existing | Met | 60 | |



Figure 7.2.c Sample Academic Audit Summary Sheet



Fig 7.2d Academic Audit 2021-22 Committee interaction and document



Fig 7.2e Academic Audit 2021-22 Committee visit to the laboratory



Fig 7.3f Academic Audit 2021-22 Committee visit to the laboratory

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 construction industry.

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, and TOEFL are available in the library.

In addition, with T&P Cell, institute has initiated Campus to Corporate Activity to help students to 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.

Placements, Higher studies and entrepreneurs for academic year 2021-22 to 2018-19 as shown in Table 7.3a.

| Items | CAY (2021-22) | CAY (2020-21) | CAYm1 (2019-20) | CAY m2 (2018-19) |
|--------------------------------|------------------|------------------|--------------------|---------------------|
| No. of final year students (N) | 61 | 63 | 17 | 32 |
| No. of students placed (x) | 39 | 62 | 17 | 31 |
| % Placement | 67% | 98% | 100% | 97% |

Table 7.3a Data for Placements, Higher studies and entrepreneurs

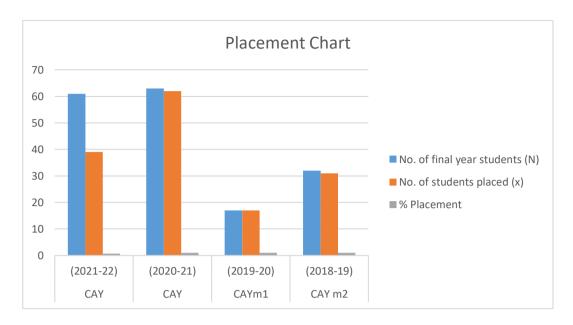


Fig. 7.3a Placement, Higher studies and Entrepreneurs data analysis

Table 7.3.1: List of Companies visited in 2018-19

| Sr.No | Name of Company | Number of students Placed | |
|-------|---|------------------------------|--|
| 1 | Infosys Ltd. Banglore | 1 | |
| 2 | Consulting Engineer Group Ltd. Jaipur Rajsthan | 1 | |
| 3 | G.S. Group, Karad | 1 | |
| 4 | Viraj, TNT, Mumbai | 1 | |
| 5 | FEAT Technology Mumbai | 1 | |
| 6 | Vistas Corporation, Mumbai | 1 | |
| 7 | Jai Kumar, Navi Mumbai | 1 | |
| 8 | Alfa Level, Pune | ne 1 | |
| 9 | Rail Vikas Nigam Ltd. Mumbai 1 | | |
| 10 | BMC magrpatta, Mulund | 1 | |
| 11 | Shriganesh Construction, Satara | 1 | |
| 12 | Nirmal Green, Baner, Mumbai | 1 | |
| 13 | D.R. Construction, Sangali | 1 | |
| 14 | B.J. Shirke, Mumbai | 1 | |

| 15 | Infosis, Hingwadi, Mumbai | 1 |
|----|-------------------------------------|---|
| 16 | Sree Construction, Mulund, Mumbai | 1 |
| 17 | Ramchya Construction, Satara | 3 |
| 18 | ShashikantDhumal, Surveyers, Satara | 3 |
| 19 | Sawant Construction, Satara | 2 |
| 21 | Om Sai Construction, Mumbai | 1 |
| 22 | BMC Mumbai | 2 |
| 23 | Innovative Construction, Satara | 1 |
| 25 | JW Infra, Satara | 1 |

Table 7.3.2: List of Companies visited in 2019-20

| Sr.No | Name of Company | Number of students Placed |
|-------|---------------------------------------|---------------------------|
| 1 | ICICI Bank, Mumbai | 1 |
| 2 | NSIC Developers, Pune | 1 |
| 3 | Shradha Construction, Pune | 1 |
| 4 | Spectrum Industry, Pune | 1 |
| 5 | Rajesh Deshmukh& Associate, Satara | 1 |
| 6 | PanditJawadekar Associate, Pune | 1 |
| 7 | Pharande Spaces, Pune | 1 |
| 8 | P.H. Infra Wakad, Pune | 1 |
| 9 | Om Chidanand Developers Pune | 1 |
| 10 | B.G. Shirke, Hadpsar | 1 |
| 11 | S.D.S. Component design, Pimpri, Pune | 1 |
| 12 | ShashikantDhumal, Surveyers, Satara | 1 |
| 13 | Innovative Construction, Satara | 1 |
| 14 | JW Infra, Satara | 1 |
| 15 | Dhumal Construction, Satara | 1 |

Table 7.3.3: List of Companies in which students placed in 2020-21

| | Table 7.3.3: List of Companies in wni | | |
|-------|---------------------------------------|---------------------------|--|
| Sr.No | Name of Company | Number of students Placed | |
| 1 | Dimension Construction, Satara | 1 | |
| 2 | Utkarsh Pvt. Ltd., Baramati | 1 | |
| 3 | Tata Computer Consultancy | 1 | |
| 4 | Rigal College, Chiplun | 1 | |
| 5 | Dhumal Construction, Satara 1 | | |
| 6 | Sathe Group, Pune | 1 | |
| 7 | Tricon Infra Build Tech, Ltd. | 1 | |
| 8 | Mahesh Patil Construction, Satara | 1 | |
| 9 | Infosis Ltd. Pune | 1 | |
| 10 | Trimurti Construction, Ashta | 1 | |
| 11 | Sugar Mill, Phalton 1 | | |
| 12 | Suyog Development Corporation, Satara | 1 | |
| 13 | YesarGeomastic Pvt. Ltd. Pune | 1 | |
| 14 | Owner Design Studio, Dharwad | 1 | |
| 15 | KiranPawar Construction, Ichalkaranji | 1 | |
| 16 | SatheConcerteConstrution, Pune | 1 | |
| 17 | Buyoji Co. Ltd. Solapur | 1 | |
| 18 | Akshai Katkar Associate, Satara | 1 | |
| 19 | Stepron Technology, Pune | 1 | |
| 20 | Goal Ganga Construction, Pune | 1 | |
| 21 | K.B. P. Civil Engg. Services Pune. | 2 | |
| 22 | MitraEngg. & Contractor Pune | 1 | |
| 23 | SukhvaniChavala Developers, Pune | 1 | |
| 24 | Strand Rebar Pune | 1 | |

| 25 | Shrinath Construction, Satara | 1 |
|----|---------------------------------------|---|
| 26 | Max Construction, Mumbai | 1 |
| 27 | Mali Construction, Kavtemahakal 1 | |
| 28 | S.S. Sathe Construction, Pune | 1 |
| 29 | Rail VikasNogma Ltd. Pune | 1 |
| 30 | T&T Infra Ltd. Pune | 1 |
| 31 | Intelligent Design, Pune | 1 |
| 32 | Om Construction Pvt. Ltd. Katraj Pune | 1 |
| 33 | Shrinath Construction, Phalton | 1 |
| 34 | Samarth Construction, Chakan | 1 |
| 35 | Aqua Food Exim Dapoli 1 | |
| 36 | Gaitri Construction, Pune 1 | |
| 37 | PanchyatSamitiKarad 1 | |
| 38 | Rachana Construction Lonawala 1 | |
| 39 | VIT Group, Hingwadi, Pune 1 | |
| 40 | Lodha Group, Mumbai 1 | |
| 41 | Swapnputi Construction, Wai 1 | |
| 42 | Dhumal Construction, Satara 4 | |
| 43 | Innovative Construction, Satara 3 | |
| 44 | JW Infra, Satara 3 | |
| 45 | Ramchaya Construction, Satara 3 | |
| | | |

Table 7.3.4: List of Companies in which students placed in 2021-22

| Sr. No | Name of Company | Number of students Placed |
|--------|--|---------------------------|
| 1 | Skayline Construction, Satara | 11 |
| 2 | Aerial Mappers, Pune | 6 |
| 3 | A.R. Kulkarni Associate, sangali | 2 |
| 4 | A.S.DESAI INFRA. PVT LTD. SATARA | 1 |
| 5 | S.P. Infra karad prin Pend | 1 |
| 6 | Yessar geomatics Pvt. Ltd, Pune | 4 |
| 7 | Integrum Property Services | 1 |
| 8 | Space Designer, Satara print | 1 |
| 9 | V.S.R. CONSTRUCTION, 1 KAWATEMAHAKAL | |
| 10 | Shankar Kumbhar Interior, satara 1 | |
| 11 | Model Developers, satara 1 | |
| 12 | Meera construction Boriwali print remain 1 | |
| 13 | Delia Decorators, Pashan Pune | 1 |
| 14 | Shiv Construction, Gargoti | 1 |
| 15 | Das Associate, Wai 1 | |
| 16 | Shahikant Dhumal, Surveyer, satara 1 | |
| 17 | Utkarsh Pvt. Ltd. 1 | |
| 18 | Aishwarya Interors Pvt. Ltd. 2 | |
| 19 | A. R. Constructions, Satara print 1 | |

Table 7.3.4: List of Entrepreneurs:

| Sr.No | Academic Year | Name of student |
|-------|---------------|-----------------------------|
| 1 | | More Pratik Ananda |
| 2 | 2018-19 | Patil Dnyaneshwar Raghunath |
| 4 | | Mane Sourabh Bajirao |
| 5 | | Shinde Anupsinh Virsinh |
| | 2019-20 | |
| 6 | | Kadam Arjun Suresh |
| 7 | | Lohar Rohit Namdeo |
| 8 | | Jadhav Rohit Sanjay |
| 10 | | Mali Eknath Sadashiv |
| 11 | | Bichukale Suraj Nanaso |
| 12 | | Randive Amol Sarjerao |
| 13 | 2020-21 | Jadhav Sanket Shashikant |
| 14 | | Kadam Arjun Suresh |

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.

Table 7.4.a Quality of students admitted to the program

| | | CAY | CAY | CAY m1 | CAY m2 |
|---------------------------|--------------------------|--------------|-------------|--------------|-------------|
| ITE | (2022-23) | (2021-22) | (2020-21) | (2019-20) | |
| National level | No. of | | | | |
| entranceexamination | students | | | | |
| (JEE) | admitted | | | | |
| (322) | Opening score/rank | | | | |
| | Closing score/rank | | | | |
| State/University | No. of | 3=1+0 Acap+2 | 18=5+10Acap | 20=14+5 | 12=10+2cap |
| levelexamination | students | EWS | +3 EWS | Acap+1EWS | |
| /others (MH-CET) | admitted | | | | |
| | Opening score/rank | 38.17/93342 | 34.27/78145 | 76.49/33159 | 80.48/32115 |
| | Closing score/rank | 12.75/114757 | 30.67/80709 | 58.15/95152 | 0.59/86958 |
| Name of entrance | No. of | 15=(12+3Aca | 55=49+6Acap | 53=44+8Acap+ | 58=56+2cap |
| examination for lateral | students | p) | | 1 EWS | |
| entry (Direct Second | admitted | | | | |
| Year: MSBTE Diploma | Opening score/rank | 73.47/34526 | 89.37/10166 | 80.21/25545 | 82.55/7053 |
| Final Semester) | | | | | |
| | Closing score/rank | 61.41/49218 | 66.69/62362 | 55.03/60719 | 70.42/25985 |
| Average CBSE/Any other | board result of admitted | | | | |
| students (Physics, chemis | try, Maths) | | | | |

| CRITERION | FIRST YEAR ACADEMICS | 50 |
|-----------|----------------------|----|
| 08 | | |
| | | |

Please provide First year faculty information considering load for the particular program

| | | | | | | | Tea | ching load | l(%) | Curre | Date Of |
|--------------------------------|----------------|-------------------|----------------|-------------------------------|--|------------------------|----------------------|----------------------|----------------------|------------|--|
| Name of the faculty member | PANNo. | Qualifi cation | 110 | Area of Specializ ation | Des ign atio n | e of join | CAY (2022 -23) | CAY (2021- 22) | CAY (2020- 21) | Asso ciate | leaving (In case Currentl y Associa ted is 'No') |
| Ashwini Deepak Kasture | BTSPK55 24K | M.Sc | 14-06- 2017 | Mathema tics | Ass ista nt Pro fess or | 15- 06- 201 2 | 100 | 100 | 100 | Yes | |
| Pooja Ramchandra Bhosale | ERAPB94 85B | M.Sc,B .Ed | 08-07- 2019 | Mathema tics | Ass ista nt Pro fess or | 01- 07- 201 9 | 100 | 100 | 100 | Yes | |
| Vidya Atul Salunkhe | CJJPS974 8B | M.Sc | 19-05- 1999 | Mathema tics | Ass ista nt Pro fess or | 01- 08- 201 9 | 100 | 100 | 100 | Yes | |
| Ms.Swapnali Shinde | PGTPS02 43D | M.Sc | 30-08- 2021 | Mathema tics | Ass ista nt Pro fess or | 01- 07- 202 2 | 100 | 0 | 0 | Yes | |
| Ms.Sonali S.More | EVMP451 9P | M.Sc | 24/3/20 18 | Mathema tics | Ass iata nt Pro f. | 2/7/ 202 2 | 100 | 0 | 0 | No | 31/06/2 023 |
| Madan Prabhakar Jagdale | BEGPJ87 74P | M.Sc | 08-07- 2019 | Mathema tics | Ass ista nt Pro fess or | 01- 07- 201 9 | 0 | 100 | 100 | No | 31/05/2 022 |
| Ruksar Rajmohamad Sayyad | IWNPS77 98C | M.Sc. | 04-07- 2017 | Mathema tics | Ass ista nt Pro fess or | 01- 08- 202 0 | 0 | 0 | 100 | Yes | |
| Pranita Dadaso Pol | DHZPP77 54R | M.Sc. | 01-06- 2018 | Chemistr y | Ass ista nt Pro fess or | 15- 07- 201 9 | 0 | 100 | 100 | Yes | |
| Komal Rajendra Nikam | BIZPN492 9H | M.Sc. | 13-07- 2015 | Chemistr y | Ass ista nt Pro fess or | 01- 06- 201 9 | 0 | 100 | 100 | Yes | |
| Namita Pratik Mahajan | ETRPB89 24A | M.Sc | 06-06- 2019 | Chemistr y | Ass ista | 01- 11- | 0 | 0 | 0 | Yes | |

| | | | | | nt Pro fess or | 202 | | | | | |
|------------------------------------|----------------|------------|----------------|----------------|--|------------------------|-----|-----|-----|-----|----------------|
| Priya Yashwant Kuthe | HPUPK34 10K | B.E | 21-08- 2017 | Chemical | Ass ista nt Pro fess or | 12- 10- 202 1 | 100 | 100 | 0 | Yes | |
| Mrs.Rohini Bhosale | ENPPB25 33D | M.Sc | 30-07- 2017 | Chemistr y | Ass ista nt Pro fess or | 21- 07- 202 2 | 100 | 0 | 0 | yes | |
| Tejaswini Dnyaneshwar Jadhav | BUIPJ124 3D | M.Sc | 24-10- 2020 | Physics | Ass ista nt Pro fess or | 17- 03- 202 1 | 0 | 100 | 0 | No | 31/06/2 022 |
| Kanchan Sanjay Mahamuni | EHFPM55 40B | M.Sc | 24-10- 2020 | Physics | Ass ista nt Pro fess or | 17- 03- 202 1 | 100 | 100 | 0 | No | 31/06/2 023 |
| AshwiniAnkush Babar | AQSPB85 46L | M.Sc | 11-06- 2010 | Physics | Ass ista nt Pro fess or | 01- 06- 201 9 | 0 | 0 | 100 | No | 31/10/2 021 |
| Dr. Nitin Ramchandra Jadhav | AGSPJ22 78D | M.A | 07-03- 2020 | ENGLIS H | Ass ista nt Pro fess or | 02- 07- 202 0 | 100 | 100 | 100 | Yes | |
| Nikita Sanjay Bhilare | FBDPB77 35Q | M.A SET | 09-07- 2019 | English | Ass ista nt Pro fess or | 16- 03- 202 1 | 100 | 100 | 0 | Yes | |
| Thoravi Rahul Yadav | BLVPM6 822M | MA | 10-07- 2008 | ENGLIS H | Ass ista nt Pro fess or | 01- 06- 201 9 | 0 | 0 | 100 | No | 30-04- 2021 |
| Aanand Sudhir Shivde | CCLPS61 18J | M.E. | 30-09- 2014 | Mechani cal | Ass ista nt Pro fess or | 06- 01- 201 9 | 0 | 0 | 100 | No | 31-07- 2021 |
| Kamlesh Kumawat | ENEPK18 12H | M.E. | 20-10- 2016 | Mechani cal | Ass ista nt Pro f. | 03/ 07/ 201 7 | 0 | 0 | 100 | No | 31/3/20 21 |
| Mr.Amol Ghorpade | BTDPG59 46C | M.E. | 10/10/2 017 | Mechani cal | Ass ista nt | 1/1 0/2 1 | 100 | 100 | 0 | No | 2/5/202 3 |

| | | | | | Pro f | | | | | | |
|-------------------------------|----------------------------------|--------------|----------------|----------------|--|------------------------|-----|-----|----|-----|----------------|
| Pratik Manohar Tambe | AXPPT26 81Q | M.E | 31-07- 2017 | Mechani cal | Ass ista nt Pro fess or | 01- 07- 201 9 | 100 | 100 | 0 | No | 31-12- 2022 |
| Pranav Avinash Pathak | BFAPP72 43G | M.E. | 20-10- 2016 | CSE | Ass ista nt Pro fess or | 22- 08- 201 1 | 22 | 35 | 38 | Yes | |
| Gujar Vijay Bhanudas | AMEPG4 168K | M.E. | 22/02/2 011 | CSE | Ass ista nt Pro fess or | 1/1 1/2 020 | 15 | 0 | 0 | Yes | |
| Suraj Shivaji Shinde | EKQPS20 10J M.E/M.Te ch | M.E. | 12-12- 2018 | Civil | Ass ista nt Pro fess or | 02- 12- 202 1 | 55 | 50 | 0 | No | 31/05/2 023 |
| Abhay V.gujar | ABPPG51 52M | M.E. | 26-06- 1994 | Civil | Ass ista nt Pro f. | 25/ 06/ 201 0 | 0 | 0 | 75 | Yes | |
| Sapkal Rajendra | BNHPS30 23E | M.E. | 25/06/2 013 | Civil | Ass ista nt Pro fess or | 1/0 6/2 016 | 50 | 0 | 0 | Yes | |
| Diksha Sanjay Jadhav | BGXPJ68 90B | M.Tech | 01-06- 2019 | Civil | Ass ista nt Pro fess or | 22- 07- 201 9 | 0 | 0 | 19 | Yes | |
| Kolekar A.B. | GDSPK15 58L | M.Tech | 18/01/2 019 | Civil | Ass ista nt Pro fess or | 1/0 6/2 019 | 0 | 0 | 86 | No | 1/05/20 21 |
| Dr. Prashant Ramesh Bamane | BHXPB51 12K | PhD,M. E. | 24-12- 2014 | Civil | Ass oci ate Pro fess or | 01- 09- 202 1 | 81 | 72 | 0 | Yes | |
| Vishal Sharad Hingmire | AEBPH83 72K | M.E. | 23-11- 2013 | E & TC | Ass ista nt Pro fess or | 12- 02- 201 1 | 17 | 13 | 0 | Yes | |
| Dr.Shinde Deepali | CBQPS44 61N | PhD | 24/09/2 015 | E & TC | Ass oci ate Pro | 15/ 02/ 202 3 | 20 | 0 | 0 | Yes | |

| | | | | | fess or | | | | | | |
|--------------------------|----------------|-------|----------------|--------|--|------------------------|---|---|----|-----|--|
| Rahul Prakash Sakhare | FCOPS84 16K | MTech | 05-06- 2017 | E & TC | Ass ista nt Pro fess or | 07- 01- 201 9 | 0 | 0 | 29 | Yes | |

8.1 First Year Student-Faculty Ratio (FYSFR)

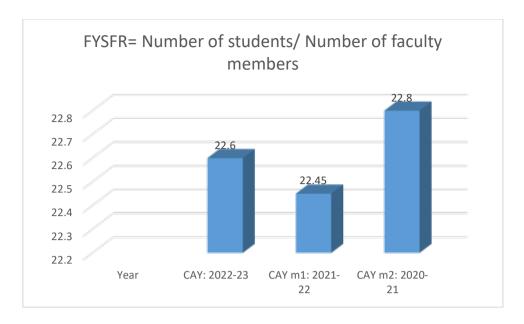
(05)

Assessment = (5×20) /Average FYSFR (Limited to Max. 5)

| Year | students | Number of faculty members(consid ering 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 |
| | 22.62 | | |
| Assessme | 4.42 | | |

Graphical Presentation of First Year Student Faculty Ratio

(05)



8.2. Qualification of Faculty Teaching First Year Common Courses

Assessment of qualification = (5x + 3y)/RF,

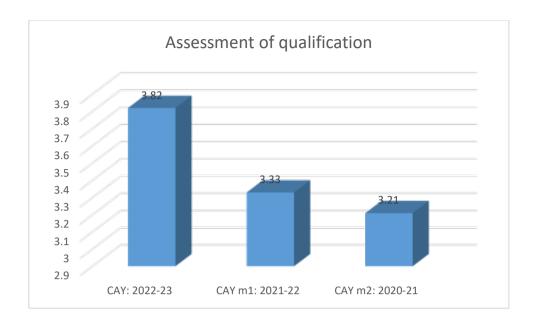
x= Number of Regular Faculty with Ph.D,

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 Ass | Average Assessment of Qualification | | | |

Graphical Presentation of Assessment of Qualification:



8.3. First Year Academic Performance

(10)

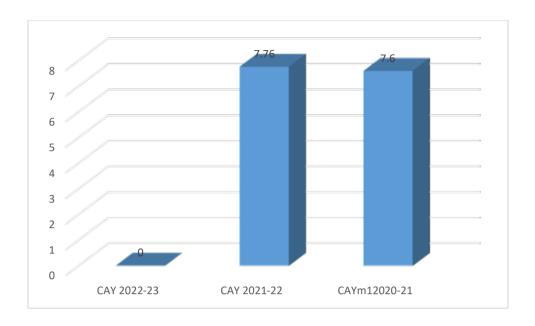
Academic Performance (AP) = (Mean of the percentage of marks in First Year of all successful students/10) x (number of successful students/number of students appeared in the examination)

| 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 | |
| | E &TC | 6.97 | 23 | 34 | 4.72 | |
| | Mech | 7.33 | 9 | 15 | 4.40 | |
| | Civ | 0 | 1 | 03 | 0 | 6.69 |
| | 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 (E & TC) | Mean of the % marks of successful student X | X/10 | Total Successful students y | Total Appeared Students Z | AP | AVE. API |
|------------------|---|------|--------------------------------------|------------------------------------|------|-------------|
| 2021-22 | 0 | 0 | 1 | 3 | 0 | F 12 |
| 2020-21 | 77.6 | 7.76 | 9 | 9 | 7.76 | 5.12 |
| 2019-20 | 76 | 7.6 | 13 | 13 | 7.6 | |

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 (05)

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 | Practical knowledge |
| | exam | |

8.4.2. Record the attainment of Course Outcomes of all first year courses (05)

For Electronics and Telecommunication 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->67 - 100% student score |
| | | Level 2- 55 - 66% student score |
| | | Level 1-40 - 54% student score |
| 2 | CA Test | Level 3->67 - 100% student score |
| | | Level 2-55 - 66% student score |
| | | Level 1-40 - 54% student score |
| 3 | MSE | Level 3->67 - 100% student score |
| | | Level 2- 55 - 66% student score |
| | | Level 1- 40 - 54% student score |
| 4 | LAB | Level 3->80 - 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 <u>relevant</u> PO and/or PSO, if applicable Indicate results of evaluation of each <u>relevant</u> PO and/or PSO, if applicable(15) CO-PO set level indicating Matrix

Academic year 2022-23 (Civil)

| Course Code | Course | CO1 | CO2 | CO3 | CO4 |
|-------------|-------------------------------|------|------|------|------|
| | | | | | |
| BTBS101 | Engg. Mathematics-I | 0.70 | 0.75 | 0.75 | 0.60 |
| BTBS102 | Engg.Physics | 0.90 | 0.85 | 1.02 | 1.10 |
| BTES203 | Engg.Graphics | 2.70 | 2.80 | 2.78 | 2.70 |
| BTHM104 | Communication Skill | 2.10 | 2.15 | 2.20 | 2.20 |
| BTES105 | Energy and Environment Engg. | 1.60 | 1.70 | 1.53 | 1.50 |
| BTBS102L | Engineering Physics lab | 2.00 | 1.40 | 2.00 | 1.40 |
| BTES106 | Basic Electrical and | | | | |
| | Electronics Engg. (Audit sub) | 2.80 | 2.40 | 2.70 | 2.70 |
| BTES108L | Engineering Mechanics Lab | 2.00 | 2.00 | 2.60 | 2.60 |
| BTES108L | Engineering Graphics Lab | 2.00 | 2.00 | 2.00 | 2.00 |
| BTHM109L | Communication Skills Lab | 2.00 | 2.00 | 2.00 | 2.00 |
| BTBS201 | Engg. Mathematics-II | 0.70 | 0.70 | 0.80 | 0.80 |
| BTBS202 | Engg.Chemistry | 0.90 | 1.00 | 0.47 | 1.00 |
| BTES203 | Engg.Mechanics | 1.00 | 0.90 | 0.75 | 0.50 |
| BTES204 | Computer Progrmming in C | 1.00 | 0.92 | 0.95 | 0.70 |
| BTES205 | Workshop Practice | 2.00 | 2.00 | 2.00 | 2.00 |

| BTES206 | Basic Civil and Mechanical | | | | |
|----------|----------------------------|------|------|------|------|
| | Engineering(audit sub) | 2.90 | 2.90 | 2.80 | 3.00 |
| BTBS107L | Engineering Chemistry Lab | 2.60 | 2.00 | 2.00 | 1.40 |
| BTES210S | Seminar | 2.00 | 2.00 | 2.00 | 2.00 |

Core Science and Engineering CO-PO Attainment 2021-22 (Civil Engineering)

| Course | PO1 | PO2 | PO3 | PO4 | PO5 | P06 | P07 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO 1 | PSO 2 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|----------|----------|
| M1 | 0.35 | 0.81 | 0.72 | 0.65 | | 0.33 | | | | | 0.75 | 0.56 | 0.56 | 0.34 |
| CHEM | 0.90 | 0.22 | | | | 0.11 | 0.44 | | 0.22 | | | | | |
| MECHANICS | 1.75 | 2.00 | 2.67 | 1.67 | 1.00 | 2.50 | 1.67 | | | | | 2.25 | 1.25 | 1.33 |
| Comp Prog In C | 1.30 | 1.08 | 1.30 | 0.87 | 1.08 | | | | | | | 0.87 | | |
| BEEE | 1.80 | | | | | 1.36 | 1.14 | | | | | | 0.28 | |
| Engg Chem Lab | 1.68 | 0.71 | | | | 0.18 | 0.79 | | 0.36 | | | | | |
| Engg Mech Lab | 1.33 | 1.66 | 2.13 | | | | 1.28 | | | | | 1.73 | 0.94 | 1.00 |
| Workshop | 1.05 | | | | 1.61 | | | | 0.70 | 0.35 | | | 0.17 | |
| M2 | 0.56 | 0.84 | 0.75 | 0.76 | | 0.38 | | | | | 0.75 | 0.55 | 0.55 | 0.39 |
| Phy | 0.77 | 0.77 | 0.77 | 1.15 | | 1.15 | 1.15 | | | | | 0.77 | 0.38 | |
| Graphics | 2.71 | 2.71 | 1.60 | 1.80 | 2.74 | | 2.03 | | 1.89 | 1.81 | 1.82 | 1.13 | 2.71 | 0.90 |
| Comm skills | | | | | 0.73 | | | 1.14 | 1.89 | 2.04 | | 1.46 | | |
| EEE | 1.40 | | 1.40 | | 1.19 | | 1.78 | | 1.27 | 1.17 | | 1.55 | 1.27 | |
| BCME | 0.73 | 1.41 | 0.94 | 0.94 | 0.63 | | | | | 1.32 | 0.97 | 0.98 | 1.46 | 0.96 |
| Phy lab | 1.43 | 1.43 | 1.43 | 2.14 | | 2.14 | 2.14 | | | _ | | 1.43 | 0.71 | |
| Gaphics lab | 0.52 | 1.38 | 0.69 | | | 0.17 | | | 0.69 | 0.69 | | 0.69 | 1.03 | 0.69 |
| Comm skills lab | | | | | 0.71 | | | 1.06 | 1.78 | 1.95 | | 1.43 | | |
| Seminar | | | | | | | | | 1.89 | 1.89 | | 1.23 | 0.71 | 0.70 |

PO levels set and achieved Attainment:

| | 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 | 1.26 | 1.14 |
| year 21-22 | 1.22 | 1.25 | 1.31 | 1.25 | 1.21 | 0.92 | 1.38 | 1.10 | 1.19 | 1.40 | 1.07 | 1.19 | 0.93 | 0.79 |

8.5.2. Actions taken based on the results of evaluation of relevant POs (05)

Academic Year-2021-22

POs Attainment Levels and Actions for Improvement- (2021-22)

| POs | Target Level | Attainment Level | Observations |
|----------------|-------------------|------------------|--------------|
| PO 1 : Know | Engineering ledge | <u>I</u> | |

| PO 1 | 2.00 | 1.22 | Target is not attained ■ The students have a limited grasp of the core principles of engineering. |
|-----------------|------|------------------------------|--|
| Action: enginee | | is will be placed on thoroug | hly comprehending the fundamentals of |

PO 2 : Problem Analysis

| PO 2 | 2.20 | 1.25 | 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 | 2.82 | Target is not attained |
|------|------|------|---|
| | | | • 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 | 2.14 | 1.31 | Target is not attained | |
|------|------|------|--|--|
| | | | 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

1. 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 | 2.44 | 1.25 | Target is not attained | |
|------|------|------|--|--|
| | | | • 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 | |
| | | | 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 | 0.92 | Target is not attained |
|------|------|------|--|
| | | | The students faced challenges in adequately evaluating societal, health, safety, legal, and cultural concerns. |

Action: 1. The aim for the upcoming academic year is to focus efforts on reaching the established goal. 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 | 1.38 | 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.

PO 8: Ethics

| PO 8 | 1.40 | 1.10 | Target is not attained - |
|------|------|------|---|
| | | | Students need improvement in their |
| | | | awareness of the importance of ethics and |
| | | | professional principles. |

Action: 1. The aim for the upcoming academic year is to devote efforts to accomplish the set objective.

PO 9: Individual and Team Work

| PO 9 | 2.29 | 1.19 | 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 |

Action: 1. The goal for the approaching academic year is to allocate efforts towards achieving the predetermined aim.

PO 10: Communication

| 1 | PO 10 | 2.26 | 1.40 | |
|---|-------|------|------|--|
|---|-------|------|------|--|

Action: 1 We'll aim to achieve the same target in the upcoming academic year

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.

^{2.} The various environmental issues such as global warming, pollution, and e-waste will be highlighted by conducting various awareness programmes.

^{2.} The importance of ethical behaviour in engineering students, will be emphasized and expert talks on ethics in engineering domain will be organized.

^{2.} The students will be motivated to participate in co curricular and extra curricular activities.

PO 11: Project Management and Finance

| PO 11 | 2.00 | 1.07 | Target is not attained - The students' knowledge of project management is inadequate. |
|-------|------|------|---|
| | | | management is madequate. |

Action: 1. The same target will be considered for the next academic year.

PO 12: Life-long Learning

| PO 12 | 2.00 | 1.19 | Target is not attained - |
|-------|------|------|--|
| | | | Greater emphasis will be placed on instilling the concept of lifelong learning among the |
| | | | students. |

Action: 1. We will put in efforts to attain the identical target in the forthcoming academic year.

- 2. The students will be motivated to participate in co-curricular and extracurricular activities.
- 3. Expert lectures pertaining to various fields and career development programmes will be organized.

^{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.

| CRITERION | STUDENT SUPPORT SYSTEMS | 50 |
|-----------|-------------------------|----|
| 09 | | |
| | | |

9.1 Mentoring system to help at individual level

(05)

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:

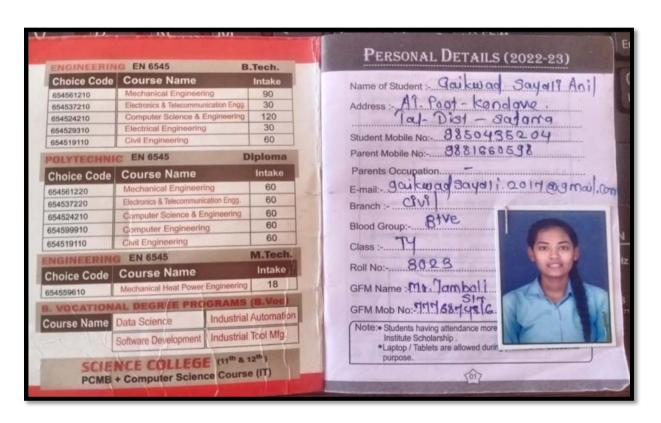
- Support to improve performance of students: Based on the previous year's result and Mid Semester Examination performance and overall behavior of students; weak and bright students are identified in each class and appropriate mentoring is done to improve the performance of weak students and motivate 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.



9.1 a: GFM Diary

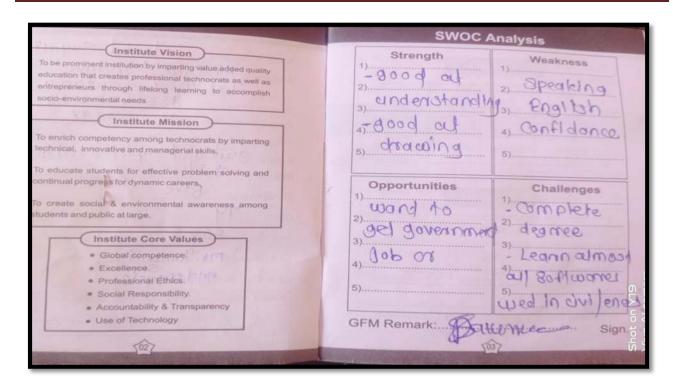


Fig. 9.1.b: GFM Diary

(10)

9.2. Feedback analysis and reward/corrective measures taken, if any

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:

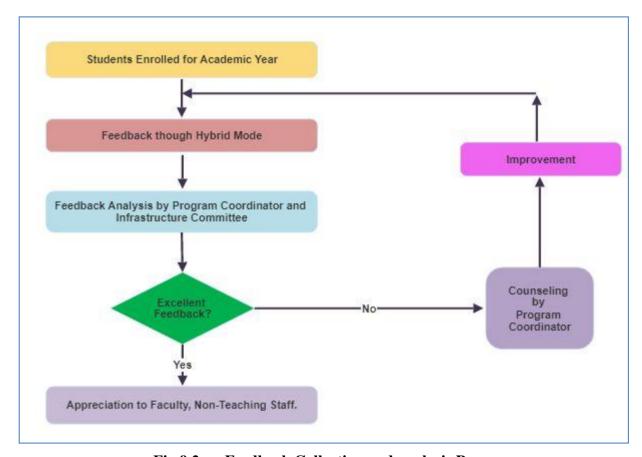


Fig.9.2.a: Feedback Collection and analysis Process

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 Civil Engineering

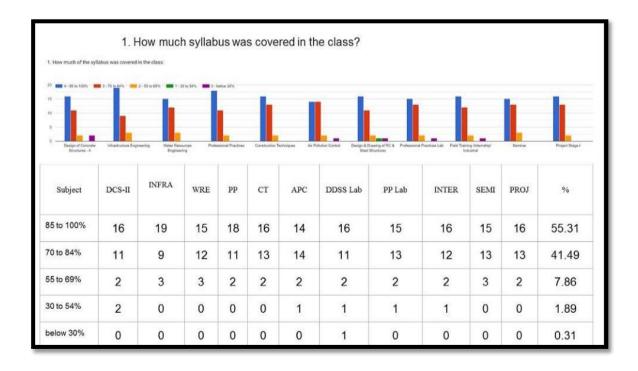
Final Year Feedback

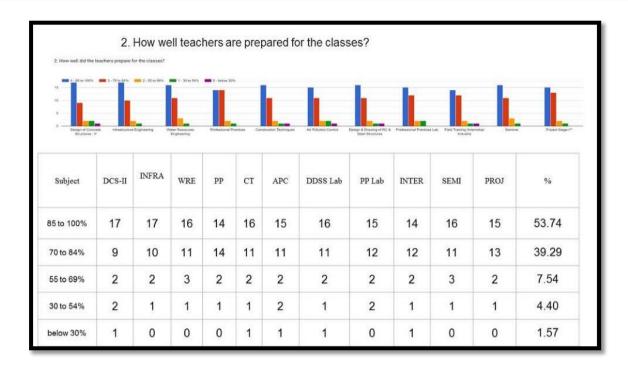
Month- Nov/Dec 2022-23

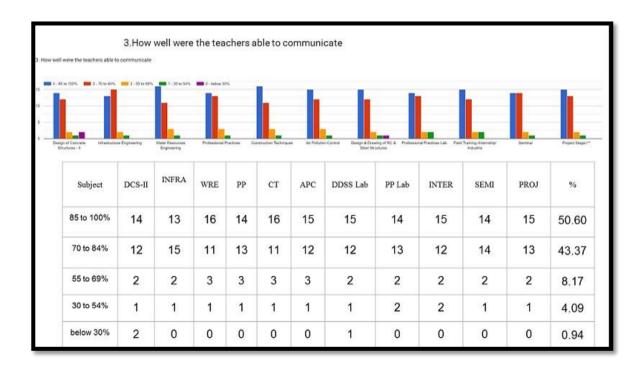
Total Responses-:35

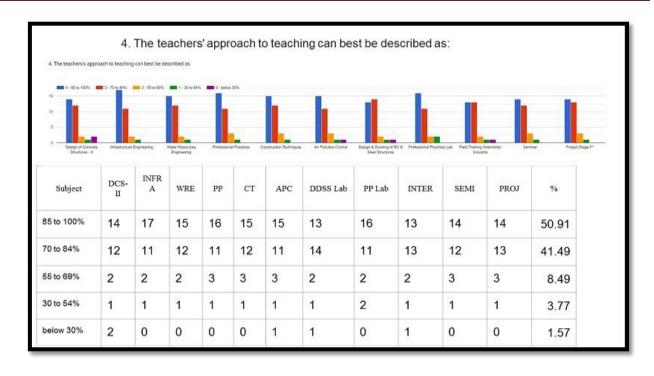
Total Class Strength-65

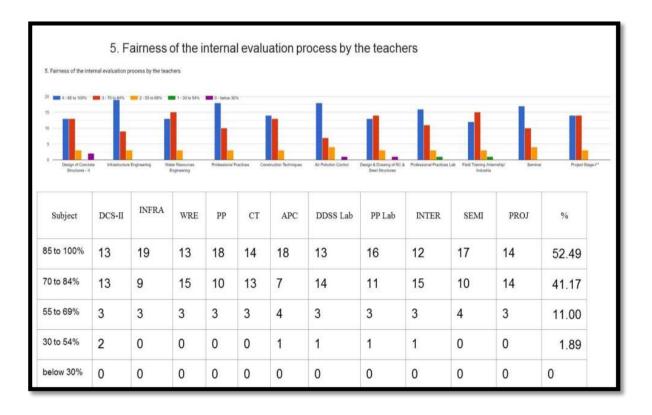
Feedback Percentage-:54%

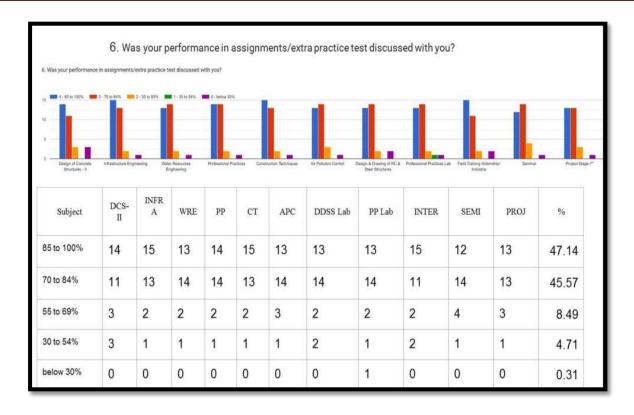


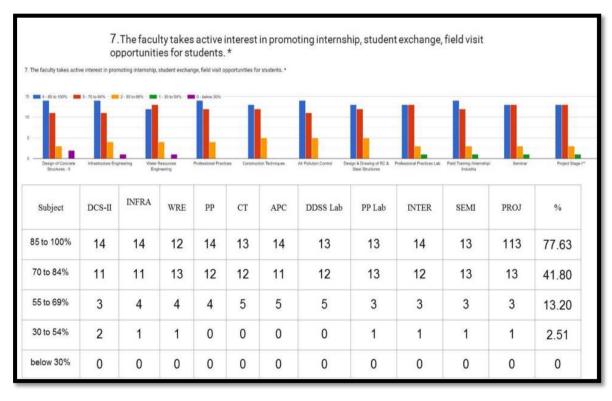


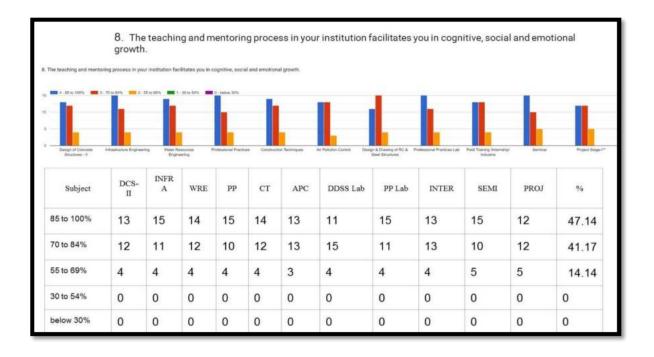


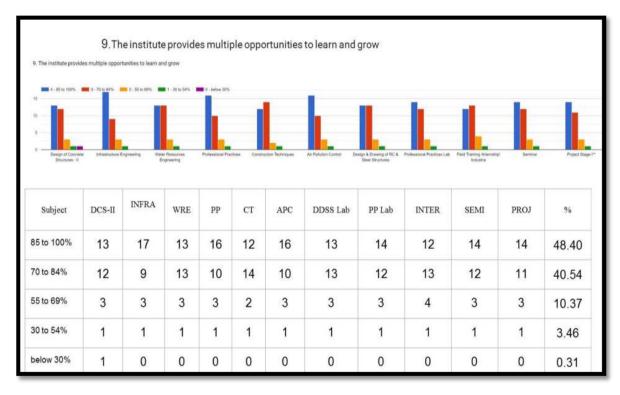


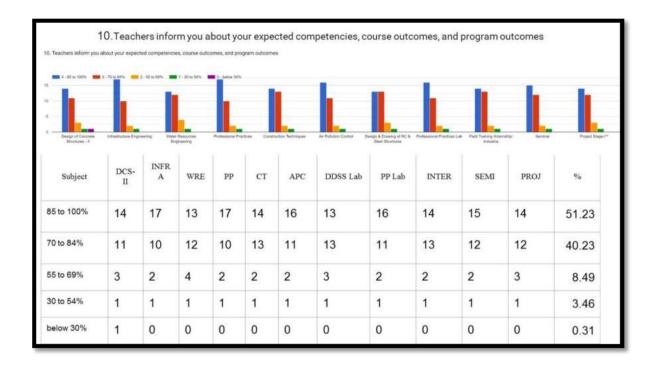


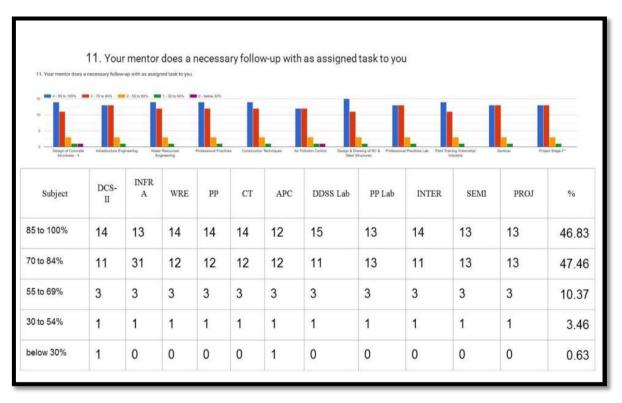


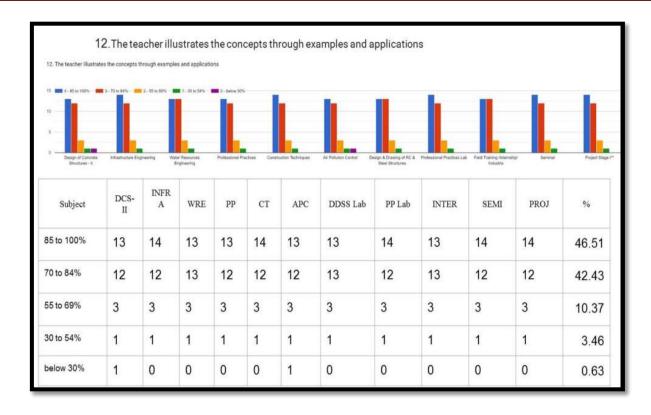


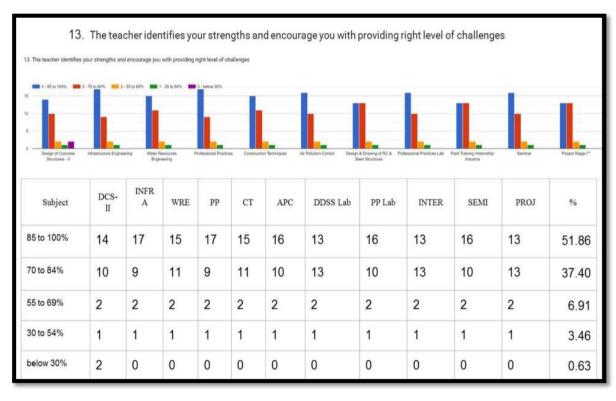


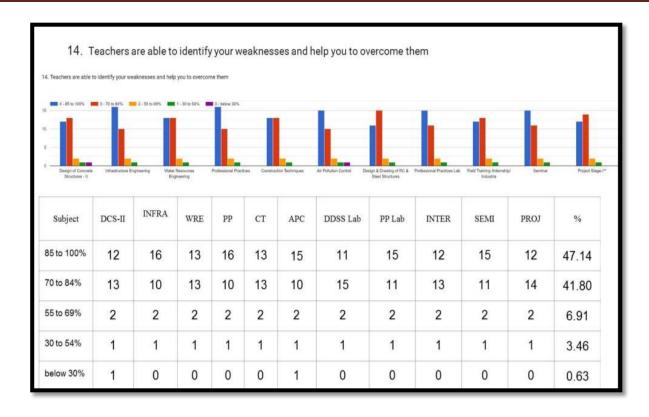


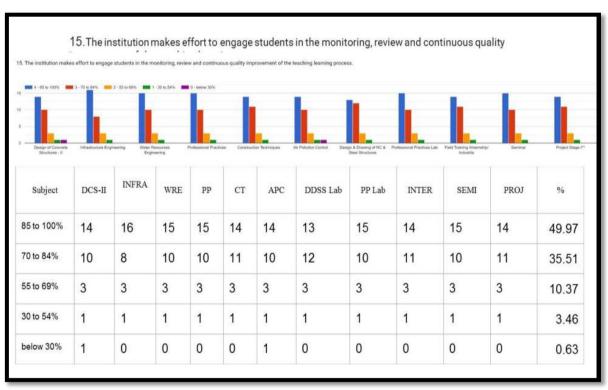


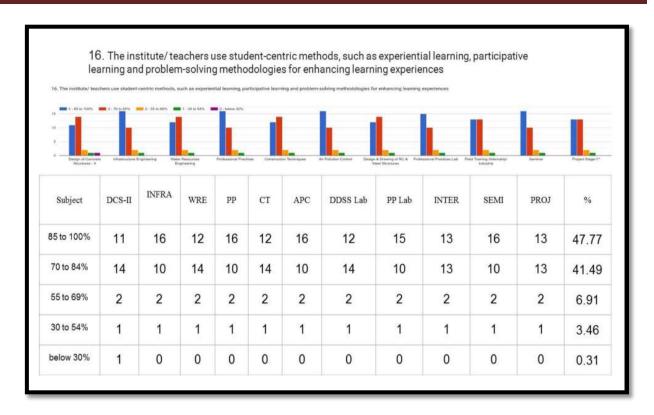


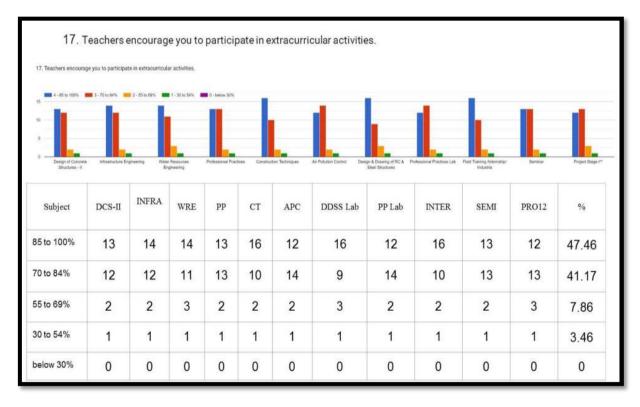


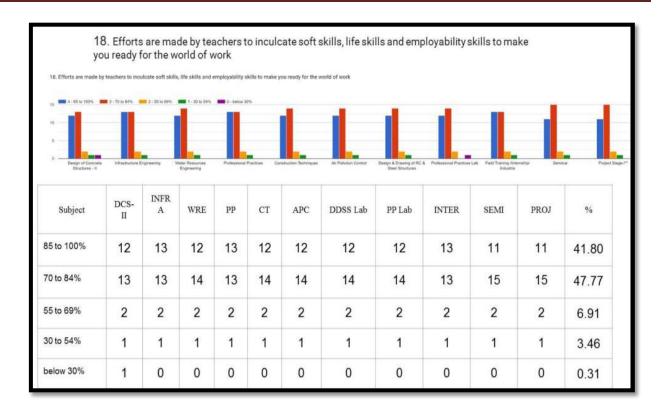


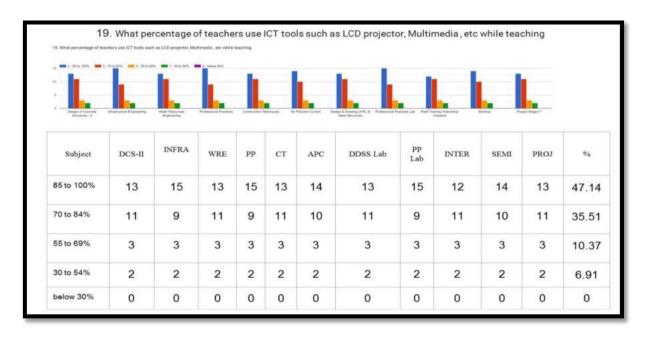












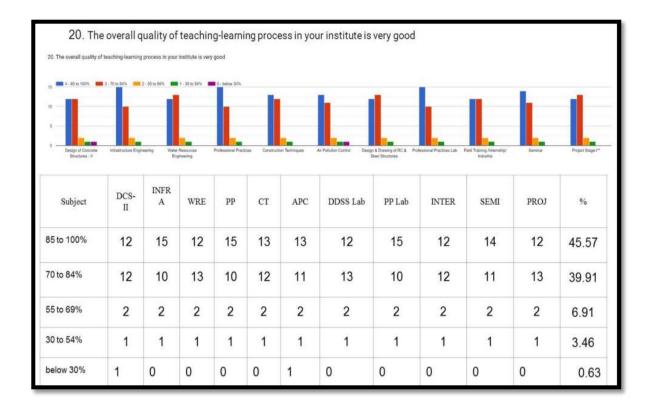


Fig. 9.2.b: Feedback Collection

Students Feedback Analysis procedure

The staff appraisal committee members at program level collects 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.

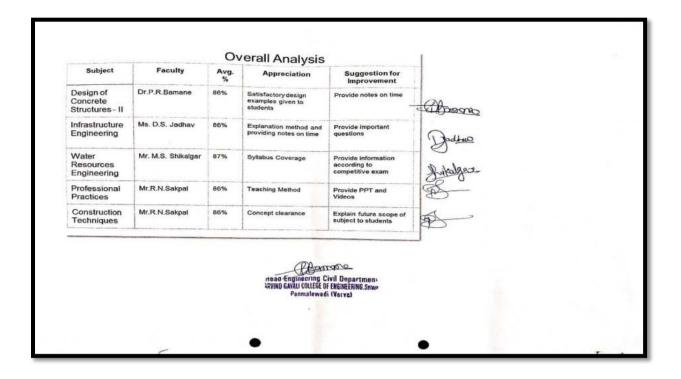


Fig. 9.2.c: Feedback Analysis



Fig. 9.2.d: Corrective Action Taken

Corrective Measures:

Table 9.2.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 | Institute provide the industry for various Company | | |
| 2021-22 | Students demand for Practical based Learning. | Emphasis is given on Project Based Learning (IOT Projects + | | |
| 2020-21 | Organize soft skill development program | Separate Slot for Soft skill Session (Campus to Corporate) is allotted in Timetable. | | |
| 2019-20 | Technical Training Program should be organized. | 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. | 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

(05)

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.

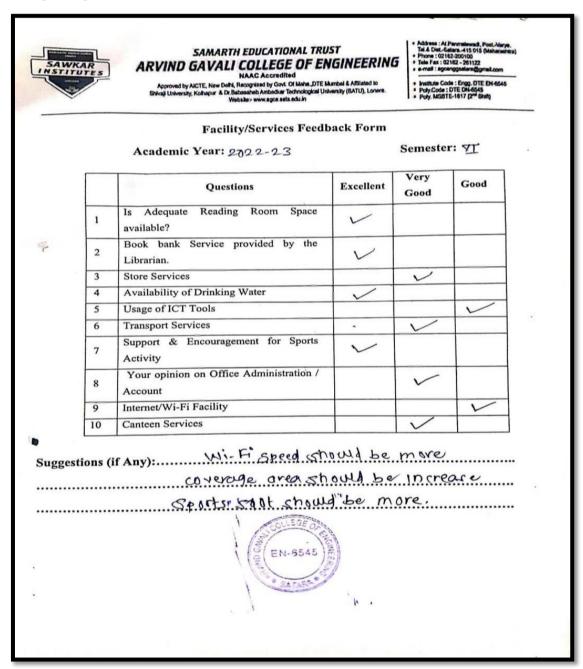


Fig 9.3.a: Facility Feedback Form

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:

Table 9.3.a: Year-wise corrective measure data regarding facilities

| Sr. | Academic | Comments given by student | Action Taken/outcomes |
|-----|----------|---|---|
| No. | Year | | |
| 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 Facility | Institute Build open Gym facility for students |

9.4 Self-Learning (05)

Scope for self-learning:

- Students are encouraged to register for online courses offered by world's leading MOOC Platforms like Coursera, NPTEL, Unacedemy.
- 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 News papers 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



Fig. 9.4.b: DELNET Web portal



Fig. 9.4.c: Practical on Virtual Lab

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)

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

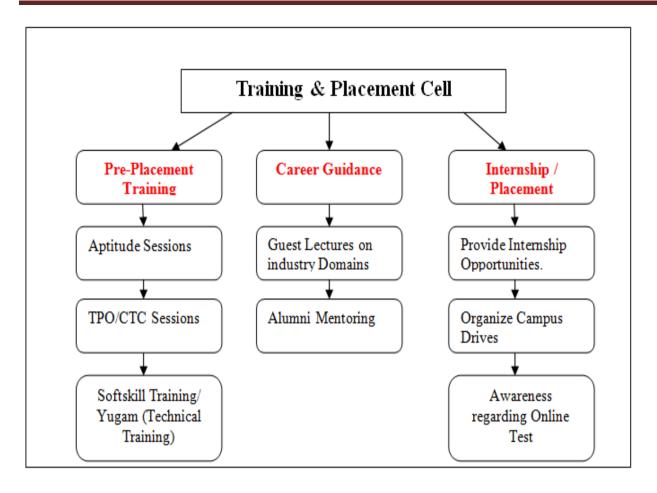


Fig. 9.5.a: Institute training and placement cell procedure

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 is IT Industry and Japan | Mr. Bipin Kadam (Thinksmart Soft, Tokyo, Japan) | 03/05/2023 |
| 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 - 30/06/2022 |
| 2021-22 | CDAC Preparation, Opportunities | Mr. Ashish Nalawade | 31/05/2022 |

| 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) by | Mr. Shekhar Bidwai, Director Chinmay Educational Consultancy, Pune | 26/11/2020 |
| 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 |
| 2018-19 | GATE Examination Awareness | Dr. Nayak B.M. (A.G.C.E., Satara) | 21/09/2018 |

Pre-Placement Training Activities: Following are the activities carried for Pre-placement training;

TableNo.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 |
| 2022-23 | Workshop on PCB Designing and Manufacturing | Mr. Pravin Mohite (Aprontech, Satara) | 7/08/2023 To 18/08/2023 |

| Academic Year | Details | Speaker/Expert | Date |
|------------------|---|--|--|
| 2022-23 | Workshop on C,C++ and Python | Mrs. Pranali Nalawade (Squirrel's Infotech) | 7/08/2023 - 18/08/2023 |
| 2022-23 | Workshop on Automation in IOT | Tushar Inamdar (Squarewave Automation Pvt Ltd, Satara) | 1/08/2023 - 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 - 19/06/2023 |
| | Five days Workshop on Introduction to Python, AI and ML | Mr. Abhiraj Ubale (Software Developer, Code Culture, Pune) | 22/05/2023 - 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 - 13/04/2023 |
| 2021-22 | English Speaking Session | Mr. Kale A.A. (A.G.C.E., Satara) | 1/05/2022- 30/06/2022 |
| 2021-22 | Workshop on CATIA,CEO, SolidWorks for Mechanical Engineering Students. | Mr. Sathe Mahesh (Design Solution, Pune) | 1/03/2022- 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- 30/06/2022 |
| 2021-22 | Aptitude Sessions | Mr. S.P.Patil Mrs. A.D. Kasture (A.G.C.E., Satara) | 1/03/2022 - 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 |

| Academic Year | Details | Speaker/Expert | Date |
|------------------|--|--|-----------------------|
| 2019-20 | Yugam – Four Week Training Program on Internet of Things. | 1) Mrs.Kirti Wanjale (VIIT,Pune) 2) Mrs.Varsha Patil (Lembhe) (JSPM, Hadapsar) 3) Mr.Pravin P. Mote (TATA Communicatios, Pune) 4) Mr.Ashish Kalambe (Modelcam Technologies Pvt. Ltd, Pune) 5) Mr.Nilesh Bhandare (Sloki Technologies Plt Ltd, Bangalore) 6) Mr.Akshay Jadhav (Space Automation, Pune) 7) Mr.Niraj Kapase (DKTE, Ichalkaranji) 8) Mr.Vaibhav V. Nalawade (Institute of Computer Science, Satara) 9) Mr.Pravin Koregave (Infinite Uptime India Pvt Ltd., Pune) | 29/7/2020-4/8/2020 |
| 2019-20 | Yugam – Four Week Training Program on PCB Design (Electrical Engg. & E&TC Engg.) | 1) Mr. Santosh Chavan (A S M Tracks, Shirwal) 2) Prof. Venkatasai shreenath (BVSR,Ongol, AP) 3) Prof. Sameer Bagwan (ADCET, Ashta) 4) Dr. Dhanashree Gawali (Singhgad,Pune) 5) Prof. Vishal Ambhore(VIIT, Pune) 6) Mr. Shridhar Dudam (Smart Logic Technologies, Pune) 7) Prof. Niraj Kapse (ElectrowingServies, Ichalkaranji) 8) Mr.Prafull Bagade (AutoTech, Nashik) 9) Mr.Tejas Shilamkar (VertivEngergyPvt Ltd) 10) Ms. Vinaya Kadam (Free Lancer) | 29/06/2020-24/07/2020 |
| 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 - 12/9/19 |

| Academic Year | Details | Speaker/Expert | Date |
|------------------|--|--|-------------------------|
| 2019-20 | Workshop on Introduction to Arduno and Basic Electronics | Mr. Vishwajit Kulkarni, AGCE, Satara | 9/9/19- 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- 13/3/2020 |
| 2019-20 | Yugam – Four Week Training Program for Civil Engineering | 1) Dr.R.R.Sorate (J.S.P.M.Bawadhan) 2) Prof.A.P.Khatri (J.S.P.M.Narhe) 3) Prof.Kakade Sir (COE,Pune) 4) Prof. Chafalkar Sir (J.S.P.M.Tathawade) 5) Prof. Ban Sir (Raisoni, Nagpur) 6) Prof.Mule Sir, (J.S.P.M.Narhe) 7) Mr.Milind Vasudev (Lax Academy) 8) Dr.Minde Sir (MIT,Kothrud) 9) Mr. Jojo Mathew, (HIT,Nidasoshi) 10) Prof. Khandekar Sir (PVPIT, Pune) 11) Dr. Wagh Sir (Zeal College, Pune) 12) Prof. Vipul Naidu (PVPIT,Pune) | 29/6/2023- 24/7/2020 |
| 2019-20 | Yugam – Four Week Training Program on PCB Design (Electrical Engg. & E&TC Engg.) | 1) Mr. Santosh Chavan (A S M Tracks, Shirwal) 2) Prof. Venkatasai shreenath (BVSR,Ongol, AP) 3) Prof. Sameer Bagwan (ADCET, Ashta) 4) Dr. Dhanashree Gawali (Singhgad,Pune) 5) Prof. Vishal Ambhore (VIIT, Pune) 6) Mr. Shridhar Dudam (Smart Logic Technologies, Pune) 7) Prof. Niraj Kapse (Electrowing Servies, Ichalkaranji) 8) Mr.Prafull Bagade (AutoTech, Nashik) 9) Mr.Tejas Shilamkar (Vertiv Engergy Pvt Ltd) 10) Ms. Vinaya Kadam (Free Lancer) | 29/6/2020- 24/7/2020 |

| Academic Year | Details | Speaker/Expert | Date |
|------------------|--|--|--------------------------|
| 2018-19 | Softskill Development Program (under lead College Activity.) | Mr.Pulkit Singh Ms. Sylviya Johnson (Eka Training) | 11/3/2019- 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- 27/1/2019 |



Fig.9.5.b: Yugam CNC Participant Certificate



Fig.9.5.c: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.cYear-wise Placement Data

| Student Drogressien | Placement Percentage | | | | |
|---------------------|----------------------|---------|---------|---------|--|
| Student Progression | 2021-22 | 2020-21 | 2019-20 | 2018-19 | |
| CSE | 83% | 95% | 81% | 63% | |
| E&TC | 81% | 94% | 94% | 90% | |
| Civil | 80% | 85% | 88% | 91% | |
| Electrical | 91% | 82% | 82% | 80% | |
| Mechanical | 66% | 70% | 80% | 72% | |
| | | | | | |

9.6 Entrepreneurship Cell

(05)

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. Shebin Cheriyan, 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.
- 4. **Entrepreneurship Development Program** by MITCON Consultancy & Engineering Services on 18th and 19th January, 2019.
- 5. Organized session on **Entrepreneurship Awareness delivered** by Mr. Rohit Bhole (Founder 3Star IT Solutions) to spread awareness among the students on 24th April 2021.
- 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 "Udyojakata Vikas Yatra" on 31st August 2023 for inculcating passion passion for entrepreneurship among the students. A session was conducted before inauguration of Udyojakata Vikas Yatra. Dr. Dipak Shikrapurkar has guided students regarding entrepreneurship.

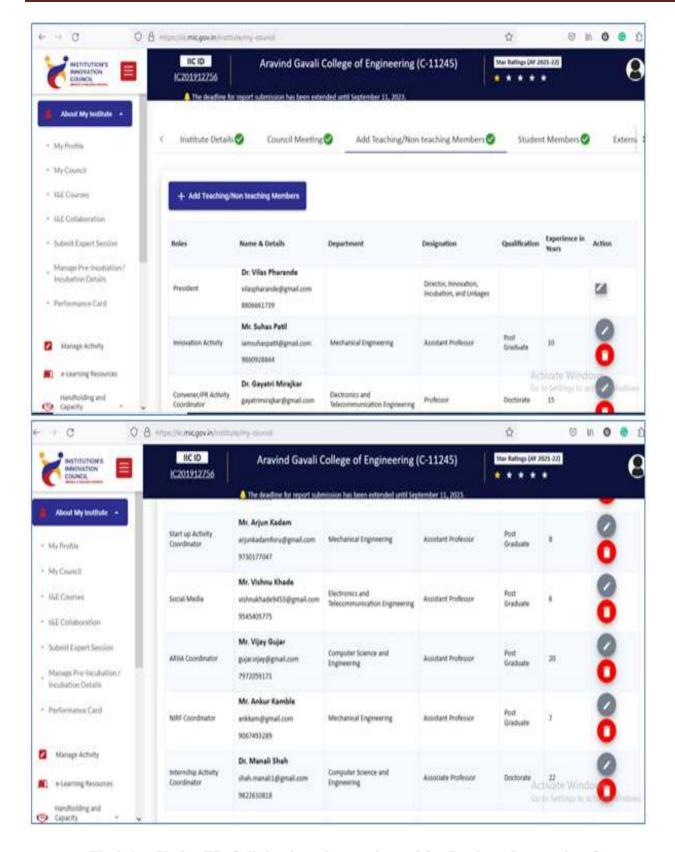


Fig.9.6.a: Under ED Cell, institute has registered for Institute Innovation Course



Fig. 9.6.b: Udyojakata Vikas Yatra organized at Institute- 31 Aug 2023.

Table No.9.6.a list of entrepreneurs

| Sr. | Name of Student | Program | Name of Organization |
|-----|-----------------------------|------------|--|
| No | |) |) |
| 1 | Randive Amol Sarjerao | CIVIL | A A Enterprizes, Ghatkopar |
| 2 | Kadam Arjun Suresh | CIVIL | Mahalakshmi Construction, Satara |
| 3 | Mane Sourabh Bajirao | CIVIL | Shree Datta Construction, Mhaswad |
| 4 | Shinde Anupsinh Virsing | CIVIL | Ratnaprabha Construction, Bhuinj |
| 5 | Patil Raj | CIVIL | M/S Raj Constro Corporation India |
| 6 | Lohar Rohit Namdev | CIVIL | The Engineer's Caffe |
| 7 | Jdhav Sanket Shashikant | CIVIL | Rajveer Builders Satara |
| 8 | Sutar Omkar 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 Engineeers, Satara |
| 12 | Jambhale Sandesh Subhash | ELECTRICAL | M. Sani Sandesh Electricals, Satara |
| 13 | Karande Piyush | ELECTRICAL | Siddheshwar Electricals, Satara |
| 14 | Bhole Rohit | 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 |

9.7 Co-curricular and Extra-curricular Activities

(10)

Sports Facilities:

- The Institution has a separate sports ground for outdoor games like Cricket, Football, Volleyball, Kabaddi 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

| | Academic Year 2022-23 | | | | |
|----|-----------------------|------------|---------|-------------|--|
| No | Name of the Student | Level | Event | Rank | |
| 1 | Shubhamdhane | University | Kho-KHo | Participant | |
| 2 | Ayush Patil | 7 | | | |
| 3 | Shreyash Patil | 7 | | | |
| 4 | Pravinkumar Mahoor | 7 | | | |
| 5 | Akshay Galve | 7 1 | | | |
| 6 | Chaitanya Yadav | 7 | | | |
| 7 | Omkar Yadav | 7 1 | | | |
| 8 | Aniket Tikudave | 7 1 | | | |
| 9 | AtharvDhane | University | Chess | Participant | |
| 10 | OmkarMiraje | 7 | | | |
| 11 | Anniruddha Kadam | | | | |
| 12 | Hasan Shaikh | | | | |
| 13 | OmkarMiraje | 7 | | | |
| 14 | AkankshaMatkar | University | Kabaddi | Participant | |
| 15 | AishwaryaPanvelkar |] | | | |
| 16 | Arati Gaikwad | 7 1 | | | |
| 17 | Sanjana Jadhav | 7 1 | | | |
| 18 | Vaishnavi Kamble | 7 1 | | | |
| 19 | Shreya Chavan | 7 1 | | | |
| 20 | Pragati Ghadge | 7 1 | | | |

| 21 | Amruta Deshmukh | | | |
|----|-----------------|------------|--------------------------|-----------|
| 22 | Avishkar Kadam | | | |
| 23 | SawantOmkar | District | Badminton (Men's Single) | Runner-up |
| 24 | Surve Swaraj | University | Interzonal Wrestling | Winner |

| | Academi | c Year 2021-2 | 2 | |
|----|-------------------------------|---------------|---|-------------|
| 17 | Abhay Sanjay Chorage | University | Tug Of War | Participant |
| 18 | Akash Anandrao Thorat | | | |
| 19 | Avdhut Ashok Mane | | | |
| 20 | Chaitanya Siddheshwar Wagh | | | |
| 21 | Harshada Kishor Shinde | | | |
| 22 | Mandhare Pratiksha Somnath | University | Kabbadi | Participant |
| 23 | Dagade Kshitija Sunil | | | |
| 24 | Kumbhar Aadarsh Rajendra | | | |
| 25 | Kanase Abhishek Bapuso | | | |
| 26 | Patil Akshada Ashok | | | |
| 27 | Katkar Akshali Dilip | | | |
| 28 | Malusare Ankita Jagannath | | | |
| 29 | Shirke Atharva Chandrakant | | | |
| 30 | Surve Swaraj | State | Wrestling | Participant |
| | | c Year 2020-2 | 1 | |
| 31 | Jadhav Ayush Dattray | University | Chess mania | Participant |
| 32 | Attar Mustan Nisar | | 2K21 | |
| 33 | Gaikwad Rushikesh Dilip | | | |
| 34 | Pustake Utkarsh Ravindra | | | |
| 35 | Jaddhav Abhishek Mohan | | | |
| 36 | Shinde Kavita Mohan | | | |
| | | c Year 2019-2 | _ | , |
| 37 | Swaraj Surve | Inter college | Wrestling -57kg (By KBPCOE, Satara) | Runner Up |
| 38 | Omkar Mahadik | University | Kabaddi | Participant |
| 39 | Shinde Akshay | | (By DBATU, | |
| 40 | Mali Kishor | | Lonere) | |
| 41 | Bhoite Aryan | | | |
| 42 | Shirke Sani |] | | |
| 43 | Gaikwad Sushant | | | |
| 44 | Sutar Pratik |] | | |
| 45 | Kalkundrikar Rahul | 1 | | |

| | Academic Year 2019-20 | | | | | |
|----|-----------------------|------------|--------------------|-----------------------|--|--|
| 46 | Pawar Rushikesh | University | КНО-КНО | Participant | | |
| 47 | Pawar Mahesh | | (By DBATU, Lonere) | _ | | |
| 48 | Pawar vaibhav | | | | | |
| 49 | Chavan Prathmesh | | | | | |
| 50 | Anande Mahesh | | | | | |
| 51 | Korade Shubham | | | | | |
| 52 | Sawant Sachin | | | | | |
| 53 | Mulik Akash | | | | | |
| 54 | Nagargoje Krishna | | | | | |
| 55 | Kadam Vaibhav | | | | | |
| 56 | Jadhav Atul | | | | | |
| 57 | Khatte Avishkar | | | | | |
| 58 | Waghmode rohit | | | | | |
| 59 | Mulla Altaf | | | | | |
| 60 | Chavan namrata | University | KHO-KHO | 3 rd Prize | | |
| 61 | Gurav Kanchan | | (By DBATU, Lonere) | | | |
| 62 | Sawant Shital | | | | | |
| 63 | Dalvi Pranita | | | | | |
| 64 | Katkar Arati | | | | | |
| 65 | Vedpathak Poonam | | | | | |
| 66 | Ingawale pratiksha | | | | | |
| 67 | Yadav Priyanka | | | | | |
| 68 | Shinde Rutuja | | | | | |
| 69 | Sakunde Neha | | | | | |
| 70 | Shingate Mayuri | | | | | |
| 71 | Chavan Sakshi | University | Kabaddi | Winner | | |
| 72 | Patil Snehal | | (By DBATU, Lonere) | | | |
| 73 | Patil Karishma | | | | | |
| 74 | Chavan pooja | | | | | |
| 75 | More Shubhangi | | | | | |
| 76 | Pawale Hrituja | | | | | |
| 77 | Velapure Divya | | | | | |
| 78 | Daphale Sayali | | | | | |
| 79 | Bhosale Priyanka | | | | | |
| 80 | Tarade Priyanka | | | | | |
| 81 | Abhishek katkar | | Shot Foot | Participant | | |
| 82 | Jadhav Akash | | (By DBATU, Lonere) | | | |
| 83 | Katkar Abhishek | | Relay 4*100 meter | Participant | | |
| 84 | Jadhav Omkar | | (By DBATU, Lonere) | | | |
| 85 | Mali Kishor | | | | | |
| 86 | Mahadik Omkar | | | | | |

| | Academic Year 2018-19 | | | | |
|----|-----------------------|--------------------|------------------------|-------------|--|
| 87 | Abhishek Katkar | University | Shot Foot (By DBATU, | Winner | |
| | | | Lonere) | | |
| | | | Running 100m & 200m(By | Participant | |
| | | | DBATU, Lonere) | _ | |
| 88 | Vaibhav kadam | | Running 800m & 1500m | Participant | |
| | | (By DBATU, Lonere) | _ | | |
| 89 | Avishkar khatte | | Running 2000m | 4rth Winner | |
| | | | (By DBATU, Lonere) | | |



Fig.9.7.a: Abhishekh Katkar: Football Competition (DBAT University)



Fig.9.7.b: Annual Sports Event "SAWKAR TROPHY" - 2023

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.

Table No.9.7.b: SATARA HILL MARATHON ACTIVITIES

| No. | Name of the Event | Date | Contribution |
|-----|-----------------------|------------|----------------------------|
| 1 | MAS Marathon 2022 | 02/10/2022 | Volunteers, Food Stations |
| 2 | SHM 2022(Satara Hill | 18/09/2022 | Volunteers, Food Stations |
| | Half Marathon 2022) | | |
| 3 | SHM 2019 (Satara Hill | 25/08/2019 | Volunteers, Water Stations |
| | Half Marathon 2019) | | |
| 4 | SHM 2018 (Satara Hill | 02/09/2018 | Volunteers, Water Stations |
| | Half Marathon 2018) | | |





Fig.9.7.c: MAS Marathon Activity 2022

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 |
|------------|------------------|---|---------------------------------|
| | 2022-23 | Shivrajyabhishek Celebration | 350 |
| 1 | | 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 | 2020-21 | 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 |

| Sr No | Academic Year | Details of cultural event | Number of students participated |
|----------|------------------|---|---------------------------------------|
| 17 | 2019-20 | Independence Day Celebration(15/08/2019) | 359 |
| 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 | | Scool 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 |
| 28 | 2018-19 | Mahatma Gandhi Jayanti(02/10/2018) | 50 |
| 29 | 2010-19 | Dandiya 2018(17/10/2018) | 409 |
| 30 | | YOUTH Festival at D.P.Bhosale College, Koregaon (26/10/2018) | 30 |

| 31 | Presenting the Streetplay on "Acche Din wo Chaar Din" (11/11/2018) | 10 |
|----|--|-----|
| 32 | Savitribai Phule Jayanti(03/01/2019) | 104 |
| 33 | Against Dowry Conference at Muktangan Satara (14/04/2019) | 25 |



Fig.9.7.d: Annual Cultural Event "TARUNAI"-2023



Fig.9.7.e: 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 Ralley 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. | Academic | Date | Event Name |
|-----|----------|------------|---|
| No | Year | | |
| 1 | 2022-23 | 15/08/2022 | Independence Day |
| 2 | | 14/11/2022 | Children Day |
| 3 | | 8/12/2022 | Lek Ladki Abhiyan |
| 4 | | 12/01/2023 | Jijau jyanti,Swami Vivekananda Jayanti |
| 5 | | 26/01/2023 | Republic Day |
| 6 | | 19/02/2023 | Shivjayanti |
| 7 | | 23/02/2023 | Blood Donation |
| 8 | | 08/03/2023 | Women's Day |
| 9 | 2021-22 | 4/03/2022 | Food Donation at Villages |
| | | 4/03/2022 | |
| 10 | | | Swatchhata Abhiyan |
| 11 | | | Health Checkup Camp |
| 12 | | 5/3/2022 | Blood Donation Camp |
| 13 | | 25/3/2022 | Tree plantation |
| 14 | | 6/03/2022 | Dustbin Donation Activity |
| 15 | | 20/06/2022 | No Vehicle Day |
| 16 | 2020-21 | 15/08/2020 | Arscenic Album Distribution Activity |
| 17 | | 21/03/2021 | Tree Plantation |
| 18 | 2019-20 | 22/07/2019 | "Jal Divas" Celebration |
| 19 | | 12/08/2019 | Activity for helping People of flood Affected |
| | | | Areas |
| 20 | | 2/10/2019 | "Swatchata Hi Seva" Activity |
| 21 | | 17/01/2020 | "Road Safety Week" (Session for Guidance |
| | | | on Road Safety and Rules by Mrs. Afreen |

| | | | Mulani (RTO Officer Satara) |
|----|---------|-------------|--|
| 22 | | 26/01/2020 | Participated and Guided regarding the |
| | | | "UNNAT BHARAT ABHIYAN" in |
| | | | GRAMSABHAs of 5 Villages (Panchwad, |
| | | | Kudal, Panmalewadi, Varye, Bhuinj) |
| 23 | | 2/2/2020 - | NSS Camp at Anewadi, Satara |
| | | 8/2/2020 | |
| 24 | 2018-19 | 14/1/2019 - | NSS Camp At Bhaleghar, Sanpane, Satara |
| 25 | | 19/1/2019 | Tree Plantation |
| 26 | | 21/07/2018 | "Swatchhata Awareness Ralley" |
| | | 02/10/2018 | , and the second |
| 27 | | 25/01/2019 | "National Voters' Day" |
| 28 | | 06/02/2019 | Road Safety Guest Lecture |
| 29 | | 22/02/2019 | "Swatchhata Camp" |
| 30 | | 23/02/2019 | Blood Donation Camp |



Fig.9.7.f: NSS Camp at Jalgaon Tal. Koregaon, Dist. Satara -2023



Fig.9.7.g: NSS CAMP at at Jalgaon, Koregaon, Satara



Fig.9.7.h: Arsenic Album Tablets Distribution-2022

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



Fig. 9.7.i: Unnat Bharat Abhiyan



Fig. 9.7.j: Guidance in Gram Sabhas under UBA

Co-curricular Activities:

Students are motivated to participate in National level Competitions related to Project Presentation, Paper/Poster Presentation, Debate, 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. | Academic Year | 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 |
| 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 Bharati Vidypeeth 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 |

| Sr. No. | Academic Year | Name of the Competition | Number of students participated |
|------------|------------------|--|---------------------------------|
| 23 | | TEQIP III Sponsored Two Days | 04 |
| | | Online FDP on "Medical | |
| | | Imaging: Special Topics in | |
| | | Magnetic Resonance Imaging " (24/9/2021) | |
| 24 | 2020-21 | Five Days online FDP on "Recent | 04 |
| | | Advances in Health 5.0 In-line | |
| | | with NEP 2020" (22/3/2021) | |
| 25 | | DiPEX (Project Presentation | 03 |
| | | By Tantra shikshan Vidyarthi | |
| | | Karya, Kolapur Division and | |
| | | Dipex) 20-23/05/2021 | |
| 26 | 2019-20 | AVISHKAR 2019-2020 | 04 |
| | | Zonal Level Competition by | |
| | | DBATU | |
| 27 | | AVISHKAR Intercollegiate | 80 |
| | | Poster Presentation Competition | |
| 28 | | PROTECH 2020 at Symbiosis | 02 |
| | | International University, Pune | |





Fig.9.7.k: National Level Project Competition CRETTECHNOVA 2k23 College of Engineering, Malegaon, Baramati



Fig.9.7.1: SMART INDIA HACKTHON at Bhilai Institute of Technology Durg



Fig.9.7.m: MATPO Aptitude Idol Participation

Student Chapter Formed: Indian Geotechnical Society:

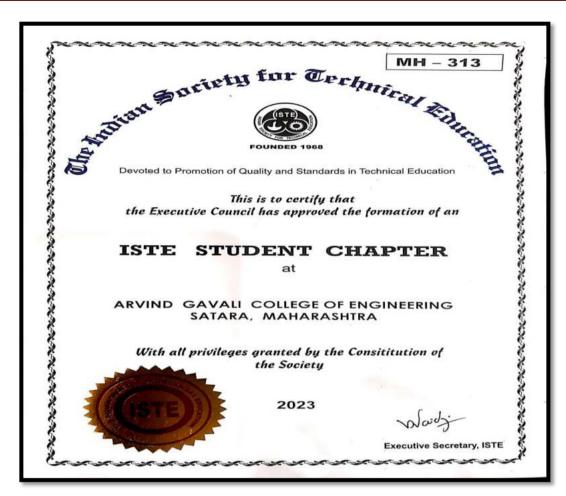
Student Chapter is formed under Indian Geotechnical Society (I.G.S.), Pune by Department of Civil Engineering. Under the chapter, guest/expert Lectures Geotechnical Field, industrial visits, workshops are supposed to be conducted. This chapter helps students to explore different aspects of geotechnical Field. This chapter promotes activities to inculcate passion towards geotechnical field and guides career opportunities in geotechnical field.



Fig.9.7.n: Indian Geotechnical Society-Pune Chapter, student Chapter Formed

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.o: 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.p: 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.q: 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.



9.7.r: 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.s: 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.t: 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.u: 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 | Guest lecture on Management Studies by Dr. Pranjali Ankule | 14/12/2022 |
| 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 is IT Industry and Japan (Mr. Bipin Kadam, Thinksmart Soft, Tokyo, Japan) | 03/05/2023 |
| 5 | | | 2/12/2022 &03-12-2022 |
| 6 | | Expert lecture on "Bituminous binders for road pavements, their specifications, suitability etc.Slope stability, Foundation on expansive soil, soil reinforcing techniques. | 27/03/2023 |
| 1 | 2021-22 | Visit to NCC Camp at Mahagaon for Seminar | 2/06/2022 |
| 2 | | Guidance on Competitive Examination by Mr. Akshay Jadhav (Infinity Academy, Pune) | 6/04/2022 |
| 3 | | Awareness program about Girl Child. | 3/01/2022 |
| 4 | | Expert lecture on soil mechanics by Dr. S.T. Shinde | 27/01/2022 |

| | One day Network security workshop | 16/12/2021 |
|---------|---|---|
| | By Mr. Prashant Patil | |
| | Expert lecture on Surveying | 27/01/2022 |
| | 3D Printer installation | 09/7/2021 |
| 2020-21 | Career in Software Testing, | 09/05/2021 |
| | Prerequisites and Opportunities by Mr. | |
| _ | - | 10/10/2020 |
| | | 10/10/2020 |
| | pile foundation engineering lecture on | |
| | Software Online Development by Dr. | |
| | Sunil Basarkar | |
| | Online Guest lecture on advanced | 18/02/2021 |
| | development Waste water Treatment | |
| | Plant by Mr. Khatri A.P | |
| 2019-20 | Resume Building and Interview | 23/03/2020 |
| | Technique workshop By Mr. N.S. | |
| | Juvekar | |
| | Guest Lecture on Introduction to Career | 11/09/2019 |
| | Opportunities in System Networking by | |
| | Mr.Ajit Sutar | |
| | _ | By Mr. Prashant Patil Expert lecture on Surveying 3D Printer installation 2020-21 Career in Software Testing, Prerequisites and Opportunities by Mr. Sushant Sankpal Online webinar on "Scope & Career in pile foundation engineering lecture on Software Online Development by Dr. Sunil Basarkar Online Guest lecture on advanced development Waste water Treatment Plant by Mr. Khatri A.P 2019-20 Resume Building and Interview Technique workshop By Mr. N.S. Juvekar Guest Lecture on Introduction to Career Opportunities in System Networking by |



Fig.9.7.v: Master Kishor Ghadge from Mechanical got opportunity to study in Germany



Fig.9.7.w: Master Utkarsh Pustake from Mechanical got opportunity to study in Germany

| CRITERION | GOVERNANCE, INSTITUTIONAL | 120 |
|-----------|---------------------------|-----|
| 10 | SUPPORT AND FINANCIAL | |
| | RESOURCES | |
| | | |

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| 10.1 Organization, Governance and Transparency | | (40) |
|--|--|------|
| 10.1 | 0.1.1 State the Vision and Mission of the Institute | |
| 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.

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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 conductive 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 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.

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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.

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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 | Chairman |
| | Hon. Secretory, Samarth Educational Trust, Satara | |
| 2 | Shri. Gavali Arvind Kondiram | Secretary |
| | Hon. Chairman, Samarth Educational Trust, Satara | Secretary |
| 3 | Shri Shanbhag Ramesh Shamrao | |
| | Member of Trustee, Samarth Educational Trust, | Member |
| | Satara | |
| 4 | Dr. Sou. Shete MahanandaVishveshwar | |
| | Member of Trustee, Samarth Educational Trust, | Member |
| | Satara | |
| 5 | Mr. Gavali Dilip Kondiram | |
| | Member of Trustee, Samarth Educational Trust, | Member |
| | Satara | |
| 6 | Mr. Ramesh Unnikrishnan | Member |
| | AICTE Western Regional Officer, Mumbai | TVIOINOCI |
| 7 | Dr. Nandanwar D.R. | Member |
| | Joint Director, DTERO, Pune | TVIOITIOCI |
| 8 | Mr. Narkar K.M. | |
| | D.Y. Patil Engineering College Kasaba Bavada, Member | |
| | Kolhapur | |
| 9 | Dr. Chitlange M.R. Member | |
| | Joint Secretory, MSBTE RO, Pune | Tylomoot |
| 10 | Mr. Mali Milindkumar S. | |
| | Associate Professor | Member |
| | Singhad College of Engineering,Pune | |
| 11 | Mr.Waikar Omkar Member | |
| | Supreme Slilconesans Trinity Enterprises Pune | 1/10111001 |
| 12 | Mr. Bidwai Shailesh P. | Member |
| 1.0 | Chairman S.P. Packaging LTD | |
| 13 | Mr. Godbole Ashutosh | Member |
| 1.4 | Charted Accounted | |
| 14 | Col Mr. Kanase Pramod A. | Member |
| 1.7 | Ex. Serviceman & Professor | |
| 15 | Prof. Hingmire Vishal Sharad Assistant Professor Member | |
| | Assistant Professor Arvind Gayali College of Engineering Satar | |
| 1.6 | ArvindGavali College of Engineering, Satar | |
| 16 | Mr. Pathak Pranav Avinash | |
| | Assistant Professor Assistant Professor Assistant Professor Assistant Professor | |
| 17 | Arvind Gavali College of Engineering, Satara | |
| 17 | Dr. Pharande Vilas Arjun | |
| | Principal, | Member |
| | Arvind Gavali College of Engineering, Satara | |

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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.

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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 |

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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 |

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| 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, |

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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.

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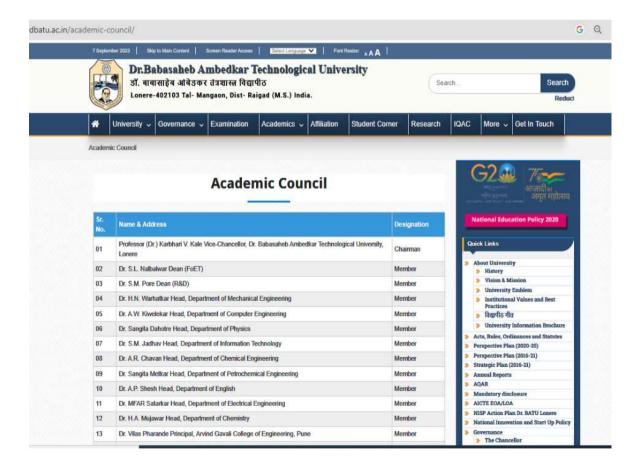
Above administrative bodies meetings are conducted minimum two times in year. Minutes of meetings are maintained in respective registers.

Table 10.1.2d Frequency of Administrative bodies meetings

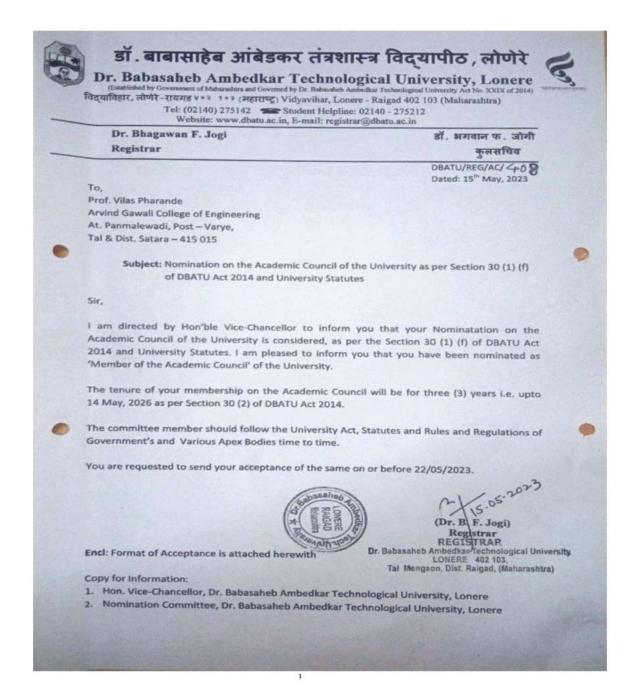
| Name of | Frequency of | 2018-19 | | 2019-20 | | 2020-21 | |
|----------------------|--------------|----------|---------|----------|---------|----------|---------|
| Committee | Meeting | Date of | No of | Date of | No of | Date of | No of |
| | | Meeting | Present | Meeting | Present | Meeting | Present |
| | | | Members | | Members | | Members |
| Governing | 2 | 2/06/201 | 11 | 15/08/20 | 10 | 15/06/20 | 11 |
| Body | | 8 | | 19 | | 20 | |
| | | 26/01/20 | 10 | 26/01/20 | 10 | 15/06/20 | 11 |
| | | 19 | | 20 | | 21 | |
| College | 2 | 2/06/201 | 07 | 14/06/20 | 07 | 17/05/20 | 11 |
| Developme nt | | 8 | | 19 | | 21 | |
| Committee | | 2/01/201 | 07 | 16/05/20 | 11 | NA | NA |
| | | 9 | | 20 | | | |
| Internal | 2 | 11/09/20 | 10 | 26/01/20 | 14 | 15/06/20 | 14 |
| Quality Assurance | | 18 | | 20 | | 20 | |
| Cell | | 15/11/20 | 16 | NA | NA | 23/02/20 | 15 |
| | | 19 | | | | 21 | |

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| Name of | Frequency | 2021-22 | | 2022-23 | |
|------------------------------|-----------|------------|---------|------------|---------|
| Committee | of | Date of | No of | Date of | No of |
| | Meeting | Meeting | Present | Meeting | Present |
| | | | Members | | Members |
| Governing | 2 | 15/06/2021 | 11 | 13/08/2022 | 12 |
| Body | | 11/03/2022 | 12 | 04/03/2023 | 10 |
| College | 2 | 17/05/2021 | 14 | 12/06/2023 | 10 |
| Development Committee | | NA | NA | 17/08/2023 | 10 |
| Internal | 2 | 14/06/2021 | 14 | 12/08/2022 | 14 |
| Quality Assurance Cell | | 03/03/2022 | 13 | 03/03/2023 | 14 |



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10.1.2e Principal Dr. Vilas Pharande is DBATU University Academic Council member

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10.1.2f Staff member Mr. Arjun Kadam is university level Avishkar event coordinator

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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.

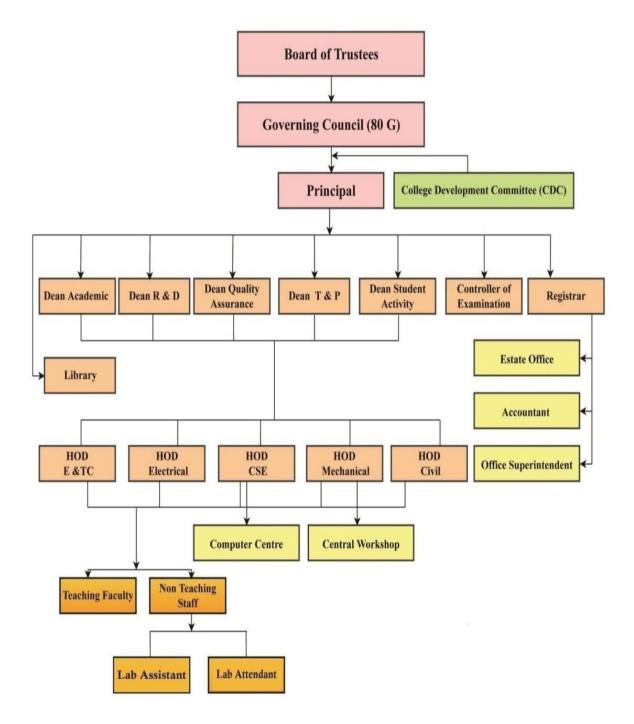


Fig 10.1.2g Organizational Structure

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Duties & Responsibilities:

Each employee in the institute has some responsibilities and the employeeshould 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 downby 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.

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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.

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- ✓ To send an invitation to industry and company for campus recruitment, to notify the studentsabout 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.

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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.

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- ✓ 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

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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 if 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.

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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

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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

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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.

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- 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.

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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

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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. Ghadge Suraj | Dean Academics | |
| 2 | Mr. Hingmire Vishal | Dean IQAC | |
| 3 | Dr. Mirajkar Gayatri | Dean R& D | |
| 4 | Mr. Rajani Mandhare | Dean Student Council | |
| 5 | Dr. Ananda Bhimrao Gholap | HoD Dept of Mechanical Engineering | |
| 6 | Dr. Bamane Prashant Ramesh | HoD Dept of Civil Engineering | |
| 7 | Dr. Nayak Meghay Banoth | HoD Dept of Electrical Engineering | |
| 8 | Dr.Sagar Shinde | HoD Dept of Electronics & Telecommunication Engineering | |
| 9 | Dr. Shaha Manali | HoD Dept of Computer Science & Engineering | |
| 10 | Mr. Pathak P.A. | Training & Placement | |
| 11 | Mrs. Yewale Vaishali | Librarian | |
| 12 | Mr. Kamble Ankur | Director of Physical Education Coordinator NSS | |
| 13 | Dr. Nayak Meghay Banoth | Coordinator Alumni Association | |
| 14 | Mr. Kanase Nitin | Registrar | |

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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.

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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.

| | Table 10.1.3.b Academic Monitoring committee members | | | | | |
|-----------|--|-------------|---|--|--|--|
| 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 | | | |

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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.

| | Table 10.1.3.c IQAC committee members | | | | | |
|------------|---------------------------------------|-------------|---|--|--|--|
| 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 | | | |

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3. 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.

| | Table 10.1.3.d Examination committee members | | | | |
|------------|--|-------------|--|--|--|
| 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 | | |

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4. University/AICTE/DTE

This committee ensures University affiliation, Extension Of Approval (EOA) from AICTE, facilitation centre for centralised admission process from DTE.

| | Table 10.1.3.e Univer | rsity/AICTE/DTE | committee members |
|-------|--------------------------|-----------------|---|
| 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. Alatkar 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.

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| | Table 10.1.3.f Pr | omotional Activi | ty 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.

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| | 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 | |

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| 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.

| ~ | | | T- |
|-------|--------------------------|-------------|--|
| 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. Alatkar 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.

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| | Table 10.1.3.j ICT 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. Alatkar 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.

| Table 10.1.3.k Anti ragging committee members | | | |
|---|--------------------------|-------------|----------------------|
| 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 |

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| 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 | |

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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. Alatkar 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 | | |

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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.

| | Table 10.1.3.m Internal Complaints Committee (ICC) members | | | | |
|------------|--|-------------|--|--|--|
| 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 | | |

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| 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 | | |

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| 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.n Grievance Redressal Cell committee members | | | | |
|-------|---|-------------|---|--|--|
| Sr.No | Names of members | Designation | Department | | |
| 1 | Dr. Pharande Vilas Arjun | Chairman | Principal | | |
| 2 | Dr. Thombare Vijay Ramchandra | Coordinator | HOD Civil 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. Patil Suhas Prakash | Member | Assistant Professor, Mechanical Engineering | | |
| 7 | Mr. Khairmode Omkar | Member | Assistant Professor, Mechanical Engineering | | |

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| 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 |

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).

| | Table 10.1.3.o Library Committee members | | | | |
|-------|--|----------|-----------|--|--|
| Sr.No | Names of members Designation Department | | | | |
| 1 | Dr. Pharande Vilas Arjun | Chairman | Principal | | |

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| 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:

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- 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 | Dr. Thombare Vijay Ramchandra | Coordinator | HOD Civil 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. 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 | | |

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| 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 |

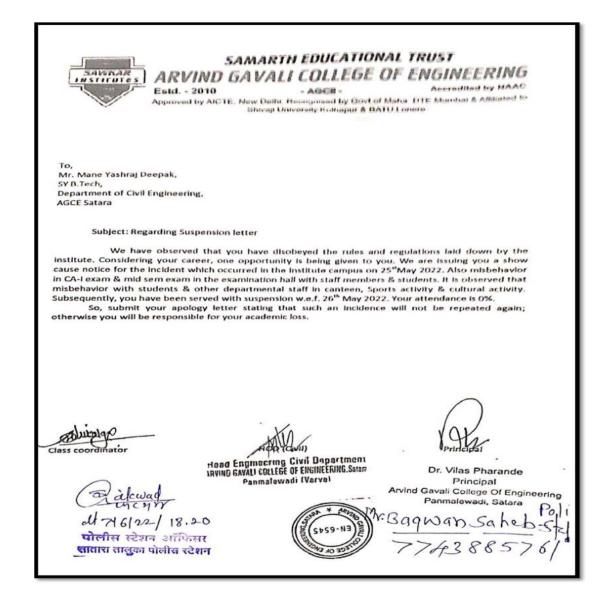
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Standard Operating Procedure (SOP):

- 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.

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Sample of Grievance Redressal mechanism:



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.

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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 | |

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| 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:

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- 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 Raupali H | Member | Social Worker | |

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| 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)

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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)

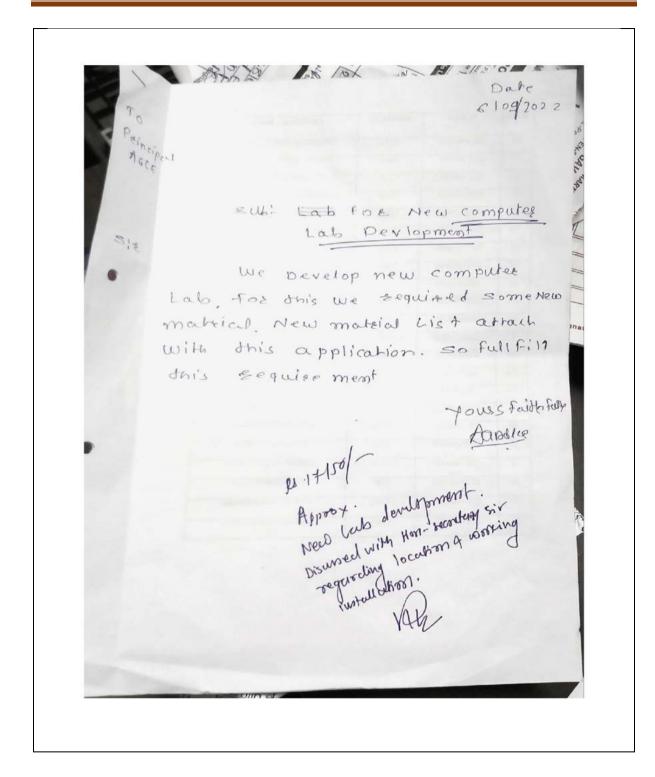
In order to discharge the day-to-day functions and activities of the Institute in smooth manner, the financial powers are delegated of the Principal, HODs and Deans by the Management. HODs and Deans also prepare budget of the Department and their relevant functional committees. Total budget of the college 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

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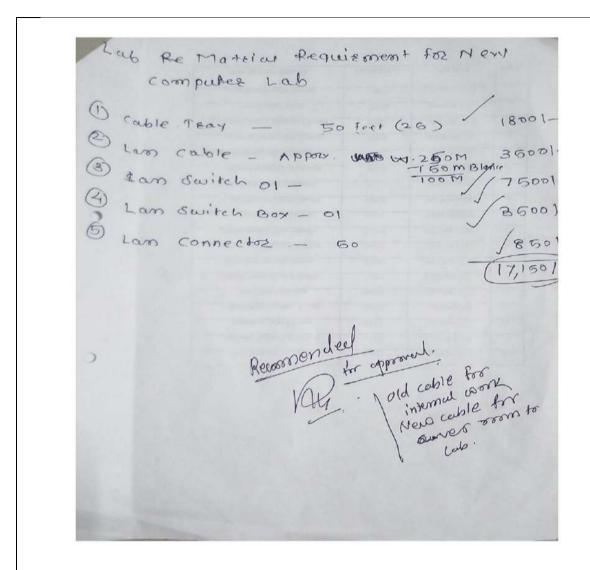


Fig 10.1.4.b1 Principal has approved Rs.17150/- for libratory development

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| | | | | Date: 18/07/2022 |
|----|-------------------------|---|--|--|
| | | | | |
| | То | | | |
| | | rincipal | | |
| | AGCE | satara | | |
| | | | | |
| | Sub: | Regarding requirement of solar pane | I structure working in workshop | |
| | Respe | ected sir, | | |
| 0 | Detail | of consumable given in the following | table | |
| | Sr | Material | Quantity | Price |
| | no | | (in numbers) | 4000 |
| | 2 | square pipe (35*35*20) rectangular pipe(03*01) | 06 01 | 4900 2295 |
| | 3 | square pipe (3*3) | 01 | 900 |
| | 4 | Bearing & casing 25 | 02 | 1500 |
| | 5 | Shaft 25*3 Hydraulic | 01 | 1500 8000 |
| | 7 | fasnar | 20 | 500 |
| | 8 | Square plate (4*4*5) | 01 | 100 |
| | 9 | Square plate (6*6*5) consumable | 01 | 400 2000 |
| | 11 | universal joint | 01 | 1450 |
| | 12 | Transport | ## ### ### ### ### ### ### ### #### #### | 500 |
| | | | TOTAL | 23985/- |
| 15 | Please 5,145 3,27 | Account: Onder Sponrered Onder Sponrered Onder Sponrered | 22 Mr. (v | hanks & Regards Kadam Akshaykumar B. Vork shop incharge) |

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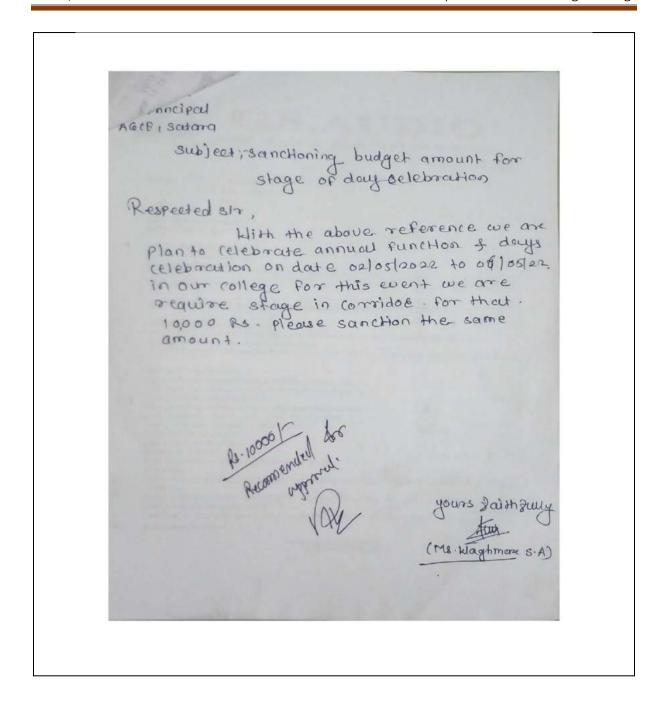
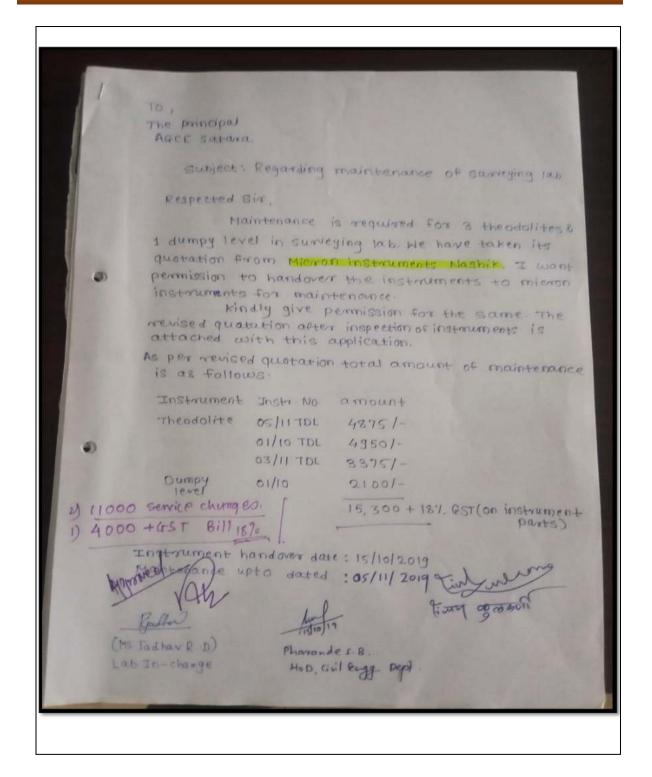


Fig 10.1.4.b2 Principal has approved Rs.10000/- for extracurricular activities

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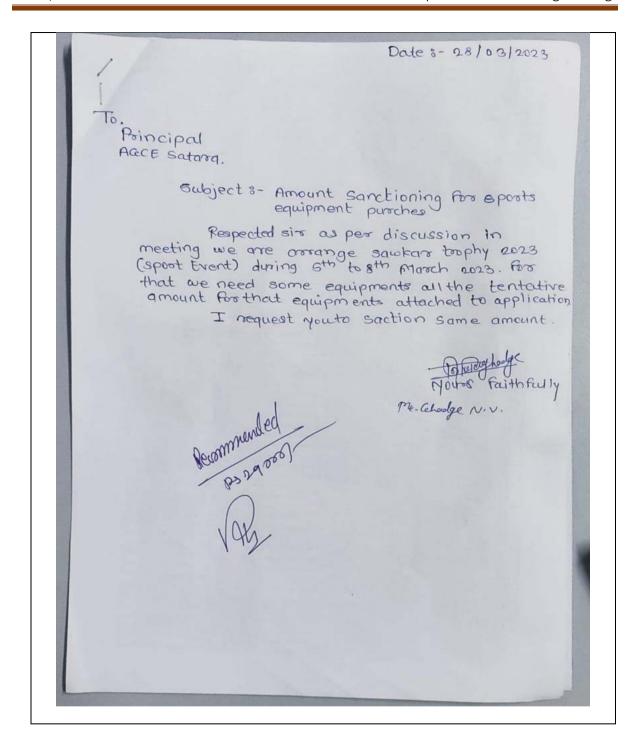


Fig 10.1.4.b3 Principal has approved Rs.15000/- for Sports activities

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amazon.in Tax Invoice/Bill of Supply/Cash Memo (Original for Recipient) Sold By : Billing Address : Arvind Gavali College of Engineering Gat no. 247, Panamalewadi Payal Enterprises 4658 A / 21 ANSARIROAD, ANSARI ROAD SATARA, MAHARASHTRA, 415015 DARYA GNAJ, DELHI, 110002 State/UT Code: 27 PAN No: AAPFP4704K Shipping Address: GST Registration No: NotApplicable Arvind Gavali College of Engineering Arvind Gavali College of Engineering Gat no. 247, Panamalewadi SATARA, MAHARASHTRA, 415015 State/UT Code: 27 Place of supply: MAHARASHTRA Place of delivery: MAHARASHTRA Order Number: 402-0209171-6497171 Invoice Number: IN-16968 Invoice Details: DL-141916061-2223 Order Date: 27.03.2023 Invoice Date: 27.03.2023 Qty Net Rate Type Amount Amount Unit Price Description Embedded Microcomputer System Real Time Interfacing | 8131516326 (9788131516324) 0% IGST ₹608.00 ₹608.00 ₹0.00 ₹608.00 0% IGST ₹0.00 0% None 30.00 Shipping Charges ₹100.00 0% IGST ₹0.00 ₹100.00 0% IGST ₹0.00 o% None ₹0.00 TOTAL: ₹0.00 ₹708.00 Amount in Words: Seven Hundred Eight only For Payal Enterprises: A Rad **Authorized Signatory** Whether tax is payable under reverse charge - No

Customers desirous of availing input GST credit are requested to create a Business account and purchase on Amazon initivativess from Business eligible offers

Please note that this invoice is not a demand for payment

Fig 10.1.4.b4 Staff member has purchase book from their account for library

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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

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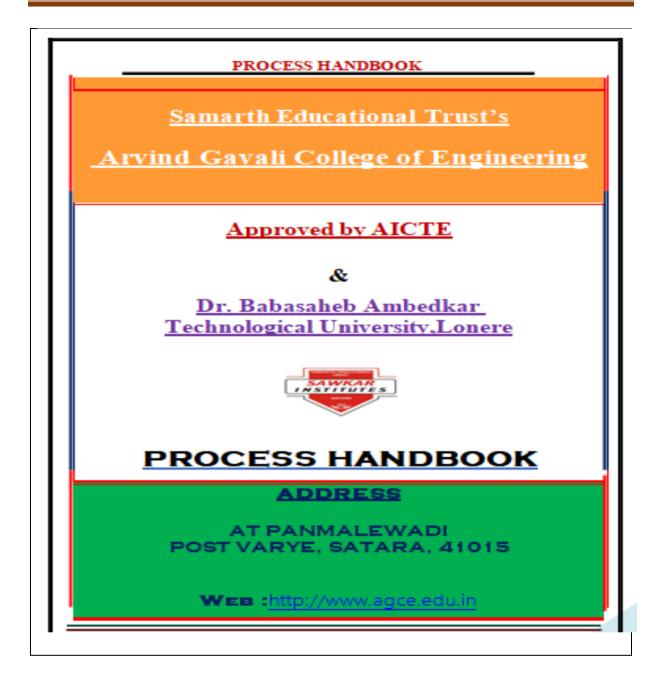


Fig 10.1.5 a Screen shot of Process Handbook first page

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.

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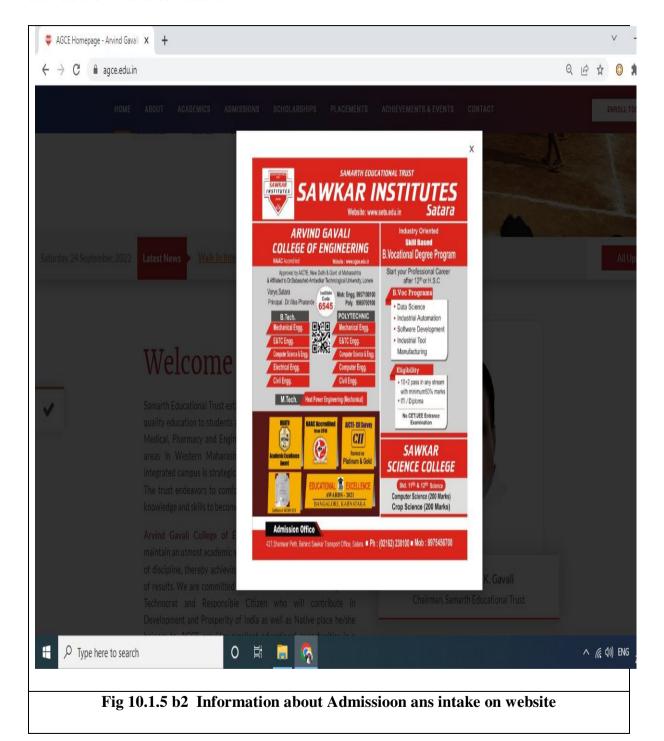


Fig 10.1.5 b1 Promotion activity to SSC Students

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ii) Website

All necessary information including intake, latest news, events and update are made available on institute website.



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Fig 10.1.5 b3 Information about latest news and udates 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

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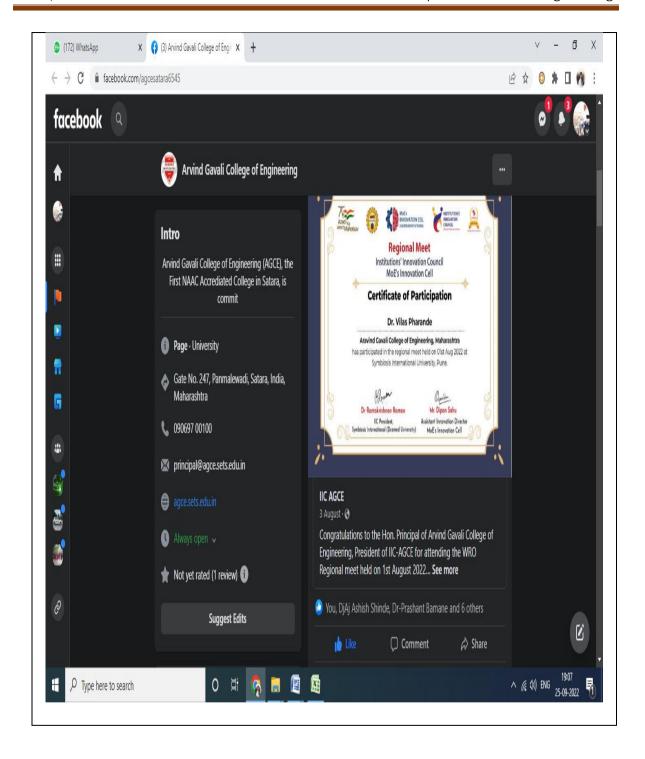


Fig 10.1.5 b5 Facebook page of Institute

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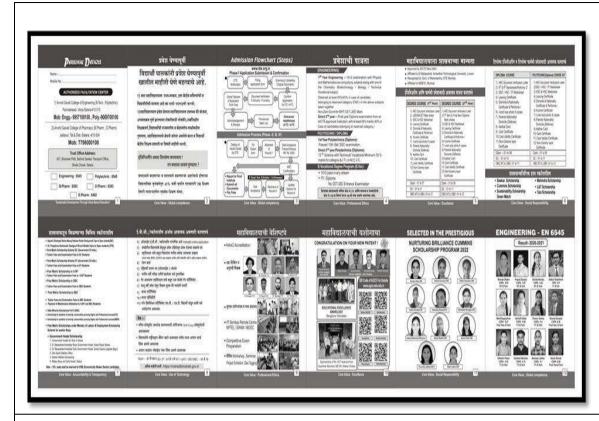
iv) Print media

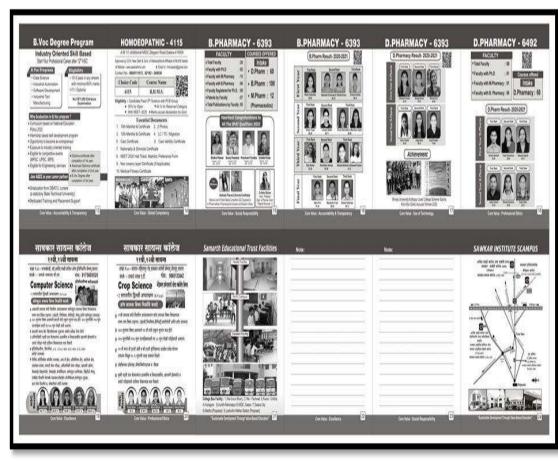
Every year institute publish Admission information diary that includes all institute information like intake, admission process, documents required, faculty members, activities, placement etc.



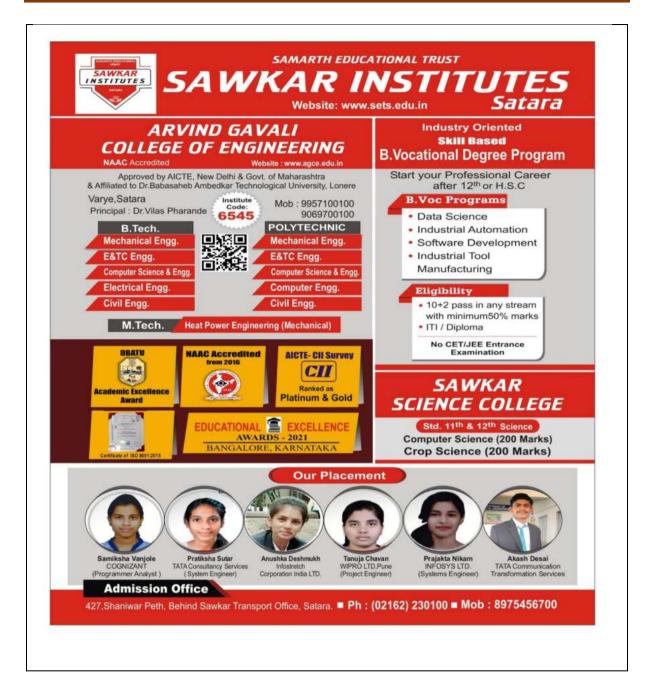
Fig 10.1.5 b6 Admission information diary

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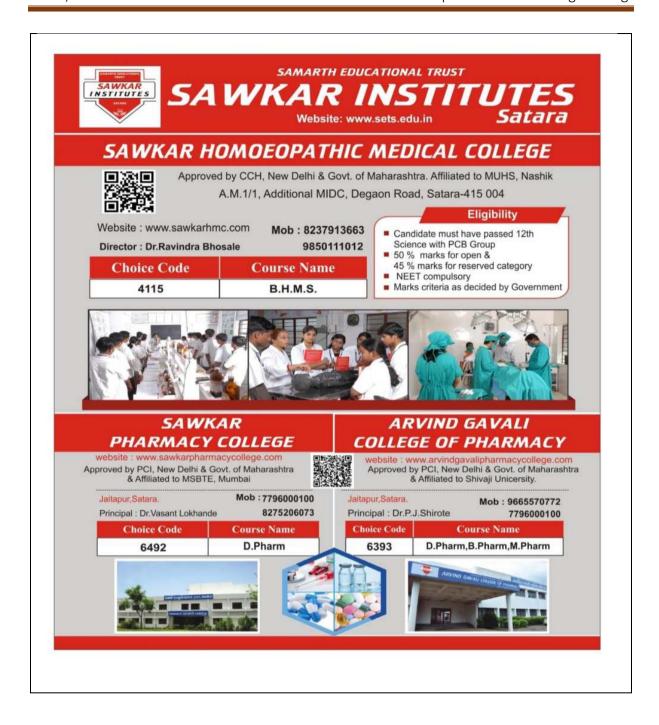


Fig 10.1.5 b7 Admission information brochure

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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

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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)

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Table B.10.2a – CFY (2022-23)

| | | Income lount) | | 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 | | Actua | Total No. of Students | | |
|----------|-------|--------|---|-----------------------|--------------------------|--|----------------|
| | (Ar | nount) | | (Amount) | | | (Student nos.) |
| Fee | Govt. | Grants | Other | Recurring | Non | Special | Expenditure |
| | | | Sources (specify) Prizes and Awards | including salaries | Recurring | Projects/Any other, specify BCUD, R&D and grants | per student |
| 79606611 | 0 | 0 | 367635 | 68270674 | 10630726 | 78700 | 62982.54 |

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Table B.10.2a - CFYm1 (2020-21)

| 7 | Total Inc | come | | Actual expenditure (till): | | | Total No. of |
|----------|-----------|--------|--|----------------------------|-----------|--|-------------------------|
| | (Amou | nt) | | (Amount) | | | Students (Student nos.) |
| Fee | Govt. | Grants | Other | Recurring | Non | Special | Expenditure |
| | | | Sources (specify) Prizes and Awards | including salaries | Recurring | Projects/Any other, specify BCUD, R&D and grants | per student |
| 81414627 | 0 | 0 | 462923 | 61816533 | 10297456 | 74700 | 53197 |

Table B.10.2a -CFYm2(2019-20)

| | Total I | ncome | | Actual expenditure (till): | | | Total No. |
|----------|---------|--------|--|----------------------------|-----------|---|----------------------------|
| | (Amo | ount) | | (Amount) | | | of Students (Student nos.) |
| Fee | Govt. | Grants | Other | Recurring | Non | Special | Expenditure |
| | | | Sources (specify) Prizes and Awards | including salaries | Recurring | Projects/Any other, specify BCUD, R&D and grants | per student |
| 64740364 | 0 | 0 | 734740 | 63512329 | 10009259 | 288619 | 63904.94 |

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Table B.10.2a- CFYm3(2018-19)

| | Total I | ncome | | Actua | Actual expenditure (till): | | | |
|----------|---------|--------|--|------------------------------|----------------------------|--|----------------------------|--|
| | (Amo | ount) | | (Amount) | | | 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 | 1,100,000 | 1,028,673 | 3300000 | 3104976 | 0 | 0 |
| Library | 80,000 | 70,845 | 23000 | 30445 | 35000 | 13570 |
| Laboratory equipment | 1,100,000 | 1,060,990 | 1080000 | 1014157 | 655000 | 594030 |
| Laboratory consumables | 1,775,000 | 1,647,092 | 1120000 | 1023030 | 1055000 | 674170 |

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| Teaching and | 69,112,000 | 65,298,451 | 65100000 | 61189875 | 63560000 | 57326373 |
|-----------------|-------------|------------|----------|----------|----------|----------|
| nonteaching | | | | | | |
| staff salary | | | | | | |
| Maintenance | 2,875,000 | 2,700,109 | 3190000 | 2992063 | 1350000 | 1224440 |
| and spares | | | | | | |
| R&D | 350,000 | 314,190 | 290000 | 259388 | 90000 | 74700 |
| Training and | 2,618,000 | 2,416,915 | 1710000 | 1659560 | 1600000 | 1474093 |
| Travel | | | | | | |
| Miscellaneous | 255,000 | 214,685 | 159500 | 148374 | 135000 | 113427 |
| expenses *(All | | | | | | |
| remaining | | | | | | |
| recurring exp., | | | | | | |
| excl. | | | | | | |
| Depreciation) | | | | | | |
| Others, specify | 31,356,000 | 16,428,774 | 15177000 | 11686365 | 27540000 | 11287915 |
| (All remaining | | | | | | |
| Capital exp.) | | | | | | |
| Total | 110,621,000 | 91,180,725 | 91149500 | 83108233 | 96020000 | 72782718 |

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| Items | Budgeted | Actual | Budgeted in | Actual Expenses in |
|---------------------|----------|-----------------|-------------|--------------------|
| | in 2019- | Expenses in | 2018- 2019 | 2018- 2019 till |
| | 2020 | 2019- 2020 till | | |
| Infrastructure | 0 | 0 | 0 | 0 |
| Built-Up | | | | |
| Library | 167000 | 156491 | 400000 | 138375 |
| Laboratory | 850000 | 797104 | 430000 | 277400 |
| equipment | | | | |
| Laboratory | 1640000 | 1479508 | 1536000 | 2051900 |
| consumables | | | | |
| Teaching and | 63560000 | 57623428 | 69300000 | 50222741 |
| nonteaching staff | | | | |
| salary | | | | |
| Maintenance and | 1985000 | 1850670 | 1882000 | 1812399 |
| spares | | | | |
| R&D | 320000 | 288619 | 180000 | 151600 |
| Training and | 1705000 | 1496097 | 1077000 | 2106971 |
| Travel | | | | |
| Miscellaneous | 91000 | 77900 | 173000 | 293916 |
| expenses *(All | | | | |
| remaining | | | | |
| recurring exp., | | | | |
| excl. Depreciation) | | | | |
| Others, specify | 25374000 | 10953838 | 28496520 | 15267127 |
| (All remaining | | | | |
| Capital exp.) | | | | |
| Total | 95692000 | 74723655 | 103474520 | 72322429 |

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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 |

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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.

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- 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 | 110,621,000.00 | 91,180,725.65 | 82.43 |
| 2 | 2021-22 | 91,149,500.00 | 83,088,233.45 | 91.16 |
| 3 | 2020-21 | 96,020,000.00 | 72,782,719.21 | 75.80 |
| 4 | 2019-20 | 95,692,000.00 | 74,723,656.08 | 78.09 |
| 5 | 2018-19 | 103,474,520.00 | 72,322,428.67 | 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.

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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

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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) | | Actual expenditure (till): | | Total No. Of |
|---------------|-----------|----------------------------|---------|-------------------------|
| 1303576 | | (Amount) | | Students |
| | | 1213137 | | (157) |
| Non-Recurring | Recurring | Non-Recurring Recurring | | Expenditure per student |
| 179836 | 1123740 | 172250 | 1040887 | 7727 |

Table B.10.3a: CFY(2021-22)

| (Amount) | | Actual expenditure (till): | | Total No. Of |
|---------------|-----------|----------------------------|---------|-------------------------|
| 147594 | 41 | (Amount) 1389112 | | Students (222) |
| Non-Recurring | Recurring | Non-Recurring Recurring | | Expenditure per student |
| 214983 | 1260958 | 203601 | 1185511 | 6257 |

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Table B.10.3a: CFYm1(2020-21)

| (Amount) | | Actual expenditure (till): | | Total No. Of |
|---------------|-----------|----------------------------|--------|-------------------------|
| 982800 | | (Amount) | | Students |
| | | 832410 | | (245) |
| Non-Recurring | Recurring | Non-Recurring Recurring | | Expenditure per student |
| 137800 | 845000 | 121320 | 711090 | 3398 |

Table B.10.3a: CFYm2(2019-20)

| (Amount) | | Actual expenditure (till): | | Total No. Of Students |
|-----------|-----------|----------------------------|-----------|-------------------------|
| 1321700 | | (Amount) | | (192) |
| | | 1202240 | | |
| Non- | Recurring | Non-Recurring | Recurring | Expenditure per student |
| Recurring | | | | |
| 262000 | 1059700 | 245540 | 956700 | 6262 |

Table B.10.3a: CFYm3(2018-19)

| (Amount) | | Actual expenditure (till): | | Total No. Of Students |
|---------------|-----------|----------------------------|---------|-------------------------|
| 1223400 | | (Amount) | | (169) |
| | | 1168575 | | |
| Non-Recurring | Recurring | Non-Recurring Recurring | | Expenditure per student |
| 393200 | 830200 | 71175 | 1097400 | 6493 |

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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 |
|------------------------|------------------------|---|------------------------------|---|------------------------|---|
| Library | 11418 | 10110 | 4483 | 5934 | 7000 | 2720 |
| Laboratory equipment | 157000 | 151430 | 210500 | 197667 | 130800 | 118600 |
| Software | 11418 | 10710 | 0 | 0 | 0 | 0 |
| Laboratory consumables | 253340 | 235092 | 218298 | 199400 | 210000 | 134570 |
| Maintenance and spares | 410340 | 385380 | 621760 | 583183 | 270000 | 244500 |
| R&D | 49960 | 44840 | 56500 | 50568 | 18000 | 15000 |
| Training and Travel | 373700 | 344960 | 333300 | 323460 | 320000 | 294393 |
| Miscellaneous expenses | 36400 | 30615 | 31100 | 28900 | 27000 | 22627 |
| Total | 1303576 | 1213137 | 1475941 | 1389112 | 982800 | 832410 |

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| Items | Budgeted in 2019- 2020 | Actual Expenses in 2019- 2020 till | Budgeted in 2018- 2019 | Actual Expenses in 2018- 2019 till |
|------------------------|------------------------|------------------------------------|---------------------------|------------------------------------|
| Library | 31000 | 28840 | 68000 | 23775 |
| Laboratory | | | | |
| equipment | 157000 | 147000 | 74000 | 47400 |
| Software | 74000 | 69700 | 251200 | 0 |
| Laboratory consumables | 303000 | 272000 | 263000 | 351000 |
| Maintenance and spares | 365000 | 341300 | 323000 | 310000 |
| R&D | 59000 | 53200 | 30700 | 26000 |
| Training and Travel | 316000 | 275900 | 184000 | 360000 |
| Miscellaneous expenses | 16700 | 14300 | 29500 | 50400 |
| Total | 1321700 | 1202240 | 1223400 | 1168575 |

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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 Civil Department

| Sr. No | Assessment Year | Allocated Budget | Adequate/ Non-Adequate |
|--------|--------------------|------------------|------------------------|
| 1 | 2022-23 | 1560859 | Adequate |
| 2 | 2021-22 | 1475941 | Adequate |
| 3 | 2020-21 | 982800 | Adequate |
| 4 | 2019-20 | 1321700 | Adequate |
| 5 | 2018-19 | 1223400 | Adequate |

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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.

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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 Civil Department

| Sr. No | Assessment Year | Allocated Budget | Utilized Budget | Utilized Percentage |
|--------|--------------------|---------------------|--------------------|---------------------|
| 1 | 2022-23 | 1303576 | 1213137 | 93.06 |
| 2 | 2021-22 | 1475941 | 1389112 | 94.12 |
| 3 | 2020-21 | 982800 | 832410 | 84.70 |
| 4 | 2019-20 | 1321700 | 1202240 | 90.96 |
| 5 | 2018-19 | 1223400 | 1168575 | 95.52 |

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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. | Branch | Titles | Volumes | National | International |
|-------|--|--------|---------|----------|------------------|
| No | | | | Journals | 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

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| Year of Purchase | Particulars |
|------------------|-------------|
| 2022-23 | DELNET |
| 2021-22 | DELNET |
| 2020-21 | DELNET |
| 2019-20 | DELNET |
| 2018-19 | DELNET |

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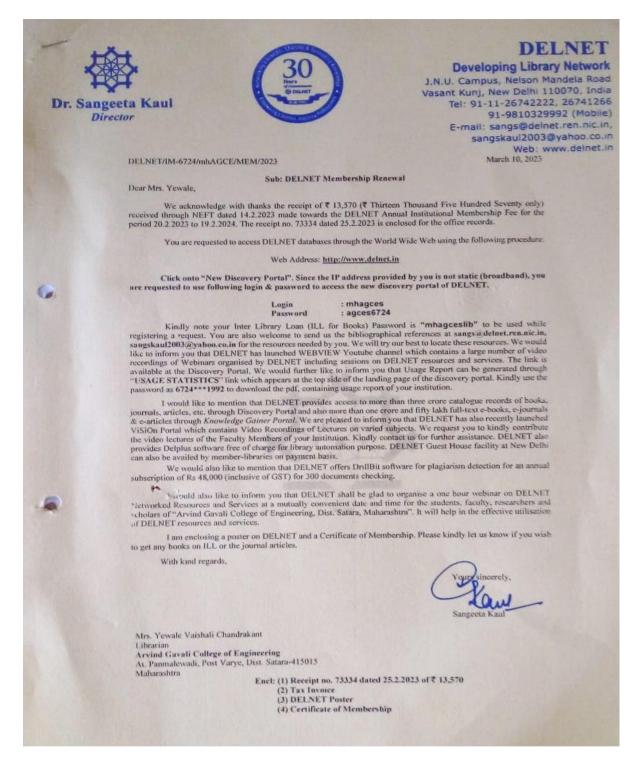


Fig 10.4a DELNET e Resource subscription 2023-24

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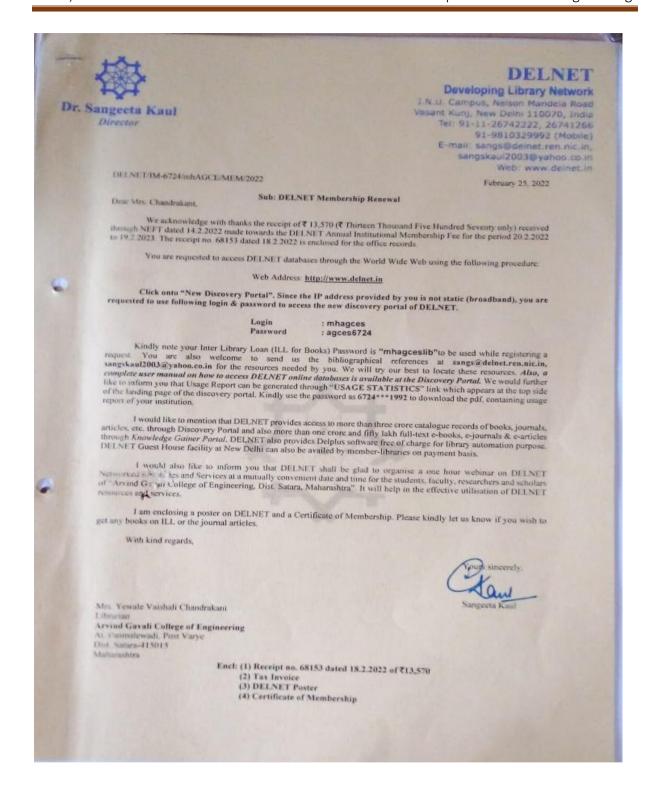


Fig 10.4b DELNET e Resource subscription 2022-23

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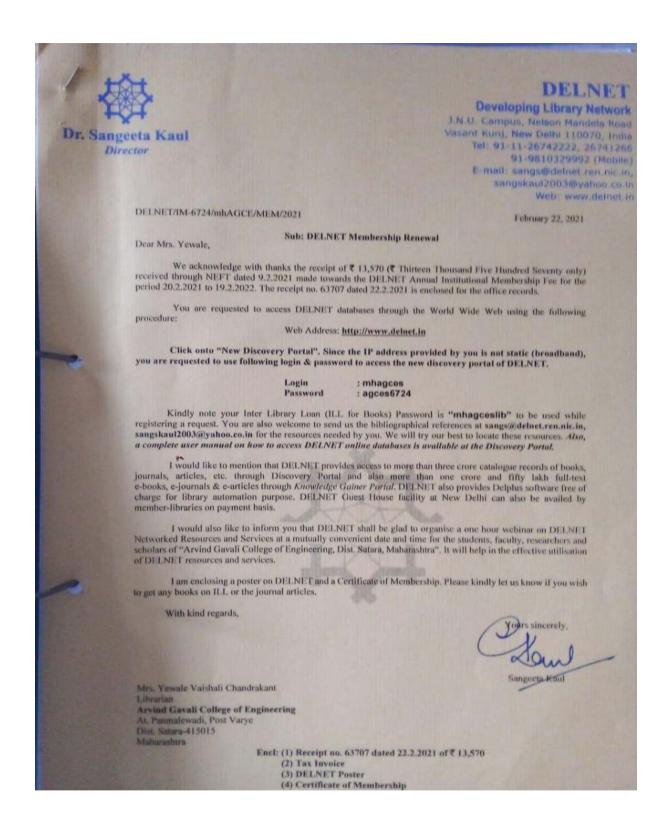


Fig 10.4c DELNET e Resource subscription 2021-22

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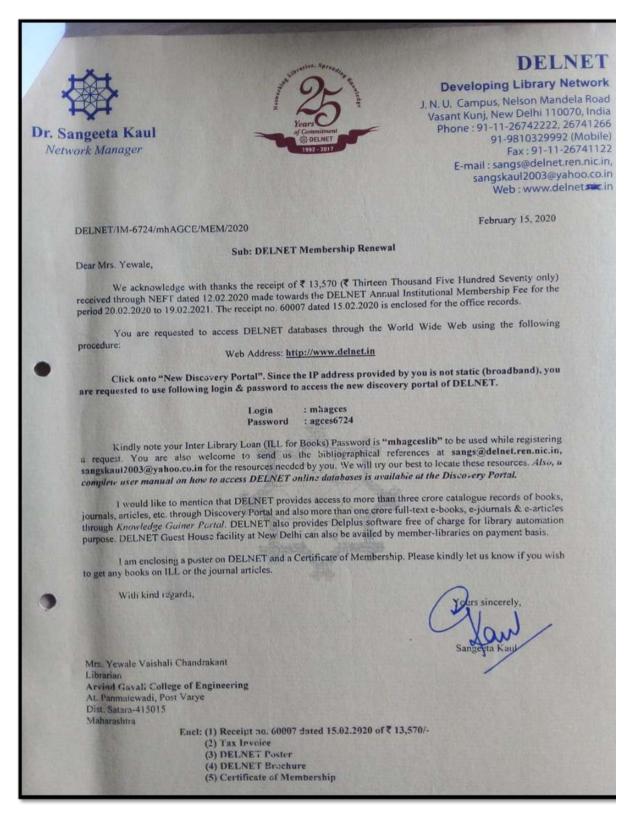


Fig 10.4d DELNET e Resource subscription 2020-21

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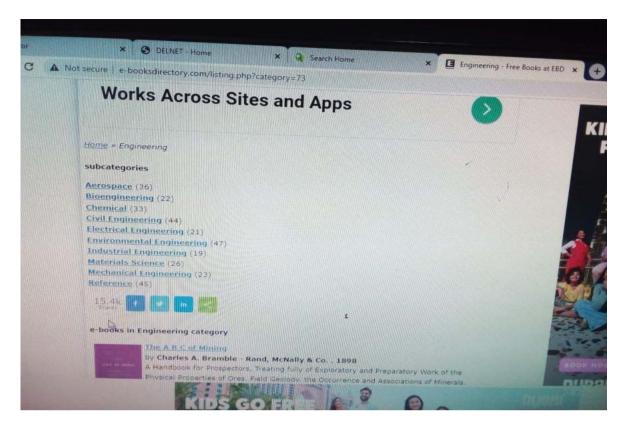


Fig 10.4e DELNET e Resource e Journal details



Fig 10.4f Students using DELNET e Resource e Journal details

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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 | 8.00 am to 7.30 pm. |
| On holiday | over man ver record |
| Number of library staff | 3 |

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| Number of library staff with degree in Library | 2 |
|--|---|
| Management | |
| Library Management Computerization for search, | КОНА |
| indexing, issue/return records | |
| Bar coding used | YES |
| Library additional services | Internet, Journals, Technical Magazine, Conference Proceedings, Newspaper, Photocopy, Printing & Scanning Soft copies of University Question papers & Syllabus shared through email Extended reading room facility during exam period Orientation to newly admitted students. Online public access catalogue. |

C. Support to students for self-learning activities:

AGCE library helps its students in self-learning activities in following way:

- 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

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- 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.

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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 |

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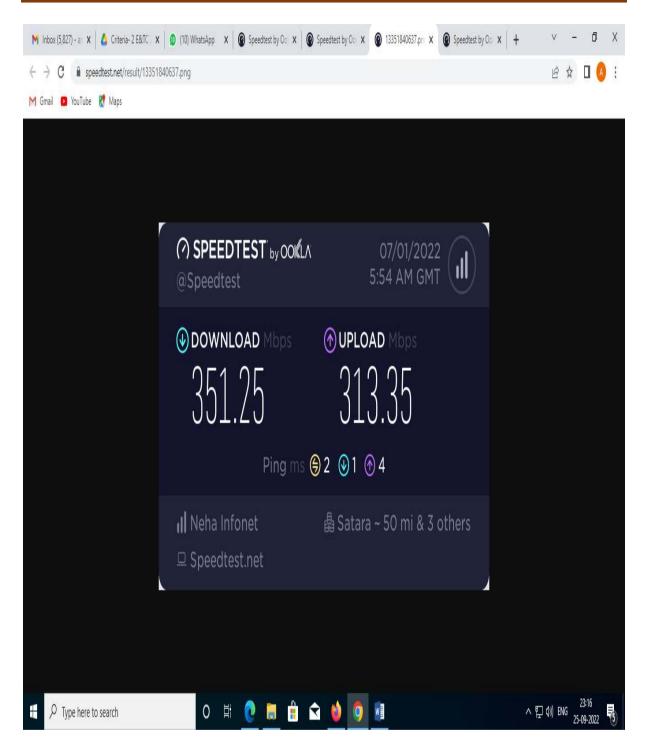
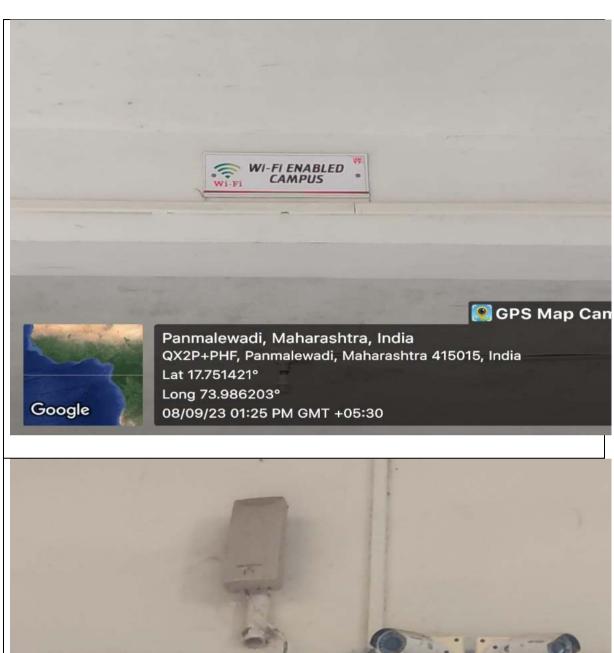


Fig 10.4.2.a Available band width: Speed Test 300 MBPS

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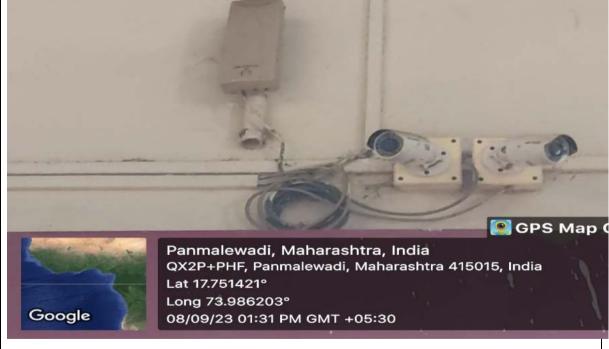


Fig 10.4.2.b Wi-fi facility available at institute

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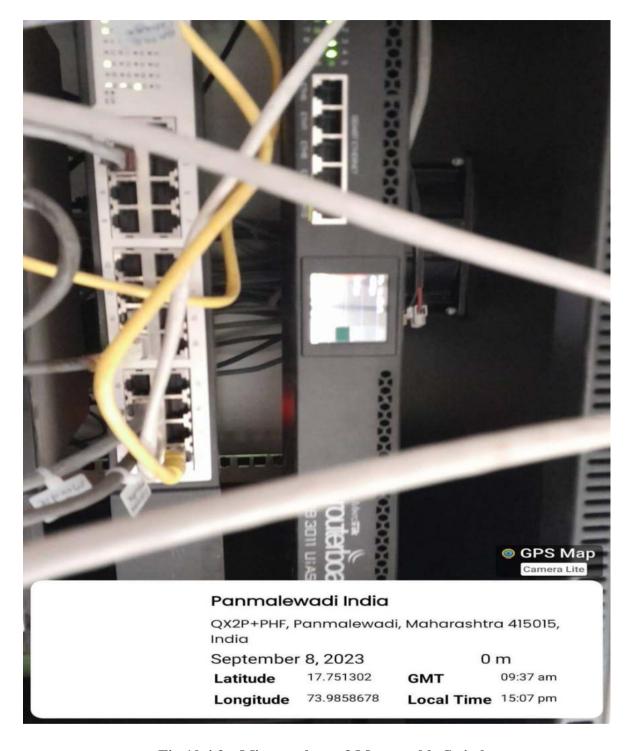


Fig 10.4.2.c Microtec layer 3 Manageable Switch

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