

# YEARLY STATUS REPORT - 2021-2022

| Part A   |   |  |
|--|---|--|
| Data of the Institution                              |   |  |
| 1.Name of the Institution                            | Modern Education Society's<br>College of Engineering, Pune 01 |  |
| • Name of the Head of the institution                | Dr. S. S. Sarwade   |  |
| • Designation  | Principal   |  |
| • Does the institution function from its own campus? | Yes   |  |
| • Phone no./Alternate phone no.                      | 02026163831   |  |
| Mobile no  | 9422460448  |  |
| • Registered e-mail                                  | principal@mescoepune.org                                      |  |
| • Alternate e-mail                                   | mescoenaac@gmail.com  |  |
| • Address  | 19, Late Prin. V.K. Joag Path,<br>Bund Garden Road ,Pune 01.  |  |
| • City/Town  | Pune  |  |
| • State/UT   | Maharashtra   |  |
| • Pin Code   | 411001  |  |
| 2.Institutional status                               |   |  |
| Affiliated /Constituent                              | Affiliated  |  |
| • Type of Institution                                | Co-education  |  |
| • Location   | Urban   |  |

| • Financial Status  | Self-financing  |
|---|---|
| • Name of the Affiliating University                                    | Savitribai Phule Pune University,<br>Pune   |
| • Name of the IQAC Coordinator  | Dr. Pranoti Prashant Mane   |
| • Phone No.   | 02026163831   |
| • Alternate phone No.   | 02026160781   |
| • Mobile  | 8806661816  |
| • IQAC e-mail address   | pranoti.mane@mescoepune.org   |
| Alternate Email address   | mescoenaac@gmail.com  |
| 3.Website address (Web link of the AQAR<br>(Previous Academic Year)     | https://mescoe.mespune.org/nation<br>al-assessment-and-accreditation-<br>council/                       |
| 4.Whether Academic Calendar prepared during the year?                   | Yes   |
| • if yes, whether it is uploaded in the Institutional website Web link: | https://mescoe.mespune.org/wp-con<br>tent/uploads/2022/04/Academic-<br>Calendar-2021-22-Sem-II-Sign.pdf |

# **5.**Accreditation Details

| Cycle   | Grade | CGPA | Year of<br>Accreditation | Validity from | Validity to |
|---------|-------|------|--------------------------|---------------|-------------|
| Cycle 1 | A     | 3.13 | 2015                     | 14/09/2015    | 13/09/2020  |

6.Date of Establishment of IQAC

of IQAC 13/12/2014

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

|  | 1                    | 1   |     | 1                           |        |       |
|--|----------------------|---|-----|-----------------------------|--------|-------|
| Institutional/Depa<br>rtment /Faculty  | Scheme               | Funding Agency                                |     | Year of award with duration | Amount |       |
| Dr. M.P.Dale<br>Mrs.<br>Vaishali<br>Kamble   | Research             | Department<br>of Science<br>and<br>Technology |     | 06-09-2021<br>05-09-202     |        | Lakh  |
| Dr. V. N.<br>Chougule  | AICTE-<br>MODROB     | AICTE   |     | 02/02/2021<br>01/02/202     |        | 863/- |
| 8.Whether composi<br>NAAC guidelines   | tion of IQAC as pe   | r latest                                      | Yes |                             |        |       |
| • Upload latest notification of formation of IQAC  |                      | <u>View File</u>                              |     |                             |        |       |
| 9.No. of IQAC mee  | tings held during th | ne year                                       | 02  |                             |        |       |
| • Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?   |                      | Yes   |     |                             |        |       |
| • If No, please upload the minutes of the meeting(s) and Action Taken Report   |                      | No File Uploaded                              |     |                             |        |       |
| 10.Whether IQAC received funding from any<br>of the funding agency to support its activities<br>during the year?   |                      | No  |     |                             |        |       |
| • If yes, mention the amount   |                      |   |     |                             |        |       |
| 11.Significant contributions made by IQAC during the current year (maximum five bullets)   |                      |   |     | llets)                      |        |       |
| 1. Internal quality assurance and Autonomy cell. (IQA-A cell) 1.<br>Academic Calendar planning & Quality Monitoring 2. IQAC,<br>Accreditation & Ranking related all activities |                      |   |     | 1.                          |        |       |

7. The institution systematically reviews its teaching-learning processes, structures, methodologies, and learning outcomes at regular intervals to ensure continuous improvement. This is achieved through the Internal Quality Assurance Cell (IQAC), established in accordance with prescribed norms. The IQAC plays a crucial role in evaluating and enhancing both the academic and operational

Page 3/67

frameworks of the institution

8. Periodic reviews are conducted by the IQAC through meetings between the principal, heads of departments, and the dean. These discussions assess the effectiveness of teaching strategies, curriculum delivery, feedback mechanisms, and student performance. Insights gained from these evaluations inform various reforms aimed at enhancing the quality of education and the overall learning experience

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

| Plan of Action                 | Achievements/Outcomes  |
|--------------------------------|--|
| Industry-Institute Interaction | In 2021-22, M.E.S. College<br>emphasized enhancing academic<br>quality, research, and student<br>outcomes. The IQAC facilitated<br>14 MOUs with industry partners,<br>leading to 42 guest lectures, 4<br>workshops, 427 internships, 264<br>placements, and 9<br>sponsorships/scholarships. These<br>collaborations enriched student<br>exposure to real-world<br>applications and industry needs.   |
| Student Skill Development      | To boost employability, IQAC<br>organized skill-building<br>activities in AI, Cybersecurity,<br>and Machine Learning. A notable<br>achievement was the student-led<br>startup, debugged.exe. The<br>Institution's Innovation Council<br>(IIC) supported entrepreneurship<br>by conducting workshops and<br>seminars on internships,<br>innovation, startups, and patent<br>filing. Faculty development<br>programs included a National<br>Level STTP on LaTeX and an FDP<br>on |
| Workshops and Webinars         | IQAC conducted 42 guest lectures<br>and 4 workshops, along with<br>webinars on entrepreneurship and<br>cybersecurity to prepare  |

| 13.Whether the AQAR was placed before | the workforce.<br>Yes   |
|---------------------------------------|---|
|                                       | challenges. Each department<br>hosted national-level<br>conferences, fostering a<br>research culture and encouraging<br>innovation and technical growth<br>among students. Through these<br>initiatives, the college aimed<br>to create a robust educational<br>environment that aligns with<br>industry requirements and<br>enhances student readiness for |
|                                       | students for industry   |

statutory body?

• Name of the statutory body

| Name | Date of meeting(s) |
|------|--------------------|
| IQAC | 11/11/2021         |

#### 14.Whether institutional data submitted to AISHE

| Year      | Date of Submission |
|-----------|--------------------|
| 2021-2022 | 11/01/2023         |

# **15.Multidisciplinary** / interdisciplinary

All programmes are designed in such a way that students get maximum flexibility to choose elective courses offered in other specializations. Proposal is submitted for new program Automation and Robotics Engineering. Multidisciplinary / interdisciplinary honors courses conducted by the Institute at the free of cost.

#### **16.Academic bank of credits (ABC):**

Students have enrolled for ABC on SPPU Portal.

#### **17.Skill development:**

The students are main stakeholders of the institute, so there is maximum involvement of students in various activities and committees. There are student representatives in various committees like Anti-Ragging Committee, Internal committee, IQAC etc. to

contribute in fulfilling administrative responsibilities. Also there is Alumni Representative in Departmental Advisory Board.College has Student Development committee under board of student development of SPPU. Co-curricular and extracurricular Activities .As co-curricular activities students are dynamically involving in various clubs like roboclub, designers club, Nakshatra astronomy club, enthusiast club, Google developer club etc. and participate and win prizes every year in various inter-college/university competitions. .All the departments have student association: Association of Computer Engineers (ACE), Electronics & Telecommunication Engineering Students' Association (ETSA), Mechanical Engineering Students' Association (MESA). It provides platform for students to apply their knowledge and develop their skills. Under these associations various activities are organized comprising of various technical competitions like Walk through the gates, Knowelex, Technical Quiz, Ohm-factor, workshop on mobile assembling etc. Additionally, college encourages students to participate in National and International technical events like Techfest (IIT Bombay), Robo Con, BAJA by SAE Indiaetc with financial assistance and infrastructural facilities.

# **18.**Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

The Institute integrates essential societal issues such as Professional Ethics, Gender, Human Values, Environment, and Sustainability into its curriculum from FE to BE, ensuring students grasp crucial principles for responsible behavior. Courses covering ecology, democracy, and governance encourage understanding of environmental challenges, the Constitution of India, and democracy's dimensions. Students have the freedom to select from a variety of audit courses in their engineering program, emphasizing the importance of these cross-cutting issues. To further this education, the college holds orientation programs for first-year students, introduces energy-saving initiatives like solar water heaters, electricity plants, and a biogas plant, and promotes environmental stewardship through vermiculture and rainwater harvesting projects. Additionally, the college fosters personal development and social responsibility among students through workshops on health and selfdefense for girls, blood donation camps, and NSS activities aimed at instilling values of kindness and respect. These efforts are complemented by environmental campaigns and disaster management drills, illustrating a comprehensive approach to embedding societal values in education. The Institute has undertaken following activities which have benefitted the neighbouring community while sensitizing the students to techno-social issues. The said domains of activity include Technology advancement, Social and Community

#### service, Public health & safety and Environmental protection.

#### 19. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

Teachers and students are well-acquainted with the established Program and course outcomes at the institution. The college has precisely defined Program Outcomes (POs) and Course Outcomes (COs) aligned with the mission and goals of each program. These outcomes, developed for both undergraduate (UG) and postgraduate (PG) programs, adhere to the framework set by Savitribai Phule Pune University (SPPU). The COs are carefully crafted to map to all POs, promoting holistic student growth in core subject knowledge, skill development, creativity, competency, ethics, values, and soft skills. Dissemination of POs, PSOs, and COs: The college employs various methods to communicate Course Outcomes (COs) and Program Outcomes (POs): Website: The college website features the COs, POs, and PSOs of respective departments. Communication to Teachers: For each program, faculty members define POs, PSOs, and COs aligned with SPPU's framework. Syllabus orientation workshops organized by SPPU cover teaching methodologies and discussions on COs. The framing of COs involves subject group incharges and department faculties, with approval following thorough discussions. Faculty members maintain all POs and COs in their course files. Communication to Students: Display Boards and Banners: POs and PSOs for respective programs are showcased on boards and banners in department corridors, the library, staff rooms, etc. Introduction of Course Outcomes: Each course begins with a presentation of relevant COs during lecture sessions. Question Papers for Continuous Assessment: Exam questions for continuous assessment align with the COs of the specific course, incorporating Bloom's Taxonomy levels of learning. Program Outcomes (POs) and Program Specific Outcomes (PSOs) align with the curriculum. Course Outcomes (COs) are defined, mapped to POs and PSOs, and quantitatively assessed. CO Attainment: Assessment methods include continuous evaluation, semester-end exams, and lab assessments. Indirect Assessment: Course Exit Survey and Guest Lectures provide comprehensive feedback. PO/PSOs Attainment: Assessment methods include direct aggregation and indirect measures like Graduate Exit and Alumni Surveys. Overall, departmental evaluation encompasses CO, PO, PSO attainment.

#### **20.Distance education/online education:**

In the contemporary classroom, teachers adeptly incorporate a variety of Information and Communication Technology (ICT)-enabled tools to elevate the teaching-learning experience. For instance, interactive whiteboards are utilized for real-time annotations, dynamic visualizations, and collaborative problem-solving sessions.

Virtual reality (VR) simulations transport students to immersive environments, such as historical events or scientific laboratories, offering a hands-on understanding that transcends traditional textbooks. Educational apps tailored to specific subjects provide interactive exercises and guizzes, enabling personalized learning experiences. Video conferencing platforms facilitate virtual guest lectures, connecting students with industry experts, broadening their perspectives, and enhancing career-oriented discussions. Learning management systems streamline the distribution of course materials, assignments, and feedback, fostering an organized and efficient learning environment. Moreover, cloud-based collaboration tools enable real-time document sharing and group projects, promoting teamwork and communication skills. Adaptive learning software customizes lessons based on individual progress, ensuring a tailored approach to each student's needs. Through the integration of these ICT tools, teachers not only enrich the academic journey but also equip students with essential digital skills for the evolving landscape of the 21st century. Institute ensures extensive use of IT facilities by providing adequate access to computers with internet facility to students and faculties. Internet Leased Line (ILL) of 300Mbps provided by Tata Teleservices is available in the college campus Wi-Fi internet access is provided to staff and students. The Institute has following license software: To roll out and outreach activities of Virtual Lab, our institution has a Virtual Lab Nodal Center (Id 226) made available to all colleges for online implementation of practical in the AY 2020-21. The Institute has MW Full suite (MATLAB-2019b) and MW one year MAOTS - ML online training suite in the AY 2020-21. MW campus wide suite (CWS) (MATLAB-2020a) is made available for the entire campus in the AY 2021-22. Institute updated Microsoft Campus agreement- Microsoft EDU Cloud Program during the AY 2019-20 and AY 2020-21 under this latest windows system software, server softwares are purchased. Also windows server CAL and Remote System CALs are available. Microsoft teams for execution of online lectures and meetings are utilized by all faculties. Library is well-resourced with the latest infrastructure and is fully automated with SLIM 21 ILMS. Cadence software related to the VLSI field is available for E&TC students in the VLSI & Design lab during AY 2018-19. NI lab view software is available for students in the mechanical department NI labview Academy. The college has open source system software installed on computers andutilized by students and faculty for online teaching and learning.

# **Extended Profile**

1.Programme

| 1.1  |                  | 257              |
|--|------------------|------------------|
| Number of courses offered by the institution across all programs during the year |                  |                  |
| File Description   | Documents        |                  |
| Data Template  |                  | <u>View File</u> |
| 2.Student  |                  |                  |
| 2.1  |                  | 2022             |
| Number of students during the year   |                  |                  |
| File Description   | Documents        |                  |
| Institutional Data in Prescribed Format  |                  | <u>View File</u> |
| 2.2  |                  | 226              |
| Number of seats earmarked for reserved category as<br>Govt. rule during the year | s per GOI/ State |                  |
| File Description   | Documents        |                  |
| Data Template  | View File        |                  |
| 2.3  | 477              |                  |
| Number of outgoing/ final year students during the year                          |                  |                  |
| File Description     Documents   |                  |                  |
| Data Template  | <u>View File</u> |                  |
| 3.Academic   |                  |                  |
| 3.1  |                  | 91               |
| Number of full time teachers during the year                                     |                  |                  |
| File Description   | Documents        |                  |
| Data Template  |                  | <u>View File</u> |
| 3.2  |                  | 113              |
| Number of sanctioned posts during the year                                       |                  |                  |

| File Description   | Documents        |  |
|--|------------------|--|
| Data Template  | <u>View File</u> |  |
| 4.Institution  |                  |  |
| 4.1  | 25               |  |
| Total number of Classrooms and Seminar halls   |                  |  |
| 4.2  | 315.81           |  |
| Total expenditure excluding salary during the year   | (INR in lakhs)   |  |
| 4.3  | 750              |  |
| Total number of computers on campus for academi  | c purposes       |  |
| Par  | t B              |  |
| CURRICULAR ASPECTS   |                  |  |
| 1.1 - Curricular Planning and Implementation   |                  |  |
| 1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process  |                  |  |
| Affiliated with Savitribai Phule Pune University (SPPU) in Pune,<br>Maharashtra, the institute diligently adheres to the university's<br>curriculum across all programs, emphasizing effective curriculum<br>execution through strategic planning. The Principal, alongside<br>department heads, spearheads discussions on curriculum<br>implementation strategies, involving:   |                  |  |
| <ul> <li>Regular Strategy Meetings: Department Heads regularly review curriculum coverage.</li> <li>Semester Review Meetings: The Principal and department leaders assess semester progress, making necessary adjustments.</li> <li>Academic Calendar Compliance: Adhering to a 16-week SPPU schedule, the institute organizes activities and workload, ensuring systematic execution with designated activity incharges.</li> <li>Teaching Methodologies Enhancement: Faculty members conduct content analyses to improve course delivery, incorporating ICT tools like online lectures from IITs, NPTEL, industry visits,</li> </ul> |                  |  |
| <ul><li>and interactive sessions to supplement traditional methods.</li><li>Practical Experiments: Students engage in group experiments</li></ul>  |                  |  |

under faculty supervision, enhancing learning through

practical application and continuous assessment.

- Student Support: Tailored support is offered to both bright and weak students, including motivational support and remedial classes based on performance.
- Feedback Mechanism: Student feedback is collected each semester to refine the teaching-learning process.
- Online and Virtual Learning: Leveraging Microsoft Teams and Virtual Lab access, the institute ensures continuous education, including during pandemic restrictions.

This comprehensive approach to curriculum implementation, supported by innovative teaching methods and robust support systems, ensures a well-rounded educational experience for all students.

| File Description                    | Documents        |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |
| Link for Additional information     | Nil              |

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

At MESWCOE, the commitment to the academic schedule and Continuous Internal Evaluation (CIE) strictly follows SPPU guidelines, incorporating periodic assessments and submissions for lab work, mini-projects, seminars, and final year projects. The institute conducts thorough analyses of both theory and practical course content to ensure effective delivery and ongoing course improvement, with mid-semester and end-semester tests assessing student progress in theory classes. Each semester begins with department heads drafting the Academic Calendar in alignment with SPPU's schedule, guiding faculty in course planning. The CIE framework includes internal assessment tests, assignments, quizzes, and seminars, all organized as per a well-defined schedule. Course instructors create question papers based on the revised Bloom's Taxonomy, with a structured review and approval process. Post-assessment activities involve evaluating submissions and calculating attainment metrics, extending to laboratory courses, project work, and seminars.

Departmental and central committees oversee the academic calendar's execution, ensuring task completion. Additionally, MESWCOE introduced Honor courses for TE and BE students in the 2020-21 and 2021-22 academic years, in collaboration with SPPU, enhancing its academic portfolio.

| File Description  | Documents   |  |
|---|---|--|
| Upload relevant supporting document   | <u>View File</u>  |  |
| Link for Additional information   | Nil   |  |
| 1.1.3 - Teachers of the Institution<br>following activities related to cur<br>development and assessment of<br>University and/are represented of<br>following academic bodies during<br>Academic council/BoS of Affilia<br>Setting of question papers for U<br>programs Design and Developm<br>Curriculum for Add on/ certifica<br>Courses Assessment /evaluation<br>affiliating University | urriculum<br>the affiliating<br>on the<br>ng the year.<br>nting University<br>UG/PG<br>nent of<br>cate/ Diploma |  |

| File Description  | Documents        |
|---|------------------|
| Details of participation of<br>teachers in various<br>bodies/activities provided as a<br>response to the metric | <u>View File</u> |
| Any additional information  | <u>View File</u> |

#### **1.2 - Academic Flexibility**

# **1.2.1** - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

#### 1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

| File Description   | Documents        |
|--|------------------|
| Any additional information                                 | <u>View File</u> |
| Minutes of relevant Academic<br>Council/ BOS meetings      | No File Uploaded |
| Institutional data in prescribed<br>format (Data Template) | <u>View File</u> |

# 1.2.2 - Number of Add on /Certificate programs offered during the year

# **1.2.2.1** - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

15

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Brochure or any other document<br>relating to Add on /Certificate<br>programs | No File Uploaded |
| List of Add on /Certificate<br>programs (Data Template )                      | <u>View File</u> |

# **1.2.3** - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

# 1791

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| Details of the students enrolled in<br>Subjects related to<br>certificate/Add-on programs | <u>View File</u> |

# **1.3 - Curriculum Enrichment**

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

Savitribai Phule Pune University (SPPU) integrates essential societal issues such as Professional Ethics, Gender, Human Values, Environment, and Sustainability into its curriculum from FE to BE, ensuring students grasp crucial principles for responsible behavior. Courses covering ecology, democracy, and governance encourage understanding of environmental challenges, the Constitution of India, and democracy's dimensions. Students have the freedom to select from a variety of audit courses in their engineering program, emphasizing the importance of these cross-cutting issues.

To further this education, the college holds orientation programs for first-year students, introduces energy-saving initiatives like solar water heaters, electricity plants, and a biogas plant, and promotes environmental stewardship through vermiculture and rainwater harvesting projects. Additionally, the college fosters personal development and social responsibility among students through workshops on health and self-defense for girls, blood donation camps, and NSS activities aimed at instilling values of kindness and respect. These efforts are complemented by environmental campaigns and disaster management drills, illustrating a comprehensive approach to embedding societal values in education.

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| Upload the list and description of<br>courses which address the<br>Professional Ethics, Gender,<br>Human Values, Environment and<br>Sustainability into the<br>Curriculum. | <u>View File</u> |

# **1.3.2** - Number of courses that include experiential learning through project work/field work/internship during the year

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| Programme / Curriculum/<br>Syllabus of the courses   | <u>View File</u> |
| Minutes of the Boards of Studies/<br>Academic Council meetings with<br>approvals for these courses | No File Uploaded |
| MoU's with relevant<br>organizations for these courses, if<br>any                                  | No File Uploaded |
| Institutional Data in Prescribed<br>Format   | <u>View File</u> |

# **1.3.3 - Number of students undertaking project work/field work/ internships**

#### 1680

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| List of programmes and number<br>of students undertaking project<br>work/field work/ /internships<br>(Data Template) | <u>View File</u> |

# 1.4 - Feedback System

| 1.4.1 - Institution obtains feedback on the     | в. | Any | 3 | of | the | above |
|---|----|-----|---|----|-----|-------|
| syllabus and its transaction at the institution |    |     |   |    |     |       |
| from the following stakeholders Students        |    |     |   |    |     |       |
| <b>Teachers Employers Alumni</b>                |    |     |   |    |     |       |

| File Description  | Documents        |
|---|------------------|
| URL for stakeholder feedback report   | Nil              |
| Action taken report of the<br>Institution on feedback report as<br>stated in the minutes of the<br>Governing Council, Syndicate,<br>Board of Management | <u>View File</u> |
| Any additional information  | No File Uploaded |
|   |                  |

1.4.2 - Feedback process of the Institution may B. Feedback collected, analyzed

| be classified as follows   | and action has been taken |  |  |
|--|---------------------------|--|--|
| File Description   | Documents                 |  |  |
| Upload any additional information  | <u>View File</u>          |  |  |
| URL for feedback report  | Nil                       |  |  |
| TEACHING-LEARNING AND EVALUATION   |                           |  |  |
| 2.1 - Student Enrollment and Profile   |                           |  |  |
| 2.1.1 - Enrolment Number Number of students admitted during the year   |                           |  |  |
| 2.1.1.1 - Number of students admitted during the year  |                           |  |  |
| 384  |                           |  |  |
| File Description   | Documents                 |  |  |
| Any additional information   | <u>View File</u>          |  |  |
| Institutional data in prescribed format  | <u>View File</u>          |  |  |
| 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of |                           |  |  |

supernumerary seats)

# 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

#### 226

| File Description   | Documents        |
|--|------------------|
| Any additional information                                       | No File Uploaded |
| Number of seats filled against<br>seats reserved (Data Template) | <u>View File</u> |

#### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

Teachers assess student learning levels through various indicators in classrooms, including academic performance, participation in discussions, class tests, assignments, tutorials, and quizzes. Continuous internal assessments and mock-end exams further help identify student progress across all courses.

#### eaching Approach:

MESWCOE faculty integrates traditional and technological teaching methods, utilizing platforms like MS Teams and Google Meet for effective online learning during the pandemic.

Support for Slow Learners:

- Remedial classes, extra lectures, and practical sessions.
- Personal attention, counseling, and mentor guidance.
- Assignments, question banks, model answers, and exam preparations.
- Soft skills training, exclusive counseling, and additional resources for comprehensive understanding.

Support for Advanced Learners:

- Encouragement in co-curricular activities, sports, and NSS.
- Research guidance, journal publications, and grants acquisition.
- Recognition for academic excellence, participation in events, and involvement in clubs.
- Motivation for higher studies, industrial exposure, and add-on courses.

Overall Enhancement:

Students receive counseling, access lecture notes, and are encouraged to participate in programs like IRIS and Hackathon for continuous improvement.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

#### **2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)**

| Number of Students | Number of Teachers |
|--------------------|--------------------|
| 2022               | 91                 |

| Documents  |  |  |
|--|--|--|
| <u>View File</u>   |  |  |
| 2.3 - Teaching- Learning Process   |  |  |
| 2.3.1 - Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences   |  |  |
| In engineering education, student-centric methods play a crucial role in enhancing learning experiences. For example:  |  |  |
| <ul> <li>In engineering education, student-centric methods play a crucial role in enhancing learning experiences. For example: <ol> <li>Experiential Learning:         <ul> <li>Example PBL projects, BE major Projects:Incorporating hands-on projects where students design and build prototypes, allowing them to apply theoretical knowledge in real-world scenarios. This could involve constructing a small-scale model of a vending machineor developing a simple electronic circuit.</li> </ul> </li> <li>Participative Learning:         <ul> <li>Example SIH, Robocon: Organizing group-based design challenges where students collaborate to solve complex engineering problems. This encourages teamwork and communication skills, essential in professional engineering settings.</li> </ul> </li> <li>Problem-Solving Methodologies:         <ul> <li>Example M-BAJA, E-BAJA: Integrating case studies into the curriculum, where students analyze and solve engineering problems encountered in actual projects. This could involve studying failures in structures, analyzing the root causes, and proposing design improvements.</li> </ul></li></ol></li></ul> |  |  |
| By incorporating these methods, engineering students actively engage<br>with the subject matter, fostering a deeper understanding and better<br>preparing them for the challenges they may encounter in their future<br>careers.   |  |  |
| Documents  |  |  |
| <u>View File</u>   |  |  |
|  |  |  |
|  |  |  |

In the contemporary classroom, teachers adeptly incorporate a variety of Information and Communication Technology (ICT)-enabled tools to elevate the teaching-learning experience. For instance, interactive whiteboards are utilized for real-time annotations, dynamic visualizations, and collaborative problem-solving sessions. Virtual reality (VR) simulations transport students to immersive environments, such as historical events or scientific laboratories, offering a hands-on understanding that transcends traditional textbooks.

Educational apps tailored to specific subjects provide interactive exercises and quizzes, enabling personalized learning experiences. Video conferencing platforms facilitate virtual guest lectures, connecting students with industry experts, broadening their perspectives, and enhancing career-oriented discussions. Learning management systems streamline the distribution of course materials, assignments, and feedback, fostering an organized and efficient learning environment.

Moreover, cloud-based collaboration tools enable real-time document sharing and group projects, promoting teamwork and communication skills. Adaptive learning software customizes lessons based on individual progress, ensuring a tailored approach to each student's needs. Through the integration of these ICT tools, teachers not only enrich the academic journey but also equip students with essential digital skills for the evolving landscape of the 21st century.

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Provide link for webpage<br>describing the ICT enabled tools<br>for effective teaching-learning<br>process | <u>View File</u> |

**2.3.3** - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year )

#### 2.3.3.1 - Number of mentors

| File Description   | Documents        |
|--|------------------|
| Upload, number of students<br>enrolled and full time teachers on<br>roll | <u>View File</u> |
| Circulars pertaining to assigning mentors to mentees                     | <u>View File</u> |
| Mentor/mentee ratio  | <u>View File</u> |

### 2.4 - Teacher Profile and Quality

### 2.4.1 - Number of full time teachers against sanctioned posts during the year

91

| File Description   | Documents        |
|--|------------------|
| Full time teachers and sanctioned posts for year (Data Template) | <u>View File</u> |
| Any additional information                                       | No File Uploaded |
| List of the faculty members<br>authenticated by the Head of HEI  | <u>View File</u> |

# 2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

# 2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

34

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| List of number of full time<br>teachers with Ph. D. / D.M. /<br>M.Ch./ D.N.B Super specialty /<br>D.Sc. / D.Litt. and number of full<br>time teachers for year (Data<br>Template) | <u>View File</u> |

# **2.4.3** - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

#### **2.4.3.1 - Total experience of full-time teachers**

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| List of Teachers including their<br>PAN, designation, dept. and<br>experience details(Data<br>Template) | <u>View File</u> |

#### **2.5 - Evaluation Process and Reforms**

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

The institute, affiliated with Savitribai Phule Pune University (SPPU), adheres to its evaluation reforms, including:

- CEO Appointment: A senior faculty serves as the College Exam Officer, overseeing exams internally and externally in alignment with SPPU directives. Exams follow choice and creditbased systems.
- 2. In-Sem Examinations: SPPU introduces In-Sem exams (30 marks) for UG and PG students, coordinated at the college level. Online exams are conducted via MS Teams, with question papers in multiple-choice format.
- 3. End-Sem Exam: SPPU conducts end-sem exams for UG (70 marks) and PG students (50 marks).

For academic excellence, the institute employs various assessment processes:

- 1. CO-Based Tests, Assignments, and Tutorials.
- Continuous Internal Evaluation: Assesses practicals and termwork based on parameters like completion, punctuality, orals, attendance, and tests.
- 3. Mid Sem and Mock Endsem Exams.
- 4. Mock Practical/Oral Exams.
- 5. BE Project Reviews.

Exams are guided by the CEO and team, ensuring a fair and transparent marking scheme. Students are informed of their scores, and model solutions are discussed. Poor performers receive counseling from parent teachers, and project reviews align with the university's Project-based learning initiative.

| File | e Description                | Documents        |
|------|------------------------------|------------------|
| Any  | y additional information     | <u>View File</u> |
| Lin  | k for additional information | Nil              |

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

Department Level Grievance Redressal:

1. Each department designates a faculty member as the exam coordinator, part of the CEO team, resolving student concerns through consultation with faculty and the department head.

2. Faculty discusses issues with students, clarifying model answers and marking schemes.

3. If dissatisfaction persists, the matter elevates to the Principal, who offers guidelines for resolution.

Institute Level Grievance Redressal:

1. Institute-level grievances for university exams are handled by the College Examination Officer and examination section. SPPUrelated issues, such as revaluation and answer sheet photocopies, are addressed with results communicated to students.

2. Staff approach the CEO for exam-related grievances, forwarding queries to SPPU for resolution, and conveying outcomes to concerned faculty.

3. Internal marks are entered via the SPPU portal, managed by HOD. Internal and external examiners ensure accurate marks entry.

4. Post online marks entry, the department coordinator collects authenticated marksheets, submitting them to the CEO office for verification and resolution of exam-related issues.

| File Description                | Documents        |
|---------------------------------|------------------|
| Any additional information      | <u>View File</u> |
| Link for additional information | Nil              |
|                                 |                  |

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Teachers and students are well-acquainted with the established Program and course outcomes at the institution. The college has precisely defined Program Outcomes (POs) and Course Outcomes (COs) aligned with the mission and goals of each program. These outcomes, developed for both undergraduate (UG) and postgraduate (PG) programs, adhere to the framework set by Savitribai Phule Pune University (SPPU). The COs are carefully crafted to map to all POs, promoting holistic student growth in core subject knowledge, skill development, creativity, competency, ethics, values, and soft skills.

Dissemination of POs, PSOs, and COs:

The college employs various methods to communicate Course Outcomes (COs) and Program Outcomes (POs):

• Website: The college website features the COs, POs, and PSOs of respective departments.

Example Link

Communication to Teachers:

For each program, faculty members define POs, PSOs, and COs aligned with SPPU's framework. Syllabus orientation workshops organized by SPPU cover teaching methodologies and discussions on COs. The framing of COs involves subject group incharges and department faculties, with approval following thorough discussions. Faculty members maintain all POs and COs in their course files.

Communication to Students:

- Display Boards and Banners: POs and PSOs for respective programs are showcased on boards and banners in department corridors, the library, staff rooms, etc.
- Introduction of Course Outcomes: Each course begins with a presentation of relevant COs during lecture sessions.
- Question Papers for Continuous Assessment: Exam questions for continuous assessment align with the COs of the specific course, incorporating Bloom's Taxonomy levels of learning.

| File Description   | Documents        |
|--|------------------|
| Upload any additional information                          | <u>View File</u> |
| Paste link for Additional information                      | Nil              |
| Upload COs for all Programmes<br>(exemplars from Glossary) | <u>View File</u> |

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

Program Outcomes (POs) and Program Specific Outcomes (PSOs) align with the curriculum. Course Outcomes (COs) are defined, mapped to POs and PSOs, and quantitatively assessed.

CO Attainment:

Assessment methods include continuous evaluation, semester-end exams, and lab assessments.

Indirect Assessment:

Course Exit Survey and Guest Lectures provide comprehensive feedback.

PO/PSOs Attainment:

Assessment methods include direct aggregation and indirect measures like Graduate Exit and Alumni Surveys.

Overall, departmental evaluation encompasses CO, PO, PSO attainment.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for Additional information | Nil              |

#### 2.6.3 - Pass percentage of Students during the year

**2.6.3.1** - Total number of final year students who passed the university examination during the year

| File Description  | Documents        |
|---|------------------|
| Upload list of Programmes and<br>number of students passed and<br>appeared in the final year<br>examination (Data Template) | <u>View File</u> |
| Upload any additional information   | <u>View File</u> |
| Paste link for the annual report  | Nil              |

#### 2.7 - Student Satisfaction Survey

**2.7.1** - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

https://mescoe.mespune.org/wp-content/uploads/2024/10/MESCOE-Students-Satisfaction-Survey-2021-2022.xlsx

#### **RESEARCH, INNOVATIONS AND EXTENSION**

#### **3.1 - Resource Mobilization for Research**

**3.1.1** - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

# **3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)**

# 1.43 Lakhs

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| e-copies of the grant award<br>letters for sponsored research<br>projects /endowments | <u>View File</u> |
| List of endowments / projects<br>with details of grants(Data<br>Template)             | <u>View File</u> |

# 3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

#### 3.1.2.1 - Number of teachers recognized as research guides

| File Description                        | Documents        |
|---|------------------|
| Any additional information              | <u>View File</u> |
| Institutional data in prescribed format | <u>View File</u> |

# **3.1.3** - Number of departments having Research projects funded by government and non government agencies during the year

# **3.1.3.1** - Number of departments having Research projects funded by government and nongovernment agencies during the year

1

| File Description  | Documents                      |
|---|--------------------------------|
| List of research projects and funding details (Data Template) | <u>View File</u>               |
| Any additional information                                    | No File Uploaded               |
| Supporting document from<br>Funding Agency                    | <u>View File</u>               |
| Paste link to funding agency website                          | https://vit.ac.in/schools/smec |

#### **3.2 - Innovation Ecosystem**

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

#### 1.Research & Development Policy of the Institute:

Research & Development Policy has been developed promote innovation and incubation for the faculty and students in tune with the corporate world.

2. Resources:

Research lab has been created for the promotion of innovation and incubation with required facilities. The Institute is nurturing the innovation with financial support of up to 50% to students in addition to the encouragement by prominent Alumni. Institute encourages the faculty and students to protect their IPby providingfacilitates and financial support.

3. Institute Innovation Council:

Ministry of Education (MoE), Govt. of India has established `MoE's Innovation Cell (MIC)' to foster the culture of Innovation among all Higher Education Institutions (HEIS). The Institution's Innovation Council (IIC MESCOE) has been established.IIC-MESCOE activity areas - Startup, Innovation, IPR and Internship.

4.Collaboration (MoU): Institute has various MoU with other institutions and industries for benefit of faculty and students.

#### 5. Activities:

Every year Innovative and entrepreneurship activities such as Hackathons, SAE BAJA, Idea competitions, Awareness workshops on IPR, Cognitive and Critical thinking, Leadership Talks, etc. are conducted as per guidelines of Innovation cell. The institute encourages the students to participate in competitions conducted by recognized bodies such as SPPU, IIC and, AICTE etc.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

**3.2.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

**3.2.2.1** - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

17

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| List of workshops/seminars<br>during last 5 years (Data<br>Template) | <u>View File</u> |

#### **3.3 - Research Publications and Awards**

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

#### 3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

| 6   |                  |
|---|------------------|
| File Description  | Documents        |
| URL to the research page on HEI website   | Nil              |
| List of PhD scholars and their<br>details like name of the guide ,<br>title of thesis, year of award etc<br>(Data Template) | <u>View File</u> |
| Any additional information  | <u>View File</u> |

**3.3.2** - Number of research papers per teachers in the Journals notified on UGC website during the year

### 3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

#### 33

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| List of research papers by title,<br>author, department, name and<br>year of publication (Data<br>Template) | <u>View File</u> |

**3.3.3** - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

**3.3.3.1** - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year

72

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| List books and chapters edited<br>volumes/ books published (Data<br>Template) | <u>View File</u> |

# **3.4 - Extension Activities**

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

The college has undertaken following activities which have

benefitted the neighbouring community while sensitizing the students to techno-social issues. The said domains of activity include Technology advancement, Social and Community service, Public health & safety and Environmental protection.

1. Advancement in Technology:

Engineers' & Teachers Day: The Celebrations organized every year have been allowing students and public to visit the innovative technical models/programs developed by our students over the years.

2. Social and Community service: Blood donation and Free Medical camps organized by NSS unit of the college in association with various blood banks and NGO.

Earn & Learn Scheme: The Earn and Learn Scheme of Board of Students Development, Savitribai Phule Pune University is implemented successfully for the needy students. Students are benefitted from this Scheme by working in the Laboratories, Library and Office, etc of our institute. This Scheme also inculcates a sense of responsibility and dignity.

3. Public Health and safety: The organization of these activities make the students practically to see several social woes and they can develop empathetic orientation. These programs help the students to understand the significance of reciprocating to the society.

4. Environmental protection: College regularly organize environmental protection related activities to make students aware with environmental pollution causes, hazards, prevention and importance of environmental pollution control.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

**3.4.2** - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

**3.4.2.1** - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

| File Description   | Documents        |
|--|------------------|
| Any additional information   | No File Uploaded |
| Number of awards for extension<br>activities in last 5 year (Data<br>Template) | <u>View File</u> |
| e-copy of the award letters  | No File Uploaded |

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., ( including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

#### 5

| File Description   | Documents        |
|--|------------------|
| Reports of the event organized   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Number of extension and<br>outreach Programmes conducted<br>with industry, community etc for<br>the during the year (Data<br>Template) | <u>View File</u> |

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Number of students participating<br>in extension activities with Govt.<br>or NGO etc (Data Template) | <u>View File</u> |

### 3.5 - Collaboration

**3.5.1** - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

# **3.5.1.1** - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

#### 14

| File Description   | Documents        |
|--|------------------|
| e-copies of related Document   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of Collaborative activities<br>with institutions/industries for<br>research, Faculty | <u>View File</u> |

# **3.5.2** - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

**3.5.2.1** - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

#### 7

| File Description  | Documents        |
|---|------------------|
| e-Copies of the MoUs with<br>institution./ industry/corporate<br>houses   | No File Uploaded |
| Any additional information  | <u>View File</u> |
| Details of functional MoUs with<br>institutions of national,<br>international importance, other<br>universities etc during the year | <u>View File</u> |

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### **4.1 - Physical Facilities**

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Classroom: All the classrooms are designed and maintained as per AICTE norms with respect to carpet area, lighting, ventilation, furniture, etc. to have a conducive environment with ICT tools which enable interactive teaching-learning processes. Smart Classrooms: Smart classroom(309) on third floor is designed with the latest ICT tools and maintained to create a new state-ofart teaching- learning facility.

Laboratories: Laboratories are well equipped with adequate number of experimental set-ups, computers and peripherals to meet syllabus requirements.

State of the art facilities: The institute has taken great initiatives to develop unique and novel research facilities to incubate research environments.

- Centre of Excellence in High Performance Computing
- Centre of Excellence PG lab & SDR Lab
- NI Lab VIEW Academy
- Industrial Tribology Lab
- Kuka Robotics Lab
- Rapid Prototyping facility [3D Printing]

Computing Facilities: The college has more than 700 computers to fulfill all the academic requirements of students as well as faculties. Our college has adequate number of computers for students and faculties, 12 laptops for all departments. The entire campus is equipped with strong Wi-Fi connectivity. Our library is well equipped with fully automated 1 server, 20 Computers for students and 6 Computers for library staff.

| File Description                      | Documents   |
|---------------------------------------|---|
| Upload any additional information     | <u>View File</u>  |
| Paste link for additional information | https://mescoe.mespune.org/wp-<br>content/uploads/2024/10/MESCOE-LABS.pdf |

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

The institute encourages and provides facilities for students to participate in various games like cricket, football; athletics etc. to ensure overall development of students and to fulfill that requirement college is equipped with various sports equipment. To promote social awareness amongst students, the NSS team of the institute regularly organizes social welfare activities.

Sports: Institute has a playground for practicing quite a lot of

sports activities. Separate Gymnasium facility for boys and girls is provided by the institute in the campus. The institute has a physical director to guide students.

Public speaking and Communication skills development: Students are encouraged to participate in various university level events to international events like M-Baja, E- Baja, Robocon for overall development of students. Personality development programs run by the institute and under ASTITVA, the Institute organizes debate competitions every year.Institute has a language laboratory.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

| 2 | 5 |
|---|---|
| 4 | 5 |

| File Description   | Documents   |
|--|---|
| Upload any additional information  | <u>View File</u>  |
| Paste link for additional information  | https://mescoe.mespune.org/wp-<br>content/uploads/2024/10/CLASSROOM_FINAL.pdf |
| Upload Number of classrooms<br>and seminar halls with ICT<br>enabled facilities (Data<br>Template) | <u>View File</u>  |

**4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)** 

**4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)** 

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Upload audited utilization statements  | <u>View File</u> |
| Upload Details of budget<br>allocation, excluding salary<br>during the year (Data Template | <u>View File</u> |

#### 4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS)

Library is well-equipped with the latest infrastructure and wellstocked with a good collection of books.

The library is fully automated and operates with SLIM 21 ILMS. It includes all the features to automate library staff functionality related to cataloguing, Circulation, Inventory, and Reporting. For library members, SLIM 21 provides a portal to search in-house collections as well as external resources.

Name of ILMS software : SLIM 21 ILMS Nature of automation (fully or partially) : Fully Version : SLIM 21 - 3.9.0.35737

Year of Automation : FY 2007-08

This software is purchased in the FY 2007-08 from Algo rhythms Consultants Pvt. Ltd. for automation of the Library. SLIM 21 include all the features to automate library staff functionality related to cataloguing, Circulation, Inventory, and Reporting. For library members, SLIM 21 provides a portal to search in-house collection as well as external resources. Through AMC this software is upgraded annually.

Following services are provided by the library to its users with the help of SLIM 21:

1.Data conversion from existing system

2.Barcode labels format customization

3.Barcode labels Printing

4.Library ID card Format customization

#### 5.Library ID card printing

#### 6.Copy Cataloguing from Amazon

# Numerous reports are generated with the help of this SLIM 21 software which help library for its smooth conduction.

| File Description   | Documents           |                       |
|--|---------------------|-----------------------|
| Upload any additional information  |                     | <u>View File</u>      |
| Paste link for Additional<br>Information   |                     | Nil                   |
| 4.2.2 - The institution has subsc<br>following e-resources e-journals<br>ShodhSindhu Shodhganga Men<br>books Databases Remote access | s e-<br>nbership e- | B. Any 3 of the above |
| File Description   | Documents           |                       |
| Upload any additional information  |                     | <u>View File</u>      |
| Details of subscriptions like e-   |                     | <u>View File</u>      |

**4.2.3** - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

### **4.2.3.1** - Annual expenditure of purchase of books/e-books and subscription to journals/ejournals during the year (INR in Lakhs)

#### 25.86

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Audited statements of accounts  | <u>View File</u> |
| Details of annual expenditure for<br>purchase of books/e-books and<br>journals/e- journals during the<br>year (Data Template) | <u>View File</u> |

**4.2.4** - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

### 4.2.4.1 - Number of teachers and students using library per day over last one year

#### 33

| File Description                                  | Documents        |
|---|------------------|
| Any additional information                        | No File Uploaded |
| Details of library usage by teachers and students | <u>View File</u> |

#### 4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

Institute ensures extensive use of IT facilities by providing adequate access to computers with internet facility to students and faculties. Internet Leased Line (ILL) of 300Mbps provided by Tata Teleservices is available in the college campus Wi-Fi internet access is provided to staff and students.

The Institute has following license software:

- To roll out and outreach activities of Virtual Lab, our institution has a Virtual Lab Nodal Center (Id 226) made available to all colleges for online implementation of practical in the AY 2020-21.
- The Institute has MW Full suite (MATLAB-2019b) and MW one year MAOTS - ML online training suite in the AY 2020-21. MW campus wide suite (CWS) (MATLAB-2020a) is made available for the entire campus in the AY 2021-22.
- Institute updated Microsoft Campus agreement- Microsoft EDU Cloud Program during the AY 2019-20 and AY 2020-21 under this latest windows system software, server softwares are purchased. Also windows server CAL and Remote System CALs are available.
- Microsoft teams for execution of online lectures and meetings are utilized by all faculties.
- Library is well-resourced with the latest infrastructure and is fully automated with SLIM 21 ILMS.
- Cadence software related to the VLSI field is available for E&TC students in the VLSI & Design lab during AY 2018-19.
- NI lab view software is available for students in the mechanical department NI labview Academy.
- The college has open source system software installed on computers andutilized by students and faculty for online teaching and learning.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

# **4.3.2 - Number of Computers**

750

| File Description                  | Documents        |  |  |
|-----------------------------------|------------------|--|--|
| Upload any additional information | <u>View File</u> |  |  |
| List of Computers                 | <u>View File</u> |  |  |
|                                   |                  |  |  |

**4.3.3 - Bandwidth of internet connection in the A. ? 50MBPS Institution** 

| File Description   | Documents        |
|--|------------------|
| Upload any additional<br>Information   | <u>View File</u> |
| Details of available bandwidth of<br>internet connection in the<br>Institution | <u>View File</u> |

# 4.4 - Maintenance of Campus Infrastructure

**4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)** 

# **4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)**

# 28473429

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Audited statements of accounts   | <u>View File</u> |
| Details about assigned budget<br>and expenditure on physical<br>facilities and academic support<br>facilities (Data Templates) | <u>View File</u> |

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

There are established systems and procedures for maintaining and utilizing physical, academic, and support facilities such as laboratory, sports complex, computer, classrooms in the institute. The maintenance of physical, academic, and support facilities are carried out by the respective departments with the help of in house staff on daily basis, and periodically record is also maintained. And care has been taken to keep the equipments, machine, etc in working condition. In case of breakdowns, standard procedure is followed to bring the equipment/machine in working condition. A supervisor is appointed to monitor and maintain the physical facilities and Housekeeping.

- Laboratories :Deadstock verification (Physical Verification) is carried out to verify working/nonworking/missing equipment etc. Preventive maintenance and performance monitoring is carried out.
- 2. Library: A librarian with supporting staff has been appointed to maintain the central library.
- 3. Sport complex/ ground/ equipment: The maintenance of ground is carried out on a regular basis. It is maintained under the supervision of the physical director.
- 4. Class Rooms: Head of the institute, HODs, and Class teachers monitor the cleanliness and ensure that the cleanliness is maintained in the classrooms.
- 5. IT facilities: The laboratory technicians and system administrator maintain the IT facilities in the institute. In case of major issues of maintenance, vendors are hired for the maintenance of IT facilities.

| File Description                      | Documents  |
|---------------------------------------|--|
| Upload any additional information     | <u>View File</u>   |
| Paste link for additional information | https://mescoe.mespune.org/wp-content/upload<br>s/2024/10/OTHER-FACILITIES-FINAL.pdf |

#### STUDENT SUPPORT AND PROGRESSION

# 5.1 - Student Support

# **5.1.1** - Number of students benefited by scholarships and free ships provided by the Government during the year

# **5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year**

#### 1561

| File Description  | Documents        |
|---|------------------|
| Upload self attested letter with<br>the list of students sanctioned<br>scholarship  | <u>View File</u> |
| Upload any additional information   | No File Uploaded |
| Number of students benefited by<br>scholarships and free ships<br>provided by the Government<br>during the year (Data Template) | <u>View File</u> |

# 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

**5.1.2.1** - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

| 5   |                  |                     |  |  |
|---|------------------|---------------------|--|--|
| File Description  | Documents        |                     |  |  |
| Upload any additional information   | <u>View File</u> |                     |  |  |
| Number of students benefited by<br>scholarships and free ships<br>institution / non- government<br>agencies in last 5 years (Date<br>Template)  | <u>View File</u> |                     |  |  |
| 5.1.3 - Capacity building and skills<br>enhancement initiatives taken by the<br>institution include the following: Soft skills<br>Language and communication skills Life skills<br>(Yoga, physical fitness, health and hygiene)<br>ICT/computing skills |                  | A. All of the above |  |  |

| File Description  | Documents        |
|---|------------------|
| Link to Institutional website   | Nil              |
| Any additional information  | No File Uploaded |
| Details of capability building and<br>skills enhancement initiatives<br>(Data Template) | <u>View File</u> |

**5.1.4** - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

### 336

**5.1.4.1** - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

# 336

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Number of students benefited by<br>guidance for competitive<br>examinations and career<br>counseling during the year (Data<br>Template) | <u>View File</u> |

| 5.1.5 - The Institution has a transparent<br>mechanism for timely redressal of student<br>grievances including sexual harassment and<br>ragging cases Implementation of guidelines of<br>statutory/regulatory bodies Organization wide<br>awareness and undertakings on policies with<br>zero tolerance Mechanisms for submission of<br>online/offline students' grievances Timely<br>redressal of the grievances through<br>appropriate committees | А. | All | of | the | above |  |  |  |
|---|----|-----|----|-----|-------|--|--|--|
|---|----|-----|----|-----|-------|--|--|--|

| File Description   | Documents        |
|--|------------------|
| Minutes of the meetings of<br>student redressal committee,<br>prevention of sexual harassment<br>committee and Anti Ragging<br>committee | <u>View File</u> |
| Upload any additional information  | No File Uploaded |
| Details of student grievances<br>including sexual harassment and<br>ragging cases  | No File Uploaded |

# **5.2 - Student Progression**

# 5.2.1 - Number of placement of outgoing students during the year

# 5.2.1.1 - Number of outgoing students placed during the year

#### 338

| File Description  | Documents        |
|---|------------------|
| Self-attested list of students placed                           | <u>View File</u> |
| Upload any additional information                               | No File Uploaded |
| Details of student placement<br>during the year (Data Template) | <u>View File</u> |

# 5.2.2 - Number of students progressing to higher education during the year

# 5.2.2.1 - Number of outgoing student progression to higher education

# 11

| File Description                                   | Documents        |
|--|------------------|
| Upload supporting data for student/alumni          | <u>View File</u> |
| Any additional information                         | No File Uploaded |
| Details of student progression to higher education | <u>View File</u> |

# **5.2.3** - Number of students qualifying in state/national/international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

# 5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

6

| File Description  | Documents        |
|---|------------------|
| Upload supporting data for the same   | <u>View File</u> |
| Any additional information  | No File Uploaded |
| Number of students qualifying in<br>state/ national/ international level<br>examinations during the year<br>(Data Template) | <u>View File</u> |

# **5.3 - Student Participation and Activities**

**5.3.1** - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year

**5.3.1.1** - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national / international level (award for a team event should be counted as one) during the year.

#### 07

| File Description   | Documents        |
|--|------------------|
| e-copies of award letters and certificates   | No File Uploaded |
| Any additional information   | <u>View File</u> |
| Number of awards/medals for<br>outstanding performance in<br>sports/cultural activities at univer<br>sity/state/national/international<br>level (During the year) (Data<br>Template) | <u>View File</u> |

5.3.2 - Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )

The students are main stakeholders of the institute, so there is maximum involvement of students in various activities and committees. There are student representatives in various committees

like Anti-Ragging Committee, Internal committee, IQAC etc. to contribute in fulfilling administrative responsibilities. Also there is Alumni Representative in Departmental Advisory Board.College has Student Development committee under board of student development of SPPU.

Co-curricular and extracurricular Activities .As co-curricular activities students are dynamically involving in various clubs like roboclub, designers club, Nakshatra astronomy club, enthusiast club, Google developer club etc. and participate and win prizes every year in various inter-college/university competitions. .All the departments have student association: Association of Computer Engineers (ACE), Electronics & Telecommunication Engineering Students' Association (ETSA), Mechanical Engineering Students' Association (MESA). It provides platform for students to apply their knowledge and develop their skills. Under these associations various activities are organized comprising of various technical competitions like Walk through the gates, Knowelex, Technical Quiz, Ohm-factor, workshop on mobile assembling etc. Additionally, college encourages students to participate in National and International technical events like Techfest (IIT Bombay), Robo Con, BAJA by SAE Indiaetc with financial assistance and infrastructural facilities.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

**5.3.3** - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

**5.3.3.1** - Number of sports and cultural events/competitions in which students of the Institution participated during the year

02

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Upload any additional information  | No File Uploaded |
| Number of sports and cultural<br>events/competitions in which<br>students of the Institution<br>participated during the year<br>(organized by the<br>institution/other institutions<br>(Data Template) | <u>View File</u> |

#### 5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Alumni association of Modern Education Society's College of Engineering Pune is registered on 14 June 2019 with registration number "MH/929/2019/Pune". Main purpose of alumni association is to build strong bond between the alumni and institute at the same time among alumni also. Alumni association organizes alumni meet to achieve following objectives:

- To encourage the Alumni to take an active and abiding interest in the work and progress of the Institute so as to contribute towards enhancement of the social utility of their Alma Mater.
- To utilize the rich experiences of Alumni for the benefit and progress of the present students.
- To provide guidance to the present students in their endeavour for better employment and higher studies.
- To promote the campus placements through the Alumni working in reputed industries in India and abroad.
- To get the valuable advices of the Alumni in the overall development of the college.

Alumni who have achieved good successes in their career or who have got selected in prestigious government services are regularly called to deliver guest lectures for the current students which definitely helps the current students to choose correct path for their career in future.

#### MESCOE Alumni Portal (Url:

http://www.mescoepune.org/alumni/index.php) is developed by the students of Google developers' club. This portal can be used by the

# alumni to get in touch with all registered alumni of various batches so that everyone can be benefited by some or the other way.

| File Description                      | Documents                                  |
|---------------------------------------|--|
| Paste link for additional information | http://www.mescoepune.org/alumni/index.php |
| Upload any additional information     | <u>View File</u>                           |

# **5.4.2** - Alumni contribution during the year (INR in Lakhs)

E. <1Lakhs

| File Description                  | Documents        |
|-----------------------------------|------------------|
| Upload any additional information | <u>View File</u> |

# GOVERNANCE, LEADERSHIP AND MANAGEMENT

# 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Institute Vision: To Groom - Motivated, Environment Friendly, Selfesteemed, Creative and Oriented Engineers.

Institute Mission: To Develop Industry Oriented Manpower to accept the challenges of Globalization by

- Promoting value education through motivated trained faculty
- Maintaining a conductive environment for education at affordable cost
- Promoting industry institute interaction
- Involving alumni

The vision and mission statements of the college are available at the college website and also have been displayed in each department and other prominent locations of the institute.

The institute has ensured that its vision and mission statements define the institution's distinctive characteristics clearly.

• The Institute has been set up with a mission to impart such knowledge that may be necessary for the holistic development of students thereby making them capable of being better employable and at par with the highly competitive job market. • The institute pursues a three-fold system that involves curricular, co-curricular and extra- curricular activities. The curriculum being followed is designed in such a way so as to enhance and empower the knowledge base of students. The main focus is on the recent trends in technology.

• The institute visualizes facilitating young adult learners with opportunities to inculcate ethics and leadership potential thereby sensitizing learners towards inclusive social concerns, human rights, gender and environmental issues.

• The institute has drawn a clear perspective plan for future development and to maintain competitive edge in imparting quality education.

| File Description                      | Documents                            |
|---------------------------------------|--------------------------------------|
| Paste link for additional information | https://mescoe.mespune.org/about-us/ |
| Upload any additional information     | No File Uploaded                     |

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and participative management.

The institute practices participative management and decentralization in all academic as well as non-academic activities. The Institute has formed various committees for effective implementation of these activities.

The institute has two main statutory committees namely Monitoring and Development Cell (MDC) and Internal Quality Assurance Cell (IQAC) framed as per norms of AICTE. These bodies play an important role in framing policies and its execution.

There are several committees such as College Development Committee, Training & Placement Cell, Research Committee, academic monitoring Committee, Exam Committee etc.

Case study: budget preparation

The process of budget preparation is described as an example of participative management..For every financial year, the heads/in-charge of various departments call for the requirement ofequipment/materials/software etc... Faculty/co-ordinators give therequirements considering various factors , the status of

available equipment/materials/software, co-curricular and extracurricularand other development activities and give an estimated budget.

The budget that includes the estimated salary, maintenance cost, etc. is prepared as well and presented to the authorities for approval.The budget is approved by the higher authority.

Actual expenditure as per budget is reviewed in third quarter and revised budget for currentfinancial year and estimated budget for next financial year is proposed.

| File Description                      | Documents  |
|---------------------------------------|--|
| Paste link for additional information | https://mescoe.mespune.org/wp-content/upload<br>s/2023/11/c6College-Committee-List.pdf |
| Upload any additional information     | <u>View File</u>   |

#### **6.2 - Strategy Development and Deployment**

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The institute planned and carried out several strategies during the period 2021-22 effectively.

#### Strategy planned:

To provide a robust platform for expression of cognitive thoughts and promote research among faculty and students.

Strategy deployment:

To provide such a platform, the three departments of the institute organize a national conference everyyear. The conference sparks innovative ideas, foster research relations, or partnerships between the various institutions and build strong research and development community. The conferences bring togetherresearchers, engineers, and scientists in the domain of interest from variety of disciplines.

The national conference on 'Advancements in Communication, Computing, and Electronics Technology'(ACCET) is a series of conferences organized by Electronics and Telecommunication Engineeringdepartment. ACCET provides a platform for researchers, academicians, and students. ACCET was organized on 19 - 20 April 2022 The national conferences on "Recent Advances in Computer Engineering" [RACE-2021] is the premierforum for presentation of new advances and research results in the field of Computer Engineering.RACE was organized on April 21-22 April 2022

'Recent Developments in Mechanical Engineering' (RDME) is a series of national conferences organizedby department of Mechanical Engineering with objective to provide the platform for students, engineers, researchers, and scientists. RDME was organized in August 2021.

| File Description                                       | Documents   |
|--|---|
| Strategic Plan and deployment documents on the website | No File Uploaded  |
| Paste link for additional information                  | https://mescoe.mespune.org/wp-content/upload<br>s/2024/02/6.2.1-conference21-22.pdf |
| Upload any additional information                      | No File Uploaded  |

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

Role & Responsibilities:

Internal quality assurance and Autonomy cell. (IQA-A cell)
 Academic Calendar planning & Quality Monitoring

2. IQAC, Accreditation & Ranking related all activities

- 2. Academic Monitoring. (AM Cell)
  - 1. Execution & Monitoring of Teaching Learning Process
  - 2. Curricular, Co-curricular Student centric activities
- 3. Public Relation-Outreach-Admissions-students-industry-system
  - cell. (PRO-cell)
    - First year admission process, Students Data, Publicity, media marketing, information dissemination, Students Clubs.
    - 2. Placements & internship
    - 3. Extra-Curricular Activities
- 4. Research -Innovation- incubation-entrepreneur cell. (R-IIE Cell)
  - 1. Grants for Research and developments activities, Labs Development for research, Publications

- Entrepreneurship, Consultancy, Testing, MOU with industry, Exchange -Collaboration programs, Staff training, FDP / STTP of subject-course, Conferences-Workshops, Seminars
- 5. Funds Endorsement & Grants cell (FEG cell)
  - Free-ship-scholarship receipt from social welfaremonitoring-liaison, Innovation-incubation Cell, Research Grants-Funds from state-central bodies
  - Planning & development of various activities, Innovation, Entrepreneurship (EDC) and startups. Generation and budgeting of funds for above activities.
- 6. Services-Amenities-Facility-Environment on campus cell. (SAFE-cell):-
  - Civil infra Sharing, Planning & development of Civil Infrastructure, Amenities, resources like electricity, water, auditorium, sports facilities, Security, CCTV, Communication, Internet Connectivity. Environment Green campus activities,.Lifts & fire safety audit. Analysis and planning for future development, Environment conservation issues

| File Description   | Documents  |
|--|--|
| Paste link for additional information  | Nil  |
| Link to Organogram of the institution webpage  | https://mescoe.mespune.org/wp-content/upload<br>s/2024/02/Organogram-of-MES-college-of-<br>engineering.pdf |
| Upload any additional information  | No File Uploaded   |
| 6.2.3 - Implementation of e-gove<br>areas of operation Administration<br>Accounts Student Admission an | on Finance and   |

Examination

| File Description   | Documents        |
|--|------------------|
| ERP (Enterprise Resource Planning)Document   | No File Uploaded |
| Screen shots of user inter faces   | <u>View File</u> |
| Any additional information   | <u>View File</u> |
| Details of implementation of e-<br>governance in areas of operation,<br>Administration etc(Data<br>Template) | <u>View File</u> |

#### **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff

The growth of an institute is contingent on its employees. Employees are valued and their needs are well-perceived. The purpose of employee welfare scheme is to enhance the holistic development of the employee's personality which enables them to perform their work in satisfactory and healthy environment. The institute has effective welfare schemes that are implemented for the benefit of teaching and non-teaching staff.

The institute provides following welfare schemes for teaching and non-teaching staff members:

• The institute motivates teachers by providing Special/ study Leave to pursue post-graduation / doctoral research to bridge the gap between the latest trends in technology and industry.

• The Institute encourages and supports staff members to participate in various conferences / workshops / staff training programmes / faculty development programmes.

• Staff members are encouraged to take membership of professional societies.

• The teaching and non-teaching staff is given other benefits like casual leave, maternity leave, medical leave, earned leave, and vacation as per SPPU norms.

• Staff members of the Institute can avail the loans from Modern Education Society's colleges employee's Co-op Credit Society Ltd.

• Employees are eligible for retiral benefits like gratuity as per

the Gratuity Act.

• The Institute has in-campus medical assistance.

• Training programmes are arranged for overall development of faculty.

• The institute has group insurance for staff.

• Uniforms facility is provided for Class IV employees.

| File Description                      | Documents  |
|---------------------------------------|--|
| Paste link for additional information | https://mescoe.mespune.org/wp-<br>content/uploads/2024/02/MES_2122.pdf |
| Upload any additional information     | <u>View File</u>   |

**6.3.2** - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

**6.3.2.1** - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

0

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | No File Uploaded |
| Details of teachers provided with<br>financial support to attend<br>conference, workshops etc during<br>the year (Data Template) | <u>View File</u> |

**6.3.3** - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

**6.3.3.1** - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

9

| File Description  | Documents        |
|---|------------------|
| Reports of the Human Resource<br>Development Centres (UGCASC<br>or other relevant centres).   | No File Uploaded |
| Reports of Academic Staff<br>College or similar centers   | No File Uploaded |
| Upload any additional information   | <u>View File</u> |
| Details of professional<br>development / administrative<br>training Programmes organized<br>by the University for teaching<br>and non teaching staff (Data<br>Template) | <u>View File</u> |

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

**59** 

| File Description   | Documents        |
|--|------------------|
| IQAC report summary  | No File Uploaded |
| Reports of the Human Resource<br>Development Centres (UGCASC<br>or other relevant centers)                 | No File Uploaded |
| Upload any additional information  | <u>View File</u> |
| Details of teachers attending<br>professional development<br>programmes during the year<br>(Data Template) | <u>View File</u> |

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

The institute strictly follows the recruitment and promotional policies as stipulated by AICTE, Savitribai Phule Pune University as well as Government of Maharashtra.

• Each and every faculty member completes the self-appraisal procedure every year in the format prescribed by SPPU.

- Self-appraisal is done on the basis of the following points:
  - Teaching learning process evaluation
  - Specific duties / tasks assigned by Heads of the Department
  - Major contribution for the benefit of student/ staff / Institute
  - Awards/ rewards obtained by the faculty and staff
  - Contribution towards extracurricular and co-curricular activities
  - Execution of exam duties assigned by SPPU
  - Research contribution of staff in terms of research projects, publications and guidance provided to students for involvement in research

| File Description                      | Documents  |
|---------------------------------------|--|
| Paste link for additional information | http://sppudocs.unipune.ac.in/sites/circular<br>s/Administrative%20Circulars%20%20Teaching/Y<br>early%20Appraisal%202020-2021_01.07.2021.pdf |
| Upload any additional information     | No File Uploaded   |

# 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The institute has the well-established mechanism for internal as well as external audits. The accounts department is headed by Registrar and maintains financial accounts. The financial statements are prepared and submitted to statutory bodies.

The audit for year 2021-22 is carried by Kalyaniwala and Mistry LLP Chartered accounts.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during

#### the year (not covered in Criterion III)

# **6.4.2.1** - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

#### 1.43

| File Description   | Documents        |
|--|------------------|
| Annual statements of accounts  | No File Uploaded |
| Any additional information   | <u>View File</u> |
| Details of Funds / Grants<br>received from of the non-<br>government bodies, individuals,<br>Philanthropers during the year<br>(Data Template) | <u>View File</u> |

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

The institute has well-developed strategy for mobilizing funds that ensures the optimal utilization of resources while maintaining the transparency in the financial management. The strategy is focused on quality enhancement.

The primary financial resource for the Institute is the tuition fee. The tuition fee is fixed by concerned statutory committee.

The resources are optimally utilized as per the sanctioned budget.

The expenditure heads are as follows-

- Major component of expenditure Employee Salaries
- Furniture, Laboratory Equipment and Consumables
- Industry Collaborative Labs.
- Library
- Establishing Centers of excellence
- Research & Development activities
- Training & Placement
- Software procurement, up-gradation, and maintenance
- Internet facility
- Student Services- NSS, Sports
- Power and fuel
- Printing and Stationery
- Postage and telephones
- Affiliation and Renewals
- Travel and conveyance
- Repair, Replacements, and Maintenance

#### • Taxes and licenses

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

In 2021-22, M.E.S. College emphasized enhancing academic quality, research, and student outcomes.

1. Industry-Institute Interaction The IQAC facilitated 14 MOUs with industry partners, leading to 42 guest lectures, 4 workshops, 427 internships, 264 placements, and 9 sponsorships/scholarships. These collaborations enriched student exposure to real-world applications and industry needs.

2. Student Skill Development To boost employability, IQAC organized skill-building activities in AI, Cybersecurity, and Machine Learning. A notable achievement was the student-led startup, debugged.exe. The Institution's Innovation Council (IIC) supported entrepreneurship by conducting workshops and seminars on internships, innovation, startups, and patent filing. Faculty development programs included a National Level STTP on LaTeX and an FDP on "R Programming."

3. Workshops and Webinars IQAC conducted 42 guest lectures and 4 workshops, along with webinars on entrepreneurship and cybersecurity to prepare students for industry challenges. Each department hosted national-level conferences, fostering a research culture and encouraging innovation and technical growth among students.

Through these initiatives, the college aimed to create a robust educational environment that aligns with industry requirements and enhances student readiness for the workforce.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | No File Uploaded |

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

The institution systematically reviews its teaching-learning processes, structures, methodologies, and learning outcomes at regular intervals to ensure continuous improvement. This is achieved through the Internal Quality Assurance Cell (IQAC), established in accordance with prescribed norms. The IQAC plays a crucial role in evaluating and enhancing both the academic and operational frameworks of the institution.

Periodic reviews are conducted by the IQAC through meetings between the principal, heads of departments, and the dean. These discussions assess the effectiveness of teaching strategies, curriculum delivery, feedback mechanisms, and student performance. Insights gained from these evaluations inform various reforms aimed at enhancing the quality of education and the overall learning experience.

Through this continuous review process, the institution has documented incremental improvements across a range of activities. Innovations in teaching methods, improved utilization of technology, enhanced faculty development programs, and better student support systems have all emerged from these efforts. Furthermore, measurable improvements in student learning outcomes, such as increased pass rates and enhanced academic performance, have been observed.

This structured approach to reviewing and enhancing the teachinglearning process ensures that the institution maintains high educational standards while fostering an environment of continuous growth and excellence.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | No File Uploaded |

| 6.5.3 - Quality assurance initiatives of the    | A. All of the above |
|---|---------------------|
| institution include: Regular meeting of         |                     |
| Internal Quality Assurance Cell (IQAC);         |                     |
| Feedback collected, analyzed and used for       |                     |
| improvements Collaborative quality initiatives  |                     |
| with other institution(s) Participation in NIRF |                     |
| any other quality audit recognized by state,    |                     |
| national or international agencies (ISO         |                     |
| Certification, NBA)                             |                     |

| File Description   | Documents   |
|--|---|
| Paste web link of Annual reports of Institution  | https://mescoe.mespune.org/national-assessme<br>nt-and-accreditation-council/#abouttab5 |
| Upload e-copies of the accreditations and certifications                                 | <u>View File</u>  |
| Upload any additional information  | No File Uploaded  |
| Upload details of Quality<br>assurance initiatives of the<br>institution (Data Template) | <u>View File</u>  |

# INSTITUTIONAL VALUES AND BEST PRACTICES

# 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

The institution constituted the following committees as per norms laid by University/UGC: Institution Grievance Redressal Committee, Anti-Ragging, Internal Committee and Mentoring Programme cares for the well-being of students and staff in the institution. The institution provides safety and security facilities for the staff and students such as CCTV Surveillance throughout the campus and security arrangement. Students wear ID cards at all times and outsiders are checked by security staff before allotting visitor IDs. The institution has a good mentoring system for the students to take care of their academic, emotional, social and cognitive development. Personal Counselling is provided to the students at different levels. There are separate washroom facilities for girls and boys. The institution has organized several programs in gender equity in curricula. The institution promotes gender sensitization through co-curricular activities like workshops, seminars, guest lectures and counselling by Parent Teacher etc. In accordance with the Nirbhay Kanya Abhiyaan scheme introduced by the Board of student development, SPPU, the college organised a workshop on Implementation of Health of girl students. The institute also organized a one day Workshop on "Self Defence" on 28 Feb 2022 for girl students to give training in health, law, and Student activities.

| File Description   | Documents  |
|--|--|
| Annual gender sensitization action plan  | https://mescoe.mespune.org/wp-content/upload<br>s/2024/02/Annual-Gender-Sensitization-Action-<br>Plan-AY-2021-22.pdf |
| Specific facilities provided for<br>women in terms of:a. Safety and<br>security b. Counseling c.<br>Common Rooms d. Day care<br>center for young children e. Any<br>other relevant information               | https://mescoe.mespune.org/board-of-student-<br>development/   |
| 7.1.2 - The Institution has facilit<br>alternate sources of energy and<br>conservation measures Solar en<br>Biogas plant Wheeling to the Gr<br>based energy conservation Use of<br>power efficient equipment | energy<br>nergy<br>•id Sensor-   |
| File Description   | Documents  |
| Geo tagged Photographs   | <u>View File</u>   |

| Any other relevant information | No File Uploaded |
|--------------------------------|------------------|
|--------------------------------|------------------|

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

Solid waste management-

In every room, dustbins are placed to collect waste and also centrally wet and dry waste inserted into green and blue big dustbins respectively. Generated waste is collected and segregated in the college premises in the category of dry and wet garbage. Recyclable waste is forwarded for further decomposition process to the Vermiculture Vermicomposting unit situated in college premises.

Water Recycling System-

Water Harvesting: A network of rainwater harvesting systems ensures continuous recharging of groundwater tables. Institute has successfully implemented a rain water harvesting Project. Ground water recharging pit is prepared on the Institute campus. Arrangement has been made so that storm water flows from the playground to fill a pit and filter pit to well. The Institute has implemented a rain water Harvesting Project, that has saved a significant amount of expenses beside it maintains campus ecology.

E-waste management- The e-waste is taken care of properly. The old unused unrepeatable electronic equipment is disposed of properly.

Hazardous chemicals and radioactive waste management- The chemicals used in chemistry laboratories are disposed of carefully. The workshop machining waste chips are collected together and sold to scrap merchants for further reuse.

| File Description   | Documents        | Documents                    |  |
|--|------------------|------------------------------|--|
| Relevant documents like<br>agreements / MoUs with<br>Government and other approved<br>agencies   |                  | <u>View File</u>             |  |
| Geo tagged photographs of the facilities   | <u>View File</u> |                              |  |
| 7.1.4 - Water conservation facilities available<br>in the Institution: Rain water harvesting Bore<br>well /Open well recharge Construction of tanks<br>and bunds Waste water recycling Maintenance<br>of water bodies and distribution system in the<br>campus |                  | C. Any 2 of the above        |  |
| File Description   | Documents        |                              |  |
| Geo tagged photographs / videos of the facilities  |                  | <u>View File</u>             |  |
| Any other relevant information   |                  | No File Uploaded             |  |
| 7.1.5 - Green campus initiatives include   |                  |                              |  |
| 7.1.5.1 - The institutional initiatives for<br>greening the campus are as follows:A. An1. Restricted entry of automobiles<br>2. Use of bicycles/ Battery-poweredA.   |                  | A. Any 4 or All of the above |  |
| vehicles   | 70 W CI CU       |                              |  |

#### **3.** Pedestrian-friendly pathways

4. Ban on use of plastic

#### 5. Landscaping

| File Description   | Documents        |
|--|------------------|
| Geo tagged photos / videos of the facilities                             | <u>View File</u> |
| Various policy documents /<br>decisions circulated for<br>implementation | <u>View File</u> |
| Any other relevant documents   | No File Uploaded |

#### 7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit
3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

| File Description  | Documents                                 |
|---|---|
| Reports on environment and<br>energy audits submitted by the<br>auditing agency | <u>View File</u>                          |
| Certification by the auditing agency  | <u>View File</u>                          |
| Certificates of the awards received   | No File Uploaded                          |
| Any other relevant information  | No File Uploaded                          |
| 7.1.7 - The Institution has disabl  | ed-friendly, A. Any 4 or all of the above |

7.1.7 - The Institution has disabled-friendly,<br/>barrier free environment Built environment<br/>with ramps/lifts for easy access to classrooms.A.Disabled-friendly washrooms Signage<br/>including tactile path, lights, display boards<br/>and signposts Assistive technology and<br/>facilities for persons with disabilities<br/>(Divyangjan) accessible website, screen-<br/>reading software, mechanized equipment<br/>5.A.Provision for enquiry and information :<br/>Human assistance, reader, scribe, soft copies of<br/>reading material, screenFreeding

| File Description   | Documents   |  |
|--|---|--|
| Geo tagged photographs / videos of the facilities                              | <u>View File</u>  |  |
| Policy documents and<br>information brochures on the<br>support to be provided | <u>View File</u>  |  |
| Details of the Software procured for providing the assistance                  | No File Uploaded  |  |
| Any other relevant information   | No File Uploaded  |  |
|  | fforts/initiatives in providing an inclusive environment i.e.,<br>Iltural, regional, linguistic, communal socioeconomic and other |  |
| Sr. No.  |   |  |
| Name of Activity   |   |  |
| Date of activity   |   |  |
| Type of activity   |   |  |
| 1.   |   |  |
| Independence Day Celebr  | ation   |  |
| 15 August 2021   |   |  |
| Social   |   |  |
| 2.   |   |  |
| Celebration Of Engineer's Day  |   |  |
| 15 September 2021  |   |  |
| Social   |   |  |
| 3.   |   |  |
| Saraswati Pooja and Ayudh Pooja  |   |  |
| 14th October 2021  |   |  |

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Cultural
4.
Republic Day Celebration
26 January 2022
Social
5.
National Science Day
28 February 2022
Social
6.
Women's Day
08 March 2022
social, Communal and cultural
7.
International Yoga Day 2022
21st June 2022
Social and cultural
8.
National Innovation Day
28 October 2021
Social, Regioanl
9.
National Energy Conservation Day
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28 October 2021 Social, Regional 10 World Intellectual Property Day 27th April 2022 Social, Regional 11. World Entrepreneurs Day

21st August 2022

Social, Regional

| File Description   | Documents        |
|--|------------------|
| Supporting documents on the<br>information provided (as<br>reflected in the administrative<br>and academic activities of the<br>Institution) | <u>View File</u> |
| Any other relevant information   | <u>View File</u> |

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

The Institution organizes activities that strengthen our constitutional values and deepen our allegiance and responsibility towards our nation. The National Service Scheme (NSS) and Board of Student Development are two integral bodies under SPPU that commit to programs and activities to inculcate constitutional obligations and patriotism among students and staff. The college fosters community responsibility by organizing blood donation camps routinely. In every camp, around 100 volunteers donate blood. The college renders national service by organizing road-safety awareness programs routinely. Students are informed about traffic rules and regulations and instill the importance of safeguarding human life. To promote a sustainable environment, Swatch Bharat campaigns and Tree Plantation drives are organized. To protect human lives and property of the college during a disaster, MESCOE organized disaster management workshops. The college also organized awareness drives and mock drills for disaster management in association with the NDRF team. MESCOE organizes a seminar on "Intellectual Property Rights" to create awareness about copyright, plagiarism, patenting, trademark, and several otherrelated aspects to cultivate professional ethics. The college enshrines the sovereign and democratic values of our nation by commemorating the Independence Day and the Republic Day annually. Constitution Day is celebrated every year in college.

| File Description   | Documents  |
|--|--|
| Details of activities that inculcate<br>values; necessary to render<br>students in to responsible citizens   | https://mescoe.mespune.org/national-service-<br>scheme/#abouttab3                            |
| Any other relevant information   | https://mescoe.mespune.org/board-of-student-<br>development/                                 |
| 7.1.10 - The Institution has a pro<br>of conduct for students, teachers<br>administrators and other staff a<br>periodic programmes in this reg<br>of Conduct is displayed on the w<br>a committee to monitor adheren<br>of Conduct Institution organizes<br>ethics programmes for students<br>teachers, administrators and oth | s,<br>nd conducts<br>gard. The Code<br>vebsite There is<br>ace to the Code<br>s professional |

| Annual awareness programmes on Code of<br>Conduct are organized | 4. |  |
|---|----|--|
|   |    |  |

| File Description   | Documents        |
|--|------------------|
| Code of ethics policy document   | <u>View File</u> |
| Details of the monitoring<br>committee composition and<br>minutes of the committee<br>meeting, number of programmes<br>organized, reports on the various<br>programs etc., in support of the<br>claims | No File Uploaded |
| Any other relevant information   | No File Uploaded |

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

Modern Education Society's College of Engineering celebrates

national and international commemorative days to implant constitutional responsibilities, to engrain patriotic spirit and to encourage unity among fellow citizens. 1. Independence Day and Republic Day are celebrated in the college by hoisting the Indian flag. 2. International Women's Day is celebrated on 8th March.

3.International Yoga Day is celebrated on 21th June. 4.Teachers Day is celebrated on 5th September. 5.Engineers Day is celebrated on 15 th September by organizing various activities like expert talk on advanced technology, eco-social roles of engineers in society. 6.Gandhi Jayanti Celebrated on 2nd October. 7. National Innovation day, Energy conservation day, IPR day and World Entreprenur days are also celebrated.

| File Description  | Documents        |
|---|------------------|
| Annual report of the celebrations<br>and commemorative events for<br>the last (During the year) | <u>View File</u> |
| Geo tagged photographs of some of the events  | <u>View File</u> |
| Any other relevant information  | No File Uploaded |

# 7.2 - Best Practices

7.2.1 - Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Best Practice I

1. Title of the Practice: 'Industry Institute Interaction'

2. Goal: Main objective is to establish and maintain relationships with the corporate world through MoUs, Centre of Excellence, sponsored projects, industrial visits and in-plant training for students and faculty members.

3. The Context: Institution has taken initiative to interact with various industries through the Industry Institute Interaction committee that maintains professional relations with industries.

4. The Practice:

1. Membership of Professional Technical Bodies

Annual Quality Assurance Report of MODERN EDUCATION SOCIETY'S COLLEGE OF ENGINEERING 2. MoUs with industries 3. Lab development under Center of Excellence 4. Industrial visit, Guest Lecture, 5. Promotion to do internship and industry sponsored project for students 6. Curriculum development at par with industry requirement Best Practice II Title of Practice: Student Skill Development Activity 1.Goal: Development of students' technical skill and job skills necessary for industries through Co- curricular and extracurricular activities. 2. The Context: Co-curricular activities are significant for enriching students on an emotional, cognitive, physical, and social level. At the same time, extracurricular activities incorporating NSS, art and music can play a vital role in nation-building, psychomotor development and dexterity. 3. The Practice: 1. Formation Different Student Chapter 2. Co-Curricular and Extra Co-Curricular Activities 3. Development of laboratories with the latest experimentation facility 4. Support for Internship and Sponsored Project 5. Provision of E-content for advance Learning (NPTEL, video Lectures. 6. Formation of Students Clubs

| File Description                            | Documents  |
|---|--|
| Best practices in the Institutional website | https://mescoe.mespune.org/national-assessme<br>nt-and-accreditation-council/#abouttab6  |
| Any other relevant information              | <u>https://mescoe.mespune.org/institutions-</u><br><u>innovation-council-iic-mescoe/</u> |

# 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Institute has taken special efforts to develop the research culture among both staff and students. Institute is always keen to provide and build an environment which can promote and encourage research in not only core areas but also in multidisciplinary areas. Institutes believe that to promote the research in the students, the faculties must be equipped with knowledge and process related to research areas. This is achieved by continuously promoting the faculty to pursue higher education like PhD through special duty leaves to attend research work and conferences, research Lab etc. Institutes also promote organization of conferences to create a platform for sharing of latest knowledge and bring together researchers from different areas of the nation. This has helped the institute to have a maximum number of faculties with PhD qualification and some as PhD Guide.

| File Description                                | Documents        |
|---|------------------|
| Appropriate web in the<br>Institutional website | <u>View File</u> |
| Any other relevant information                  | No File Uploaded |

7.3.2 - Plan of action for the next academic year

1. Planning to start new UG course (Automation and Robotics)