



# **SELF STUDY REPORT**

**FOR**

**2<sup>nd</sup> CYCLE OF ACCREDITATION**

**MET'S INSTITUTE OF ENGINEERING**

**BHUJBAL KNOWLEDGE CITY ADGAON**

**422003**

**[www.metbkcengg.ac.in](http://www.metbkcengg.ac.in)**

**Submitted To**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**July 2023**

# **1. EXECUTIVE SUMMARY**

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## **1.1 INTRODUCTION**

MET's IOE is affiliated with Savitribai Phule Pune University (SPPU) and approved by AICTE. The Institute works towards providing students with opportunities to excel in various professions and contributes towards global development. Our faculties are involved in curriculum design, development, and implementation for SPPU Pune. The curriculum is developed to meet the professional and personal needs of students. While pursuing academic excellence, Institute ensures the all-around personality development of every student. The teaching-learning process has a conducive environment.

A well-planned, beautifully landscaped, and neatly maintained campus provides state-of-the-art modern facilities.

The Institute has sufficient space for all academics, extra-curricular, co-curricular, and other activities. Boy's and the girl's hostel each has a capacity to accommodate 150 students.

Every department is well equipped with necessary infrastructure such as separate classrooms, laboratories, workshops, and seminar halls. Hostel facilities are provided for boys and girls. The library has acquired a valuable collection of more than 31,580 books with a rich collection of International and National level Journals of current and back volumes. The library reading room capacity is 150 users. The digital library is also available with ASME Membership, NPTEL, and IEL online. IEEE access is given to staff and students, Special Membership of the British Library, and Membership of NDL.

The vision of the Institute is to educate and inspire engineers committed to the innovative and ethical application of technology in the solution of societal problems and lead among peer institutions of interdisciplinary research. The departments have framed their vision and mission in tune with the Institute's vision and mission. The Institute believes that faculties are its backbone and the Principal is a pillar of the Institute. Thus priority is given to the recruitment of experienced, qualified, and competent faculty.

The NSS unit of the institute does various social activities like Tree plantation, Blood Donation Camp, Health Check, cleanliness drives at adopted villages,s, etc.

Institute promotes environmental awareness like energy saving, Rainwater harvesting, wastewater management, etc.

Institute has established an Industry Institute Interaction cell. The administration and academic systems work in coordination for smooth and effective governance.

### **Vision**

To develop Institute as a Centre of Excellence for developing globally accepted professionals having application orientation, lifelong learning approach towards socio-economic growth of stakeholders and the Society as a whole.

## **Mission**

- Preparing Graduates capable enough to practice effectively and responsibly to technological changes and pursue advanced engineering.
- Inculcate applied research to support and contribute to the social and economic well-being of citizens and organizations in nearby regions.
- Cultivate the entrepreneurial spirit and linkage of engineering education and business for technology commercialization.
- Evolve thoughtfully to the changing needs of industry and the surrounding world.

## **Process of Dissemination/Communication:**

- Display of Vision, Mission at various prominent places
- Uploading on institute website links
- Uploading on ERP login and Training & Placement Portal
- Communicating through mail or hard copy to different stakeholders, etc
- The vision and mission are passed on to the parents during parent meetings.
- During various continuing education programs and orientation programs, Vision, Mission clearly conveyed to the faculty and support staff with a clear understanding of the goals specified by the Institute and Trustees of the Mumbai Educational Trust
- Vision, Mission are communicated to the students during their admission process, during continuing education programs, through various counseling activities like induction and annual programs, etc
- Vision and Mission are made known to the Faculties and Students through their ERP login and also displayed on notice boards
- Dissemination of information about Vision, Mission, and PEOs among Alumni is carried out during communication with Alumni.

## **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

### **Institutional Strength**

Approved by AICTE, DTE, Govt. of Maharashtra & affiliated to Savitribai Phule Pune University.

Received Grants for research projects under the QIP program of SPPU.

Institute receives grants from the Department of Science and Technology.

Recognized research center in Mechanical & Computer engineering.

Institute has collaborated with various industries for internships and sponsored projects for industry exposure.

Institute is running an Earn and Learn scheme for student welfare.

Placement of the students in SSI, MSI, and MNC.

Participation of students in social curricular and co-curricular activities.

Our faculty members are involved in curriculum design, development, and implementation for SPPU, Pune.

Faculties and scholars from prestigious Institutes are invited as resource persons in conferences workshops and FDP.

A good number of publications.

A flexible transport facility by own transport fleet in addition to city buses.

ERP system for effective administration, and data analysis.

Good faculty retention in IOE.

Special Counseling cell to cope with the diversified students.

Institute nodal center; Amrita Vlab, IIT Spoken tutorial and RETC IIT Madars

### **Institutional Weakness**

Inadequate number of Ph. D. qualified faculty

Fewer placements of students in prestigious and big companies.

Very less involvement of alumni, since the alumni association is formed recently.

### **Institutional Opportunity**

To increase the employability of the students and also encourage them for being entrepreneurs in various fields.

To enhance alumni involvement in placement activities.

To encourage faculties for pursuing Ph. D. from prestigious Institutes.

To encourage the students for participating in various competitive examinations.

To motivate students for improving their technical and practical knowledge to become quality engineers.

### **Institutional Challenge**

To increase the employability of the students and also encourage them for being entrepreneurs in various fields.

To enhance alumni involvement in placement activities.

To encourage faculties for pursuing Ph. D. from prestigious Institutes.

To encourage the students for participating in various competitive examinations.

To motivate students for improving their technical and practical knowledge to become quality engineers.

## 1.3 CRITERIA WISE SUMMARY

### Curricular Aspects

**The process for effective implementation of the Curriculum includes:**

- **Preparation of Academic Calendar:** Academic calendar is prepared by referring University Academic Calendar. The activities to be conducted are included in the academic calendar. The different activities are guest lectures, workshops, seminars, conferences, Faculty Development Programs, IN SEM exam schedules, etc. The academic calendar is followed throughout the semester for its effectiveness and timely execution of activities.
- **Workload Distribution and Time Table:** Choices are requested and the load distribution is carried out. Time Table Coordinator prepares department timetable and laboratory timetables and it is displayed on notice boards.
- **Subject Teaching Plan and Laboratory Plan:** Subject teaching plans and Laboratory plan is prepared by the concerned faculty. The head of the department monitors the status of the syllabus covered and the status of completion of practicals.
- **Course File:** The faculty maintains a course file, which consists of class notes, PowerPoint presentations, assignments, a question bank, and other learning material. These contents are made available to concern students.
- **Apart from Teaching Learning:** Guest lectures and workshops by experts from industry and academia are arranged.
- **Industrial Visit:** Industrial visits are arranged for the students for field exposure. Students are also doing internships in industry.
- **Student Feedback:** Automated feedback from the students is obtained and analyzed periodically to improve the teaching-learning process.
- **Collaborative Learning:** Students and faculty members participate in different collaborative activities like Soft Skill development, Expert Lectures, online courses, NPTEL, Virtual Labs, IIT Spoken Tutorial, IIT free open source software laboratory, etc.
- **Student Encouragement:** Students are encouraged to participate in various activities conducted at Department/Institute/State/National. Students are also encouraged to organize various activities at the Department level/Institute level/State level/National level on Campus.
- **Online ERP System:** Every individual student is given a login ID of the ERP system so as to operate and obtain updates from time to time. This enables the students to go through online resources, giving feedback, through their respective login IDs. ERP is an in-house developed system based on our requirements.

### Teaching-learning and Evaluation

## Evaluation Process

Credit based evaluation system adopted by the Institute is as directed by the university and it is given as follows:

### External (University) Assessment:

- 1: Centralized Assessment Program (CAP) for END SEM Theory Examination
2. IN SEM Examination conducted by the university
3. Assessment of Term Work, Practical, Oral Examination by two examiners, one examiner from the Institute (Internal) and a second examiner from another institute (External) appointed by the University.
4. Project Assessment by two examiners, one examiner from Institute (Internal) and a second examiner from another institute (External) appointed by University.

## Research, Innovations and Extension

The institution has a research committee to plan, monitor and address issues of research.

Research and Development Cell (RDC) has been established in the Institute. The academic research coordinator monitors the activity with the help of members of the research committee.

The Institute has established the Research and Development Cell (RDC), and the activities under RDC are -

- To create a research culture in Institute and motivate students and teaching faculty to take up research projects leading to innovation.
- To improve industry Institute and Institute -Institute interaction to work for mutual benefits in the area of research and innovation.
- To improvise the cooperation and support with other Institutes of national importance for faculty up-gradation and resource sharing through faculty development programs, workshops, seminars, and special lectures on the thrust area.
- The RDC coordinates timely auditing and submission of utilization certificates to the funding authorities
- Coordinate the functioning of research activities of all the departments

Faculties are actively involved in research work. They devote themselves in supporting and guiding student's research projects. A good number of research scholars are being successfully guided by our senior faculty members.

The institution has a recognized research center for two programs- **Computer Engineering and Mechanical Engineering**. The Institute has established Research laboratories for both programs. The faculties are doing research activities through research projects funded by SPPU and other sources also.

The resources are made available like online resources IEEE, J-Gate, British Library, NDL, NPTEL, etc. Also, the required Books, Handbooks, and Print Journal are also available in the library

The Institutes provided the infrastructure and the required equipment for the purpose of research. The faculties are deputed to participate in workshops, seminars, and conferences with financial assistance.

The efforts are made by the Institute for encouraging research activity by way of :

- Organizing Faculty Development programs in association with Industries experts.
- Organizing seminars/hands-on workshops/conferences etc
- MOUs to enhance Industry Institution collaboration to explore research areas.

## **Infrastructure and Learning Resources**

### **Infrastructure**

The infrastructural facilities available on the campus are.

Sufficient Number of Classrooms with Data Projectors

Sufficient Number of Laboratories with Data Projectors in some Laboratories

Auditorium / Seminar Hall with Data Projector and Audio System and other infrastructural facilities

Central Library with OPEC system

Sports facility for Outdoor Sports and Indoor Sports

Playground for outdoor sports

Cafeteria with a conducive environment

Banking (ATM)

Boys' Hostels and Girls Hostel with Spacious and Furnished Rooms

Guest Room, Visitors Room, Nutritious Food, Reading & Recreation Room, Purified Drinking Water by RO system,

Bus Facility / Transport facilities for students and staff

Fullflaged gymnasium and indoor sports facility available

Power Backup System/ Generator,

Wastewater management as well as solid waste management

Rain Water harvesting

e-waste management activity

**Learning Resources:**

To make learning more student-centric support structures and systems is available for students and teachers to develop skills like interactive learning, collaborative learning, and independent learning. This is achieved with the support of

**1. NPTEL Online Certification Courses**

To encourage more students across Institutes to participate in this initiative, Our Institute started NPTEL Local Chapter. Faculties and students registered for various NPTEL courses and use the online learning facility to enrich their knowledge of the respective domain.

**2. IIT Spoken Tutorial**

The Spoken Tutorial project is the initiative of the 'Talk to a Teacher activity of the National Mission on Education through Information and Communication Technology (ICT), launched by the MHRD. The use of spoken tutorials to popularize software development and its use is coordinated through <http://spoken-tutorial.org> website.

**3. Virtual Lab and practical facility:**

A virtual lab provides **online labs and experiments**. Our Institute is having an MOU with Amrita University for this facility of Virtual Lab. Amrita University jointly participates with IITs and Dayalbagh University. These experiments and labs will be hosted for open access through the main project website <http://vlab.co.in> and at the University link <http://vlab.amrita.edu/>. This project is an initiative of the Ministry of Human Resource Department under the National Mission on Education through ICT. Objectives of the Virtual Labs: To provide remote access to Labs in various disciplines of Engineering for learning basic and advanced concepts through remote experimentation.

**Student Support and Progression****ERP login to every student and staff**

ERP System is implemented for the students and staff. Students are regularly accessing the information uploaded by the staff members. Students can check their attendance, download e-material, receive group messages, timetables, exam timetables, etc. Also, students submit feedback to the teaching-learning process through their ERP login. Various important links are provided to the students through this ERP login.

**Access to Teaching Learning material of Text/Audio/video type**

All the teaching-learning materials like PDFs, PPTs, Text files, and Videos related to the subject are uploaded by respective staff on their ERP login. Students can access these materials through their login, download them and carry those for their reference.

**Students' access to the learning resources:**

Access to the facilities of the library and E-Library is fully digitized and all the information on books is



available to the students through the OPAC system. Students can access this facility through their respective ERP logins.

### **Students Access to E-Resources:-**

students have access to IEEE, J-Gate, British Council Library, Digital library Content, and Learning resources uploaded on ERP by the faculty members.

In strengthening the social economic aspects, Institute has initiated various processes and monitors their outcomes and effectiveness. Some of the initiatives are:

- Training and Placement cell
- Counseling cell
- Industry Institute Interactions,
- Entrepreneurship cell,
- Opting for the projects like RETC Rural Engineering Technology Club in association with IIT Madras.
- Final projects with Industry Sponsorships
- MoU with Industries like ARES, ESDS, and Intellidemics, for inculcating training and Entrepreneurship among students.

### **Governance, Leadership and Management**

#### **Governance, Leadership, And Management**

- The policies and the plans of the Institute are formulated by Governing Body on the suggestions and recommendations of the Academy advisory Committee, where in Head of the Institute (Principal), and Heads of the Departments are associated.
- The role of top management: To decide the vision and mission statements, long-term goals, and objectives of the Institute.
- The role of the Principal: Principal as the head of the Institute executes the policies decided by top management. His role is to keep the Management abreast of various initiatives, and also the changing need for in tune with the requirements of statutory and regulatory authorities.
- The role of the Head of the departments is to coordinate between faculties and the head of the Institute and recommends requirements of equipment due to changing technology and curriculum, desired training to labs, and manpower respectively. They also help the teachers to implement new methods in teaching, and experimentation and also motivate the faculty and students through academic excellence.
- The role of faculties of the departments: The faculty interacts with the students for implementing teaching-learning processes and ensures the attainment of learning objectives of imparting quality education.
- A number of portfolios are formed in the Institute for the smooth functioning of academics and administration. Responsibilities are handled by senior faculty members. Responsibilities are shared at the department and the Institute level for the effective growth of the Institute.

The Institute authorities have imbibed a professional culture in the senior employees and this is very well reflected in the retention of the faculty

- The parents' meet is a platform that lets the Institute authorities understand their views and expectations from the Institute.

The employers (Representatives of Companies) visit campus for seminars, and conferences, and interact with Institute authorities, faculty, and students.

The feedback received from the Industry professionals is used to update the laboratory infrastructure to meet the current needs of the Industry.

### **Institutional Values and Best Practices**

MET's Institute of Engineering, Bhujbal Knowledge City is a renowned institute with the goal of comprehensive educational development of each and every section of the society. We believe that through the overall development of the student, who can not only do a job but also an entrepreneur and can fulfill their responsibilities towards their families while also thinking about society and obviously the nation. The MET IOE has inculcated Gender Equality and Sensitivity through various initiatives, activities, and programs to create a safe, secure, and healthy atmosphere on campus. The objective is to promote education that would be sensitive to the needs of all genders and various sections of society. To ensure that students of all genders are given equal opportunities for education, the staff members ensure equal participation and involvement while forming teams and groups in almost all the activities including, sports events, cultural events, project groups, seminar groups, etc.

MET's Institute of Engineering has many best practices and two exceptional best practices are **Central Counseling & Student Development Cell and Students Forum**. First best practice **Central Counseling & Student Development Cell** has the vision to help students to resolve their personal, educational & behavioral problems. To support students to enhance & nurtured their potential through Individual, Group, career & Intellectual Counseling & mentorship Programs to make them enable sound personalities to face the challenging & competitive environment with Success. One More best practice **Students Forum has an objective to** Enhance their leadership qualities and to provide a platform for solving real-life problems through engineering knowledge and improving skills such as teamwork, lifelong learning, ethics of society, and leadership quality.

Distinctive feature: e-Cell MET: Working for a decade, plays a vital role in awareness, development of entrepreneurship scope, and opportunities. It has started giving results, Students are inculcated to adopt self-employment as a career option.

### **Environment Consciousness**

The Institute is environmentally conscious and monitors the greenery on the campus. The tree plantation is the major concern to maintain the immaculate purity and beauty of the Institute to provide a pleasant atmosphere. Other aspects of environmental consciousness such as **Energy Conservation, Use of Renewable Energy, rain Water Harvesting, Tree Plantation, Hazardous Waste Management, E-Waste Management, etc are taken care.**

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	MET'S INSTITUTE OF ENGINEERING
Address	Bhujbal Knowledge City Adgaon
City	Nashik
State	Maharashtra
Pin	422003
Website	<a href="http://www.metbkcengg.ac.in">www.metbkcengg.ac.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	V.p.wani	0253-2555925	9372670533	0253-2303203	vpwani@gmail.com
IQAC / CIQA coordinator	V.j.gond	0253-2555886	9423174311	0253-2303203	vjg.eltx@gmail.com

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	

State	University name	Document
Maharashtra	Savitribai Phule Pune University	<a href="#">View Document</a>

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	15-05-2023	12	

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Bhujbal Knowledge City Adgaon	Urban	5	22200

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/ Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BE,Computer Engineering	48	HSC	English	120	120
UG	BVoc,Computer Engineering	36	HSC	English	30	0
UG	BE,Information Technology	48	HSC	English	60	60
UG	BE,Electronics And Telecommunication Engineering	48	HSC	English	60	60
UG	BVoc,Electronics And Telecommunication Engineering	36	HSC	English	30	0
UG	BE,Mechanical Engineering	48	HSC	English	120	115
UG	BE,Electrical Engineering	48	HSC	English	60	60
UG	BE,Civil Engineering	48	HSC	English	60	46
UG	BE,Artificial Intelligence And Data Science	48	HSC	English	60	60
PG	ME,Computer Engineering	24	BE in the relevant field of Engineering	English	12	2
PG	ME,Mechanical Engineering	24	BE in the relevant field of	English	18	2

			Engineering			
PG	MCA,Master In Computer Application	24	BCA or BSc Computer or IT	English	60	60
Doctoral (Ph.D)	PhD or DPhil ,Computer Engineering	48	ME in the relevant field of Engineering	English	19	15
Doctoral (Ph.D)	PhD or DPhil ,Mechanical Engineering	48	ME in the relevant field of Engineering	English	11	6

### Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	11				23				89			
Recruited	5	0	0	5	0	0	0	0	28	12	0	40
Yet to Recruit	6				23				49			
Sanctioned by the Management/Soci ety or Other Authorized Bodies	5				17				57			
Recruited	3	2	0	5	11	6	0	17	32	25	0	57
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				37
Recruited	33	4	0	37
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				41
Recruited	36	5	0	41
Yet to Recruit				0

### **Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	7	2	0	8	6	0	3	0	0	26
M.Phil.	0	0	0	0	0	0	0	1	0	1
PG	1	0	0	3	0	0	57	36	0	97
UG	0	0	0	0	0	0	0	0	0	0

<b>Temporary Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0



<b>Part Time Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

<b>Details of Visting/Guest Faculties</b>					
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	
	1	0	0	0	1

**Provide the Following Details of Students Enrolled in the College During the Current Academic Year**

<b>Programme</b>		<b>From the State Where College is Located</b>	<b>From Other States of India</b>	<b>NRI Students</b>	<b>Foreign Students</b>	<b>Total</b>
UG	Male	1646	16	0	0	1662
	Female	771	10	0	0	781
	Others	0	0	0	0	0
PG	Male	94	0	0	0	94
	Female	41	0	0	0	41
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	20	0	0	0	20
	Female	16	0	0	0	16
	Others	0	0	0	0	0

<b>Provide the Following Details of Students admitted to the College During the last four Academic Years</b>					
<b>Category</b>		<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
SC	Male	189	168	114	129
	Female	104	108	97	107
	Others	0	0	0	0
ST	Male	57	60	39	39
	Female	41	49	38	29
	Others	0	0	0	0
OBC	Male	855	760	623	651
	Female	433	430	399	439
	Others	0	0	0	0
General	Male	476	408	342	354
	Female	219	201	158	174
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
<b>Total</b>		<b>2374</b>	<b>2184</b>	<b>1810</b>	<b>1922</b>

### **Institutional preparedness for NEP**

<p>1. Multidisciplinary/interdisciplinary:</p>	<p>MET's IoE is an institute offering multiple courses and it also promotes and encourages students from different branches to carry out multidisciplinary projects. Interdisciplinary courses are one approach to address such needs, as they can aid in the enhancement of engineering education and the integration of desirable specialized subjects into the current engineering education system. The engineering stream of S P Pune University follows the choice-based credit-based system. The Institute is affiliated with S P Pune University, the curriculum offers the inclusion of courses in science &amp; Mathematics in the first and second year of engineering, and humanity courses are included as a</p>
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part of the structure and syllabus for every branch. The Institute has a student forum in every department, which provides an opportunity to celebrate Engineers' Week. In engineers' week, students organize various activities like paper presentations, quiz competitions, culture, and technical workshops. The elective subjects are offered to the students. Every student is opting for the subject of their interest from the choice offered. The subjects offered are from diverse engineering fields. This provision of offering elective subjects facilitates to bridge between different engineering fields. This enables students to fulfill the current industry needs. Multidisciplinary becomes common among engineering fields. The subjects like Innovation and Entrepreneurship, Digital business management, and Digital Marketing are included in the course. Audit courses like energy economics and policies, and human resource development are a part of audit courses. The minor and major projects are assigned from different engineering fields. Through a multidisciplinary approach, a student gains skills in problem-solving, critical thinking, time management, self-management, communication and writing, analysis and research methodologies, teamwork, and much more. The staff and students are actively involved in solving live industrial problems, agricultural issues, providing solutions for industry to enhance their productivity. Efforts are still on for suggesting low-cost automation for small-scale industries and undertaking projects for offering software and IoT-based solutions. Industry institute interaction is strengthened in the form of internships, and projects. Consultancy is offered to government agencies through RUSA and Civil engineering.

2. Academic bank of credits (ABC):

Academic Bank of Credits has been established on the lines of the National Academic Depository (NAD), In ABC the students' academic data are held and academic awards are stored i.e. storehouse of academic awards. Despite the fact that ABC enables students to register or commence credit transfer, the final outcomes of credit redemption and issuance of certificates, as well as the compilation of award records, are administered by academic institutions via the NAD Platform. University Grants Commission, New Delhi had issued the instructions to the university for implementation of Academic Bank of

	Credits. As per the directives and the guidelines provided by the university the students are informed to open their Academic Bank of Credits account and create the ABC ID
3. Skill development:	The objective is to empower the students with adequate skill sets that will enable their employment in relevant sectors and also improve productivity. Training and development initiatives are educational activities within an institute that are planned to improve the placement performance of an individual student or group of students. These programs typically involve advancing knowledge and skill sets and instilling greater motivation to enhance performance. At different levels, the training programs are organized by each department. The soft skill programs are organized by individual departments as well as at the institute level by the training and placement department. Few to quote here for example Mahindra Pride skill development program under CSR by Mahindra and Mahindra, Zensar Skill development, Skill development program by Barclays, etc.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Indian Knowledge Systems (IKS), is about our local context, integration of the cultural-social and the academic dimensions of natural science and technology education. Incorporating IKS for helping students to gain awareness of rich heritage and the knowledge produced by the Ancient Indians. The integration of IKS into the engineering curriculum including mathematics, astronomy, philosophy, yoga, tribal knowledge, and traditional ways of learning will result in an appreciation for the role of science in everyday life. The NSS unit of the institute organizes outdoor residential camps. The NSS coordinator selects a location from rural areas (villages) for such camps. Students are interacting with the villagers. These participating students are conducting different activities such as health awareness, cleanliness, computer literacy, etc for the people residing in that village. It helps the students to be proud and connect to their culture and appreciate where they come from. Students continue to uphold their traditions, and maintain the values passed on from generations. IKS is incorporated by a university in an accurate and scientific manner throughout the curriculum wherever relevant.

5. Focus on Outcome based education (OBE):	Outcome-based education (OBE) is an approach to course design, teaching, and learning that is focused on what the students are expected to learn. The board of studies and academic council of the university adopts the Outcome-based education process that involves the restructuring of curriculum, and assessment procedures to assess the competencies of students in their totality. It helps in describing the competence of a learner in terms of knowledge, skills, and values. The university-prescribed course structure offers an OBE framework to learn and deliver the acquired skills. The course structure is describing the course contents, course outcomes, and learning objectives. Thus the Outcome-based education results in increased student academic success.
6. Distance education/online education:	Distant education is now a term for any form of education in which the teacher and student are separated by geographic distance and communication is done via some forms of technology. Distance learning allows students to learn additional skills. Online classes allow the flexibility to complete coursework. With the rapid development of technology and the Internet, distance education could provide quality learning to students. The courses available from remote institutes are offered to the students to enhance their skills. National Programme on Technology Enhanced Learning (NPTEL) is a quality Indian e-learning platform for university-level science, technology, and engineering. The institute is having a nodal center of Amrita University for a virtual laboratory. The institute had made available different E-learning platforms for various courses like NPTEL, and Spoken Tutorial from IIT Mumbai.

### Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	The electoral literacy Club is set up in the college. The students and faculty are members of the club. The faculty coordinator and students from different departments are contributing to the electoral literacy program.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and	The Electoral Literacy Club is formed by the Institute of Engineering. ELC is constituted by the principal

whether the ELCs are functional? Whether the ELCs are representative in character?	with the faculty coordinator, the students' coordinator, and other staff and faculty members. The students' coordinator and faculty members are instrumental in organizing the ELC activities
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	The ELC organizes awareness programs about voter registration and supports the election administration.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Yes, the Awareness drive is organized by the ELC Club
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	yes

## Extended Profile

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### 1 Students

#### 1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2176	2049	1721	1841	1885

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 2 Teachers

#### 2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 131

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

#### 2.2

Number of teaching staff / full time teachers year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
110	112	112	115	121

### 3 Institution

#### 3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
206.69	458.65	394.06	406.76	372.65

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>



## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

##### 1.1.1

**The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment**

**Response:**

MET's Institute of Engineering has established different processes for planning, delivering, monitoring, and assessing various academic activities. Specifically, these processes are focusing on curriculum planning implementation with their effectiveness. Such processes are lined up with the requirements of the university, institute, department, and individual classes focusing on students' development.

1. **Preparation of Academic Calendar:** Academic calendar is prepared for every semester. In order to fulfill the program requirements, the Academic Calendar is prepared by referring University Academic Calendar as a base and guidelines for every semester including different guest lectures, workshops, seminars, and conferences. The academic calendar is followed throughout the semester for its effectiveness.
2. **Teaching Work Load Distribution:** Every individual faculty is asked to give his/her choice for the subjects of his/her interest at FE, SE, TE, BE, ME. The head of a department takes a review of the previous year's feedback and results for subjects. A meeting of all faculty members is called so as to finalize the load as per the choice of the faculty.
3. **Time Table Preparation:** According to the workload distribution based on the choices given by the respective subject teacher, Time Table Coordinator prepares department timetable containing the schedule for teaching to meet the requirements of the University curriculum for circulation.
4. **Use of various instructional methods and pedagogical initiatives and ICT Tools**
5. **Quality of classroom teaching:** Traditional instructional methods like chalk and talk, quiz, presentation, etc. are used during classroom teaching.
6. **Conduction of Experiments:** As per the load distribution every individual faculty prepares the practical subject allotted to him/her by identifying the requirements and procurement of equipment, if required.
7. **Continuous assessments in the laboratory:** Students are instructed and made habitual to complete their practical assignments on time and prepare desired documents as per file requirements. Faculty assess the students on a regular basis during the practical session.
8. **Collaborative Learning:** Students and faculty members participate in different collaborative activities like Soft Skill development, Expert Lectures, online courses, NPTEL, Virtual Labs, IIT Spoken Tutorial, and IIT FOSS laboratory, etc.
9. **Elective Subject Selection:** Final year students are briefed about the different electives available regarding contents, applications, and scope/demand for each. They are given sufficient time for discussion and then they give their choices for elective subjects.
10. **Monitoring of Teaching Learning Process**
11. **Student feedback of the teaching-learning process and action taken:** The feedback process is carried out on a regular basis as follows

1. Feedback Collection
2. Feedback Analysis
3. Corrective Measures / Action taken
4. Basis of Reward
12. Analysis of Evaluation of POs and PSOs
13. Seminar and Project Topic selection and finalization
14. Student Counseling and Mentoring
15. Student Encouragement
16. Online ERP System
17. Orientation/Induction Program
18. Process for Academic Audit
19. University Examination (Insem, Online, Endsem Examination)
20. Subject Teaching Plan and Laboratory Plan
21. Course File and Subject File
22. Laboratory Practicals & Continuous Assessment
23. Apart from Teaching Learning
24. Industrial Visit
25. Collaborative Learning
26. Process of Defining Target Attainment Level
27. Process of Computing Target Attainment Level
28. Process for Lab Preparation
29. Audit Course Conduction
30. Internship
  1. Process for Departmental Internship
  2. Process for Industry-based Internship

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 1.2 Academic Flexibility

### 1.2.1

**Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)**

**Response: 0**

File Description	Document
List of students and the attendance sheet for the above mentioned programs	<a href="#">View Document</a>
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Evidence of course completion, like course completion certificate etc. Apart from the above:	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 1.2.2

*Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years*

**Response:** 0

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 1.3 Curriculum Enrichment

### 1.3.1

*Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum*

**Response:**

The Institute sensitize its staff and students on issues such as gender, inclusion, and environment through workshop /seminars/ poster presentation competition. Institute organizes expert sessions on the issues of gender.

The extension activities organized by the institution sensitize students with respect to critical issues concerning the society and environment such as poverty, social injustice, gender bias, and pollution evils, and the corrective measures to counter them. These programs make them aware of their role in society, groom their personality and enable them to take part in the Nation building process.

Each engineering department has student associations that conduct various technical and non-technical activities. The Institute conducts various programs through NSS (National Social Service) for the betterment of society.

On the front of crosscutting issues, different subjects have been introduced in the curriculum. We have audit courses included in every semester from the second year onwards. The list of these subjects addressing cross-cutting issues like professional ethics, gender equality, human values, environment, and sustainability are the part of curriculum.

**Some of the subjects are:** Professional Ethics and etiquette, Sustainable Energy Systems, Stress management by Yoga, Communication etiquette in workplaces, Road Safety, Industrial safety, and environment Consciousness, Business intelligence, Emotional Intelligence, Social awareness, and Governance program.

During covid-19 pandemic students and staff members are involved in sensitizing and making masks. Sanitization and covid related issues like oxygen, hand gloves, use of masks, and following covid-19 pandemic norms were informed to society. MET's Bhujbal Knowledge City has established its covid center as an extension activity and service to society.

Faculty have attended and completed the AICTE course on Human values UHV I and UHV II addressing crosscutting issues like sustainability and human values.

The current issues of cyber security and general awareness-related sensitization program are also conducted. National-level expert in this area have shared their experiences with the student and faculty through workshops and seminars

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 1.3.2

**Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)**

**Response:** 100

### 1.3.2.1 Number of students undertaking project work/field work / internships

Response: 2176

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 1.4 Feedback System

### 1.4.1

*Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website*

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	<a href="#">View Document</a>
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	<a href="#">View Document</a>
Action taken report on the feedback analysis	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	<a href="#">View Document</a>

## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1

##### Enrolment percentage

**Response:** 60.3

##### 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2021-22	2020-21	2019-20	2018-19	2017-18
449	334	314	408	328

##### 2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
692	632	552	582	582

#### File Description

#### Document

Institutional data in the prescribed format

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

#### 2.1.2

*Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years*

**Response:** 44.8

##### 2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2021-22	2020-21	2019-20	2018-19	2017-18
159	110	123	153	136

### 2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
346	316	276	291	291

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	<a href="#">View Document</a>
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule ( Translated copy in English to be provided as applicable)	<a href="#">View Document</a>

## 2.2 Student Teacher Ratio

### 2.2.1

**Student – Full time Teacher Ratio  
(Data for the latest completed academic year)**

**Response:** 19.78

## 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 and teachers use ICT- enabled tools including online resources for effective teaching and learning process**

**Response:**

**Experiential learning:**

To fulfill the program requirements industry visits are organized for students year-wise to enable the students to experience practical knowledge of the real world. This gives them insights into exposure to the industrial environment and the work culture ethics in the industries and also visits help students to learn about management skills. The fieldwork, workshops, and seminars, are conducted for the students to gain advanced knowledge.

In addition to the regular syllabus conducted by the faculty, classroom teaching is augmented by arranging expert talks and workshops by experts from industry and academia in enhancing the applicability of engineering knowledge in the respective fields. In order to get real-time exposure to the Industry, Industrial visits are arranged for the students, in strengthening their technical Knowledge. Students are deputed for internships in industries during semester breaks and the final semester. It also helps the students to gain practical knowledge in the industry.

**Participative learning:**

Different resources are made available to students to participate in different collaborative activities like technical events, central library activities, and online courses under Nodal Centre. In “Engineering Week” various events are organized by the students of various branches for the conduction of various events like code debugging, poster competitions, and quizzes. Such collaborative learning helps the students to develop their teamwork, communication, leadership skills, event management, and conceptual knowledge. Students also get an opportunity to present and share their technical knowledge during events in the form of different innovative methodologies. The panels of faculty members evaluate and provide feedback to students for better management and performance. For inter-Institutional coordination and giving exposure to work in a team, the “MET-UTSAV” program for all students on the campus is arranged every year. This gives the platform for the development of an individual and working in a team. Students get a multidisciplinary environment through this platform for their overall development as an individual and a team.

**Problem-solving:**

As per the conduction of the academics and its effectiveness in the line of Industry requirements, every teacher reviews the contents and identifies appropriate curriculum gaps. The institute encourages the students to go for **project-based learning** activities like mini projects. Students can learn about problem definition, analysis, design, and implementation. Students attend **internships** in industries during the semester breaks. During the final year, students are selects industry-oriented projects. This helps our students to solve real-world industry problems and contribute to society.

**Final Year Projects:** The institute encourages students to undertake projects aimed at solving real-world industrial, societal, and environmental problems.

**ICT-enabled tools for the effective teaching-learning process**

**Enterprise resource planning (ERP):** College ERP platforms provide a centralized digital space for teachers and students to access course materials and assignments. They facilitate online communication, and feedback, streamlining the learning process and promoting a more organized and interactive learning experience.



The study material provides to students through the Google groups of concerned classes. Also, Students gain exposure to the latest technology by training in AWS, ORACLE academy, and IIT Spoken tutorials.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1

**Percentage of full-time teachers against sanctioned posts during the last five years**

**Response:** 98.45

**2.4.1.1 Number of sanctioned posts year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
117	114	112	115	121

### File Description

### Document

Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)

[View Document](#)

### 2.4.2

***Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)***

**Response:** 15.44

**2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
24	20	18	16	10

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	<a href="#">View Document</a>
Institution data in the prescribed format	<a href="#">View Document</a>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1

**Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient**

**Response:**

Institute is affiliated with SPPU University and has adopted the reforms of the University and its directives for implementation for the benefit of students. Major reforms are the use of Credit based evaluation system. The evaluation of students is done through the examinations conducted by the University which sets the question papers and does the assessment also. With the revised syllabus, the assessment of students is done through two examinations viz. In-semester examinations are conducted in the middle of the semester and End-semester examinations. A practical/Oral examination is conducted by the University in which an external examiner assesses the performance of students along with an internal examiner.

The evaluation process adopted by the Institute is as follows:

**University Assessment:**

- 1: Assessment of University Theory Exam (CAP process)
- 2: Assessment of University Practical/Oral Exam
3. Student Project Assessment

**Internal Assessment:**

1: In sem Exam (online and written exam assessment)

2: Project submission/evaluation

3: Seminar Presentation

4: Term work Submission / Oral Examination

Internal and external assessments are done in the form of term work evaluation, Practical examination, Oral examination, Project demonstration, and seminar evaluation. Results of In-sem examination and End-sem examinations are displayed along with marks/credits achievements of students.

For the evaluation of such examinations, University appoints the examiners, and evaluation is done by these examiners. Behavioral and communication aspects of the students are evaluated in the seminar/projects groups and collaborative learning processes.

For any grievances, the student follows the guidelines given by the university for verification of the answer sheet and rechecking if he desires. There is a standard procedure to apply to the university through the institute examination section. The teachers and staff of the examination section guide the students and provide the necessary support to clear their doubt.

As per the University provision, students can apply for reevaluation of the answer sheets. They can get the photocopy of their answer sheets evaluated by the examiner. In case of any grievance, the above process is available for the students. As well they can confirm the answers from the subject experts and if required may further proceed towards rechecking the answer sheets.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.6 Student Performance and Learning Outcomes

### 2.6.1

*Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website*

#### Response:

The Institute is following the curriculum designed by SPPU. The vision and mission of each program are defined in line with the Institute's vision and mission and displayed on the website.

Program Educational Objectives (PEO), Program Specific Outcomes (PSO), and Course Outcomes (CO) of all the courses are defined.

POs/COs for all programs offered by the institute are displayed on the website, laboratory manual, project manual, HOD cabin, corridor, Department Notice Board, and Department laboratories.

The evaluation methods, CO-PO mapping, and CO – PSO mapping metrics were defined and introduced at all levels of the programs. The COs and POs are communicated to all the students at the time of commencement of every semester and academic year and also disseminated through display in classrooms, laboratories, laboratory manuals, etc.

The head of the Department along with faculty members plans and conducts activities to achieve COs and POs attainment.

A matrix presentation of POs and COs and mapping with the evaluation process is carried out and presented in the form of a matrix.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.6.2

*Attainment of POs and COs are evaluated.*

**Explain with evidence in a maximum of 500 words**

**Response:**

**Format and Process of Defining Target Attainment Level of Learning Outcomes of the Courses**

**Course Name: Course Code:**

**Process for Defining Target Attainment Level**

The process is defined in the following steps at the Institute level based on University Examination Results as no useful indicators about results like average marks or maiden marks are provided by the University.

1. **Select a Course** to find its attainment by Student performance through University Examinations.
2. Find out the number of **students who appeared** for University Examinations.
3. **Find Average Marks** as...
  - If AppearedStudents = X and
  - Total Marks Scored by all students= Y then,
  - Average Marks=Y/X
4. Determine Course Average Marks as per University Results (**Course Outcomes and learning outcomes Target Attainment**) using Average Marks, e.g..

- If Average Marks = 43.29 then,
  - COs Target set Attainment level = 43
5. Find out the **count** of students, who have scored Marks equal to or greater than the COs set Attainment level.
6. Find out the **Percentage of students**, who have scored Marks equal to or greater than the COs set Attainment level out of Appeared students as...
- Suppose COs set Attainment level = 42 and
  - Count(students) = 45 and
  - Appeared Students = 60 then,
  - Percentage (Students) =  $\text{Count} / \text{Appeared} * 100$ , Ex;  $45/60 * 100 = 75\%$
7. Course Outcome attainment through University Examinations can be determined using the following guidelines.
- **Attainment level 1:** If the number of students scoring more than average marks or set attainment level is 60% or above.
  - **Attainment level 2:** If a number of students scoring more than average marks or set attainment level is 70% or above.
  - **Attainment level 3:** If the number of students scoring more than average marks or set attainment level is 80% or above.

**Set Attainment Level for the following academic year:**

**Expected number of students to appear:**

**Justification for setting Attainment Level:**

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 2.6.3

**Pass percentage of Students during last five years (excluding backlog students)**

**Response:** 94.75

**2.6.3.1 Number of final year students who passed the university examination year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
612	572	508	481	515

**2.6.3.2 Number of final year students who appeared for the university examination year-wise**

**during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
630	576	517	551	563

<b>File Description</b>	<b>Document</b>
Institutional data in the prescribed format	<a href="#">View Document</a>
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	<a href="#">View Document</a>
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	<a href="#">View Document</a>

**2.7 Student Satisfaction Survey****2.7.1****Online student satisfaction survey regarding teaching learning process****Response:** 3.06

<b>File Description</b>	<b>Document</b>
Upload database of all students on roll as per data template	<a href="#">View Document</a>

## Criterion 3 - 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 last five years (INR in Lakhs)*

**Response:** 36.8

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

2021-22	2020-21	2019-20	2018-19	2017-18
1.9	2.0	24.102	00	8.8

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 3.2 Innovation Ecosystem

#### 3.2.1

**Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident**

**Response:**

The institution has a recognized research centre for two programs- Computer Engineering and Mechanical Engineering. The Institute has established Research laboratories for both the programs. The faculty and students from other programs are doing research activities through research projects funded by SPPU and other sources also.

The institution has a Research and Development Cell to plan, monitor and address issues of research. The coordinator monitors the activity with the help of members of research committee.

The activities under RDC are -

- To create research culture in Institute and motivate students and teaching faculty to take up the research projects leading to innovation.

- To improve industry Institute and Institute -Institute interaction to work for mutual benefits in the area of research and innovation.
- To improvise the cooperation and support with other Institutes of national importance for faculty upgradation and resource sharing through faculty development programmes, workshops, seminars, and special lectures on thrust area.
- To coordinate the functioning of research activities of all the departments
- The RDC coordinates timely auditing and submission of utilization certificate to the funding authorities.

The Institutes provided the infrastructure and the required equipments for the purpose of research. The faculties are deputed for participation in workshops, seminars and conferences with financial assistance. The resources are made available like on line resource IEEE, ASME, British Library, NDL, NPTEL, etc. Required Books, Handbooks and journal are also available in library. The funds are allocated for research and development. The departments does the up gradations of laboratories in terms of latest technologies and the Institutes permits for purchase of equipments and required technological platforms. Faculties are encouraged to participate as resource persons in various workshops, seminars and conferences as reviewer, session chair etc.

The institute has constituted a Institution Innovation Council (IIC) for promotion and monitoring of research, innovation and development activities. Details of Several innovative projects on the emerging areas (robotics, automation, Artificial Intelligence, electric vehicles, data science, data mining, 3D printing etc) are successfully completed by the students..

- iCreate Incubation Funding for top Innovations has selected our BE (Information Technology) student project entitled “Soil Master an Ecosystem for soil analysis” in the competition held at Ahmadabad, Gujarat, India.
- "Project on Electric Vehicle" by Electrical Engineeirng Students.
- An International Project on “Extra High Voltage (EHV) Switchyard” by Electrical Engineeirng Students.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.2.2

*Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years*

**Response:** 12

**3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years**



2021-22	2020-21	2019-20	2018-19	2017-18
1	0	3	4	4

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 3.3 Research Publications and Awards

#### 3.3.1

**Number of research papers published per teacher in the Journals notified on UGC care list during the last five years**

**Response:** 0.37

**3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
5	8	11	8	16

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	<a href="#">View Document</a>
Link to re-directing to journal source-cite website in case of digital journals	<a href="#">View Document</a>
Links to the papers published in journals listed in UGC CARE list or	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

#### 3.3.2

**Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years****Response:** 0.08**3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1	2	4	4	0

File Description	Document
List of chapter/book along with the links redirecting to the source website	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

**3.4 Extension Activities****3.4.1****Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.****Response:**

The Institute believes in inculcating a strong sense of ethical and social values in its students. By Knowing the social responsibility a number of activities are organized by the Institute.

The Institute has a very dynamic and passionate National Social Service (NSS) unit. NSS unit regularly organizes Blood donation camps on the occasion of National Youth Day and, other occasion in each semester in collaboration with Saibaba Heart Institute and Nasik Blood Bank. Number of students and staff participates and donates the blood in this camp. The NSS team has done Gram Swach Abhiyans and held awareness Programmes to implement social issues at various villages such as Gaulane, Kone and Nagosali. Poster Exhibition for Awareness was arranged for students of the Institute by NSS.

A team from Tulsi Eye Hospital visits our Institute campus and Adopted villages for the eye check-up and other eye related issues.

**NSS:**Bhujbal Knowledge City has adopted some villages surrounding Nasik city for the overall development of population of rural part in the district.

BKC conducts various programmes for these adopted villages through Institutional **Social Responsibility** (ISR) and by means of NSS Activities (Regular Activity and Special Winter Camps)

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.4.2

#### **Awards and recognitions received for extension activities from government / government recognised bodies**

##### **Response:**

The faith of our trust Mumbai Educational Trust is “?????????? ??????? ??????? ?????” OR “It multiplies manifold when offered to others”. We are continuously involved for the welfare and happiness of the common masses. The institute has conducted several extension activities in line with the motto to address social issues and these activities are appreciated by the different government/government recognized bodies. A summary of awards and recognitions received for extension activities from government/government recognized bodies is as follows:

Institute is recognized as an active NPTEL nodal Centre for (National Programme on Technology Enhanced Learning), is a joint venture of the IITs and IISc, funded by the Ministry of Education (MoE) Government of India. We received Active NPTEL Single Point Of Contact (ACTIVE-SPOC) award continuously since 2017 till date.

Our faculty members were recognized for best thesis award from International Conference in Contemporary Issues in computing (ICCIC- 2020), Kolkata. Our Faculty members awarded with best research paper award from many of the conferences such as 5th International conference on data management, analysis and Innovation, International conference NANOCON -2018, Pune , ICTC Conference 2021,cPGCON 2020 (Computer Post Graduation Conference, conducted by Amrutvahini College of Engineering, Sangamner in association with BoS, Computer Engineering, Savitribai Phule Pune University, Pune)..

We felicitate the achievers of the institute with “MET RATNA” during MET UTSAV celebration every year. Five of the faculty members have been awarded with “MET RATNA” for successfully completion of Doctor of Philosophy in relevant fields from our research centre. One staff was awarded “MET RATNA” for successfully completion of Post graduation from our institute.

Our faculties are felicitated with “Research Excellence” award in 2021 from RJS International Multidisciplinary research foundation.

Students won so many awards at different levels.

Our students of Final Year Information Technology have selected in top 25 rank in KPIT Sparkle 2023 for their Project entitled “Soil Analysis and Crop Prediction in IoT enabled farm using ML Algorithm” organized by KPIT SPARKLE-22 at Pune, Maharashtra, India.

iCreate Incubation Funding for top Innovations has selected our BE (Information Technology) student project entitled “Soil Master an Ecosystem for soil analysis” in the competition held at Ahmadabad, Gujarat, India.

Around 61 students have received grants from IIT, Madras to complete NPTEL courses as an award for upgrade their skills.

Faculty of Civil Engineering have been selected for the NNRMS-ISRO Sponsored training programme 2023. There was total 7 participants who are working in the field of Geosciences. He had trained with various software in Remote Sensing and GIS, technical concepts followed by a project of two weeks. He secured “A” grade for this training program. Also, For his excellence performance he was permitted to take research at ISRO-Indian Institute of Remote Sensing (IIRS), Dehradun.

Students of the institute have participated and won awards in various sports at university level, Zonal level.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.4.3

*Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.*

**Response: 13**

**3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
2	1	9	1	0

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 3.5 Collaboration

#### 3.5.1

*Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.*

**Response: 14**

<b>File Description</b>	<b>Document</b>
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	<a href="#">View Document</a>
List of year wise activities and exchange should be provided	<a href="#">View Document</a>
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

#### 4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching – learning, viz., classrooms, laboratories, computing equipment etc
- ICT – enabled facilities such as smart class, LMS etc.

**Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)**

#### Response:

The institute have sufficient classrooms and well-equipped laboratories to meet AICTE's norms and criteria for maintaining excellent quality in academic programs on campus.

The campus is spread over 34 acres of land and has all the required physical infrastructure of sophisticated and international standards to make teaching-learning activities more fruitful to meet the current and future needs of the courses. The campus has an exhilarating ambience of lush greenery.

**Classrooms:** The college has well-furnished, well-ventilated, and spacious classrooms equipped with LCD projectors for conducting theory classes. The college also has ICT classrooms that provide multimedia learning and internet access. These facilities are designed to provide students with an optimal learning environment. The classrooms are equipped with comfortable seating arrangements. The ICT classrooms are equipped with the latest technology and provide students with access to multimedia learning tools that help them learn more effectively.

**Laboratories:** At our college, we take pride in our well-equipped laboratories that meet the norms set by AICTE and SPPU. These labs support practical classes, technology learning, and training beyond the syllabus. Our workshop imparts basic knowledge of various machines and tools and their use in different manufacturing industries, irrespective of branch. The workshop experience helps build an understanding of industrial jobs along with time and skills requirements for the job. Our labs are well-equipped and spacious for optimal learning.

**Seminar Hall:** In addition to this, our college have seminar hall that is regularly used for conducting local/national/international seminars at the college. Students actively engage in paper presentations, group discussions, and tutorials.

**Gymnasium:** Our gymnasium is a state-of-the-art facility. It is equipped with the latest and most modern equipment that is designed to help you achieve your fitness goals. Our gymnasium is staffed by experienced and certified trainers who are dedicated to helping you achieve students' fitness goals. Gymnasium is available for students and staff with flexible timings.

**Cultural activities:** Our college offers a wide range of cultural activities that include music, dance, drama, and other performing arts. These activities are designed to help you explore your interests and

develop your skills. We believe that cultural activities are an essential part of a well-rounded education, and we encourage all our students to participate in these activities. Every year we conduct a cultural event called “*MET Utsav*”.

**Yoga/Meditation Space:** Our college provides a dedicated space for yoga and meditation that is designed to help students relax and focus their minds. This space is equipped with all the necessary equipment and facilities that are required for performing yoga and meditation.

**Indoor and outdoor playground facilities:** The college provides ample opportunities for students to engage in sports activities. The athletics ground is used for various sports such as cricket, football, etc. Additionally, basketball and volleyball courts are available for students to use. The college also has a lawn tennis court for students who enjoy playing tennis. For indoor games, the college provides sufficient space for badminton, table tennis, chess and carrom.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

#### 4.1.2

*Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years*

**Response:** 4.9

**4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
10.56	6.31	6.45	19.44	47.35



File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

### 4.2.1

*Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students*

#### Response:

### 4.2 Library as a learning Resource

#### 4.2.1. Library is automated using Integrated Library Management System (ILMS)

Complete catalogue of the library holdings has been created by using In-house integrated Library Software (ERP) developed Version 1.0. 0637.myERP Students Information System (Students Info) 192.168.12.19 Online Public Access Catalogue (OPAC) is provided to the users on intranet site <http://erp.bkc.met.edu> . Students are using the OPAC extensively for searching the required books and journal articles.

The library has 8266 titles and 31580 text and reference books that cover all major fields of Science and Engineering. It covers an area of **989.97** sq.m. with a reading room with spacious study space. Reading room capacity of the central library is 150 Students.

The library is connected with the other libraries on the campus and an integrated OPAC of the holdings is made available to all users on <http://erp.bkc.met.edu>.

In-house integrated Library Software (ERP) developed module easily issues/returns the books using a barcode scanner. integrated Library Software (ERP) in managing publications easy for entry

journals/Magazines.

#### 4.2.2. The institution has subscription for the following e-resources

Sr. No	Description	URL
01	IEEE (ASPP) (12Month)	IEEE URL : <a href="https://ieeexplore.ieee.org/Xplore/home.jsp">https://ieeexplore.ieee.org/Xplore/home.jsp</a>
02	J-GATE (JET) J-GATE Engineering and Technology (JET)	<a href="https://jgateplus.com/search/">https://jgateplus.com/search/</a>
03	National Digital Library (NDL) (Free To all)	URL - <a href="https://ndl.iitkgp.ac.in/">https://ndl.iitkgp.ac.in/</a>
04	e-Shodh Sindhu (Free)	<a href="https://ess.inflibnet.ac.in/oes/memberhome.php">https://ess.inflibnet.ac.in/oes/memberhome.php</a>
05	Shodhganga Membership (Free)	<a href="https://shodhganga.inflibnet.ac.in">https://shodhganga.inflibnet.ac.in</a>
06	NDLI Club	<a href="https://admin.club.ndl.iitkgp.ac.in/admin-club">https://admin.club.ndl.iitkgp.ac.in/admin-club</a>
07	NPTEL LOCAL CHAPTER	<a href="https://metbhujbalknowledgecity.ac.in/metengg/nptel-local-chapter/">https://metbhujbalknowledgecity.ac.in/metengg/nptel-local-chapter/</a>
08	So many free E-Resources - Free E-resources blogs, websites list uploaded in our College website.....  <a href="http://www.metbhujbalknowledgecity.ac.in">www.metbhujbalknowledgecity.ac.in</a>	

#### 4.2.3 Expenditure for purchase of books/e-books

##### 4.2.3.1 Expenditure for purchase of books/e-books during the year (INR in Lakhs)

Sr. No	Year	Total Book Qty	Total Amount
01	2022-23	127	41716
02	2021-22	04	2803
03	2020-21	00	00
04	2019-20	02	920
05	2018-19	396	312740
06	2017-18	788	484980
		<b>Total Cost</b>	<b>843159</b>

##### 4.2.3.2 Expenditure for purchase of subscription to journals during the year (INR in Lakhs)

Sr. No	Year	Total Journal Qty	Total Amount
01	2022-23	125	368197
02	2021-22	00	00

03	2020-21	00	00
04	2019-20	00	00
05	2018-19	93	297534
06	2017-18	86	262675
		<b>Total Cost</b>	<b>928406</b>

#### 4.2.3.3 Expenditure for purchase of e- journals during the year (INR in Lakhs)

Sr. No	Year	Total Online Journal Qty	Total Amount
01	2022-23	13415	711477
02	2021-22	00	00
03	2020-21	00	00
04	2019-20	00	00
05	2018-19	50	1200
06	2017-18	500	9700
		<b>Total Cost</b>	<b>723577</b>

#### 4.2.4 Foot falls and login data for online access)

##### 4.2.4.1 Library Uses reports:

- Average number of walk-ins: 100 Per/Day
- Average number of books issued/returned: 60 Per/Day
- Ratio of library books to students enrolled:  $30136/2059 = 14.63$
- Average number of books added during start to till year:  $30136/11=2740$
- Average number of books added during last three years:  $4966/4=1242$
- Average number of login to opac (OPAC) : 50 per working day
- Average number of login to e-resources: 30 per working day
- Average number of e-resources downloaded/printed: Downloaded – 16586 average per year [Last 4 Years average up to 2016-17]

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 4.3 IT Infrastructure

### 4.3.1

**Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection**

*Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words*

**Response:**

**Response:**

IT Infrastructure and services have been updated and upgraded as and when required. Also new IT equipment's have been purchased as per requirements.

### **Session 2023 – 24**

For the current academic year the Ben-Q MS550 Projectors (Qty. 25) for Classrooms, 4TB 7.2K SAS 3.5” Hard Disk for Lenovo V3700 Storage (Qty. 05) for the up gradation of data storage space are purchased. For Training & Placement Section Smart QLED 4K TV 55” has been purchased.

### **Session 2022– 23**

The 40KVA UPS is replaced with a new 60KVA UPS with 12V 65 AH batteries (Qty.1 with 30 Batteries) of Mechanical Engineering department.

For protection against Viruses and other threats Kaspersky End Point Security Antivirus with 3 Years Subscription have been purchased (Qty.1450 Users).

Networking material for New AIDS LAB has been purchased.

Replacement of battery bank of 12V 65AH X 30 batteries for 60KVA UPS System.

Purchased Lenovo Think Centre Desktop (Qty. 229) against the requirement due to natural growth, commencement of new Courses and replacement of Old computers.

### **Session 2021-22**

Annual Maintenance contract for Digital Language Lab Software.

For smart Classroom the Eyeris IX device with stylus (Qty. 3) has been purchased.

For the safety of the equipment's installed in new Computer LAB's Hikvision 2MP Dome Cameras (Qty. 05) has purchased & installed.

### **Session 2020-21**

During the COVID Pandemic / Lockdown situation to conduct the online lectures the Logitech Web-Cam C270 HD & Speakers (Qty. 30) were purchased and installed.

Purchased the new consolidated UPS with Isolation Transformers of 80KVA and 60KVA (Qty. 01) each.

The NX Academic - Core & CAD Software is purchased for Mechanical Department.

**Session 2019-20**

The CREO University Campus Pack Subscription is purchased for Mechanical Department.

EVOLIS Double Sided Card printer (Qty. 01) is purchased for RFID Card for I Card Printing of the students through ERP Software.

A Canon MF244DW multifunction Printer (Qty. 02) is purchased for Head of the Institution and the admin office of the Institute.

A Canon DR-M160 High Speed Document Scanner (Qty. 01) is purchased for Admin department.

**Session 2018-19**

For Network & cyber Security the total value subscription Plus of One Year for Cyberoam CR 500 Firewall system purchased.

To ensure Uninterrupted Power Supply to all the equipment's in the Institute AMC has been done for Maintenance of UPS systems in the Institute.

Renewal of Bentley Software for Civil Engineering Department.

A Studio-master XR-100 Microphone set (Qty. 01) for Engineering seminar hall is purchased.

Purchased the Automation Studio Educational Version 6.3 (10 users) for Mechanical, Electrical and E&TC engineering department.

**Session 2017-18**

Purchased the CREO University Campus Pack Subscription for Mechanical Engineering department.

Replacement of batteries for Server Room UPS is done with EP 42-12 (Qty. 32) Exide SMF Batteries.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

**4.3.2**

**Student – Computer ratio (Data for the latest completed academic year)**

**Response:** 2.72

**4.3.2.1 Number of computers available for students usage during the latest completed academic year:**

Response: 801

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	<a href="#">View Document</a>
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	<a href="#">View Document</a>

#### 4.4 Maintenance of Campus Infrastructure

##### 4.4.1

*Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)*

Response: 14.62

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

2021-22	2020-21	2019-20	2018-19	2017-18
22.45	98.08	54.70	42.43	51.25

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1

*Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years*

**Response:** 87.57

**5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1957	1809	1525	1597	1582

#### File Description

#### Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Upload policy document of the HEI for award of scholarship and freeships.

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

#### 5.1.2

*Following capacity development and skills enhancement activities are organised for improving students' capability*

- 1. Soft skills*
- 2. Language and communication skills*
- 3. Life skills (Yoga, physical fitness, health and hygiene)*
- 4. ICT/computing skills*

**Response:** A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	<a href="#">View Document</a>
Report with photographs on ICT/computing skills enhancement programs	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.1.3

**Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years**

**Response:** 29.33

**5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
630	576	517	551	563

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.1.4

*The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases*

- 1.Implementation of guidelines of statutory/regulatory bodies**
- 2.Organisation wide awareness and undertakings on policies with zero tolerance**
- 3.Mechanisms for submission of online/offline students' grievances**
- 4.Timely redressal of the grievances through appropriate committees**

**Response:** A. All of the above



<b>File Description</b>	<b>Document</b>
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	<a href="#">View Document</a>
Proof related to Mechanisms for submission of online/offline students' grievances	<a href="#">View Document</a>
Proof for Implementation of guidelines of statutory/regulatory bodies	<a href="#">View Document</a>
Details of statutory/regulatory Committees (to be notified in institutional website also)	<a href="#">View Document</a>
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	<a href="#">View Document</a>

## 5.2 Student Progression

### 5.2.1

**Percentage of placement of outgoing students and students progressing to higher education during the last five years**

**Response:** 44.75

**5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
263	253	264	214	209

**5.2.1.2 Number of outgoing students year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
612	572	508	481	515

<b>File Description</b>	<b>Document</b>
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	<a href="#">View Document</a>
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.2.2

*Percentage of students qualifying in state/national/ international level examinations during the last five years*

**Response:** 1.82

**5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)**

2021-22	2020-21	2019-20	2018-19	2017-18
11	9	2	2	3

<b>File Description</b>	<b>Document</b>
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 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 last five years**

**Response: 2**

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

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	0	0	1

File Description	Document
Upload supporting document	<a href="#">View Document</a>
list and links to e-copies of award letters and certificates	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

**5.3.2**

**Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)**

**Response: 8.6**

**5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
7	0	9	15	12

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 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**

**Response:****5.4.1: There is a registered Alumni Association that contributes significantly to the development of the institution**

The Alumni Association is registered and holds regular meetings to plan its involvement and developmental activities with the support of the college.

**Alumni Engagement**

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services. The Institute has a duly registered Alumni Association for building strong bond between alumni and institute. MET's Institute of Engineering is a registered Alumni Association under the societies registration Act 1860. It was registered on 14 Day of February 2019, to The Registrar of Society, Nashik Region, registration no: Nashik/0000091/2019. It gives support to the students through interaction, guidance and placement. The mission of the association is to reach, engage and serve all alumni and current students by networking with one another to foster a life-long intellectual and emotional connection between the alumni.

**Objectives of the alumni association:**

1. Strengthening the ties between former students of MET's Institute of Engineering, Bhujbal Knowledge City, Nashik and the College.
2. Stimulating the interest and activity of the alumni of MET's Institute of Engineering, Bhujbal Knowledge City, Nashik.
3. To nurture strong relationship between alumni and the Alma mater.
4. Addressing the suggestions of alumni, while supporting the Institute goals.
5. Foster recognition of MET's Institute of Engineering accomplishments, programs, and offerings.
6. Inculcate Institute belongingness among current and former students.
7. Providing MET's IOE with insight into the needs of the communities it serves.
8. To promote the campus placements through the alumni working in reputed industries in India and abroad.
9. Promote social cause.
10. Assist the Institute and the alumni in all the aspect through the expertise knowledge and experience gained in the profession by the members.

Sighting the above objectives of Alumni Association our alumni contributes in many ways for the development and betterment of our Institute. The alumni employed in reputed organizations in India and abroad help the final year students in their project work and also inform them about the employment opportunities in their respective organizations. They also help in getting internships and placements for present students and organise Industrial visits. Thus the institute puts in efforts in maintaining good relations with its alumni involving them in the development of the institute. The main aim of the association is to maintain link between the institution and the alumni and share information on mutual growth, achievement and advancement in various fields. The significant contribution of Alumni Association fosters mutually beneficial interactions between the alumni and the college. The institute effectively networks and collaborates with alumni which have seen a progressive increase in the number of alumni interacting with the students every year. It is our plan to develop everlasting relations with our alumni which in turn will give rise to mutual benefits.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

#### 6.1.1

*The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.*

#### **Response:**

The institution is guided by a clear vision and mission that outlines its purpose and goals. The statements of Vision and Mission are as follows

**VISION:** To develop Institute as a Centre of Excellence for developing globally accepted professionals having application orientation, a lifelong learning approach towards the socio-economic growth of stakeholders and the Society as a whole.

#### **MISSION:-**

- Preparing Graduates capable enough to practice effectively and responsibly to technological changes and pursue advanced engineering.
- Inculcate applied research to support and contribute to the social and economic well-being of citizens and organizations in nearby regions.
- Cultivate the entrepreneurial spirit and linkage of engineering education and business for technology commercialization.
- Evolve thoughtfully to the changing needs of industry and the surrounding world.

The policies and the plans of the Institute are formulated by Governing Body on the suggestions and recommendations of the Local Management Committee, where in Head of the Institute (the Principal) and Heads of the Departments are associated.

The top management decides the vision and mission statements, long-term goals and objectives of the Institute. The Principal executes the policies decided by top management. He keeps the Management abreast of various initiatives, programmes and also the changing need for Technology and requirements of statutory and regulatory authorities. The Principal plans for the smooth conduction of academic programmes, evaluation process, and R&D activities in association with HoDs, FE coordinator, College Examination Officer, Librarian, and Physical Education Director. HoD acts as a coordinator between faculties and the Principal, he recommends the requirement of resources due to changing technology, desired training to labs and manpower respectively. They also help the teachers to implement new methods in teaching, and experimentation and also motivate the faculty and students through academic excellence. Faculty members interact with the students for the implementation of the teaching-learning process and ensure the attainment of learning objectives of imparting quality education.

All academic activities are monitored by various committees involving the stakeholders like industry, parents, and alumni and communicated to management for review to decide various quality issues. The

Annual Appraisal system lays a lot of emphasis on the fulfilment of the deliverables derived from the Quality Policy. A number of portfolios are formed in the Institute for the smooth functioning of academics and administration.

This commitment to learning and growing enhances the institution's ability to meet its objectives and adapt to emerging challenges effectively.

In preparation for NEP implementation; the institute offers multiple courses and promotes the students of various branches to carry out multidisciplinary projects. The courses in science & Mathematics in the first and second years of engineering and humanity courses are included as a part of the syllabus for every branch. The engineering stream of SPPU follows the choice-based credit-based system. The social activities are promoted through NSS and CSR. The staff and students are actively involved in solving industrial and agricultural problems by providing low-cost automation and IoT-based solutions. The implementation of ABC will start next academic year. Course objectives and Outcomes are described by SPPU. For the knowledge of students, the mapping of CO-PO-PSO is printed in journals.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

## 6.2 Strategy Development and Deployment

### 6.2.1

*The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc*

#### Response:

**Salient features of the Institutional Strategic Perspective Plan are as follows:**

- To get accreditation from the accreditation institutions viz NBA and NAAC;
- Introduction of interdisciplinary UG & PG programs and courses to attain the character of a holistic Deemed to the institution.
- Nurture innovation and creativity amongst the staff as well as students with cross-functional ideas, with the freedom to think and evolve for the betterment of oneself, the institution, and society as a whole;
- State-of-the-art infrastructure, conducive work culture to nurture professional and ethical values amongst the staff and students;
- Promote heterogeneity and demographical diversity in admitting students/faculty, helpful towards national/international exposure to evolve and grow in our institution.
- To focus on high-quality research from faculty members and scholars.
- Doctorate degree attainment of every faculty by 2028.
- To establish a Technology Business Incubation to inculcate students for selecting the entrepreneurial path as a career option.

- Establish Centers of Excellence in selective areas of Engineering and Science.
- To offer twinning and double degree programs along with the establishment of collaborations with leading overseas universities /research laboratories for the exchange of students and faculty, a step ahead towards cross-country research.

**Since its inception in 2006, the achievements of the Institute as per Perspective Plans:**

- Since its establishment in 2006, the institution has had a Strategic plan to achieve its vision and mission of the institute and guide it on the path of growth and development.
- In 2006, the institution's aim was to achieve academic excellence and effective capacity utilization of the infrastructural resources.
- Initially with four UG programs in 2006, progressively we have provided additional UG, PG programs, and Research Centers affiliated with SPPU Pune;

- 1.4 Courses (UG): Computer, IT, Etx, E&Tc, in 2006;
2. One Course each: Mechanical (UG), MCA (PG) in 2007;
3. Additional Division: Mechanical (UG) in 2010
4. Two Courses: Electrical (UG) and Civil (UG) in 2012;
5. PG/ ME: Computer and Mechanical Engineering in 2012;
6. Research Center in Computer and Mechanical in 2017;
7. Additional Division: Computer in 2018
8. One Course: AIDS: Artificial Intelligence and Data Science (UG) in 2021

- Institute has NAAC in 2017 with B++
- NBA Accreditation of UG Programmes in Computer Engineering twice
- We welcome students from all countries and our educational programs are designed to equip students with virtual knowledge that helps them to achieve what they want to be and go where they want to go on the ladder of success.
- Apart from providing quality education, our environment-friendly green campus with a conducive atmosphere is helpful for students to utilize the ambiance to the fullest.
- Through our educational programs and student forum to foster student development activities, we provide opportunities and experiences that build community, help them grow personally and professionally, and create a place that students can call home now and throughout their life.
- To get all programs as well as the Institution accredited by NBA and NAAC.
- 20 UG & 4 PG programs got accredited by NBA.
- The Institution obtained NAAC 'A' grade in the first cycle itself.
- Introduce interdisciplinary UG & PG programs and courses to attain the character of a holistic Deemed-to-be University.
- To establish at least two or three Centers of Excellence in chosen areas of Engineering and Science.
- Accordingly, the following centers are established in the institution
- BSAU Applei OS Application Development Centre.
- Center for Energy Research and Studies.
- Faculty Training Academy
- Crescent Innovation and Incubation Council
- Centre for Leadership



File Description	Document
Upload Additional information	<a href="#">View Document</a>
Institutional perspective Plan and deployment documents on the website	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 6.2.2

#### *Institution implements e-governance in its operations*

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	<a href="#">View Document</a>
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	<a href="#">View Document</a>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 6.3 Faculty Empowerment Strategies

### 6.3.1

**The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression**

**Response:**

**Performance Appraisal System:**

The performance of the faculty members is evaluated by the Institute as follows:

ERP system is developed for updating the self-appraisal (Personal Endeavour) which is considered at the end of every academic year.

The process of appraisal includes self-appraisal followed by evaluation by the HOD at the end of every academic year. HoD submits faculty members' appraisal forms to the Principal for evaluation.

Following parameters are included in the performance appraisal form of teaching faculty.

- Engaging in Theory Lectures / Practical / Tutorials as per university target.
- Attendance of Students in regular Theory Lectures/practicals.
- Result Analysis of Subjects.
- Marks Scored by Students in Subjects.
- Comparison with 3-Year's Average Result.
- Student's Feedback:
- Professional Endeavour like
  - Member / Office Bearer of All India Professional body / University.
  - Submitted Copy of Notes / PPT / Teaching Plan of one subject.
  - Improvement in qualification beyond eligibility / written standard textbook/Member of Editorial Board of Technical Journal.
  - No of Students Guided for M. Tech / ME / M. Pharm/ Ph. D.
  - Technical Papers Published and Presented in National / Inter-National Journals.
- Active Involvement in various activities.
  - Proposals Submitted
  - Number of Sponsored Projects / Proposals Received
  - Number of Presentations held under Journal Club
  - Number of Expert Lectures Delivered in a Year Beyond Syllabus
  - Efforts were made to update Knowledge (Short Term Courses/ CEP/ Seminar/ Workshop attended) related to the department.

**Performance evaluation of nonteaching staff is carried out based on the following parameters:-**

- Personal Effectiveness Assessment
  - Integrity/Credibility
  - Discipline
  - Team Effectiveness/Internal Customer Focus
  - Achievement Orientation
  - Leadership/Personal/Professional Effectiveness
  - Reporting Skills
  - Innovation and Creativity
- Specific Attributes for Accounts/Finance Team
- Specific Attributes for Administrative/Non-Teaching Team
- Performance evaluation of Lab attendant is carried out based on the following parameters: The form -
  - Details of current work performed
  - Addition knowledge/Degree obtained, if any
  - Participation in co-curricular activities
  - Ideas about the development of the Institute, if any

**Effective Welfare Measures:**

The Institute has the following effective measures:

- Staff Welfare Measures for teaching and non-teaching staff:
- GroupMediclaim Facility: Two lakhs in case of medical emergencies without any payment.
- Employees Provident fund: As per the government rules maximum of Rs. 1800 is credited to the employee's PF account.
- Gratuity: Gratuity is payable to all eligible staff members.
- Group Term Insurance: Term Plan of Rs. 10 Lakhs is provided to employees.
- Staff Personal Loan: Worth Rs. 20,000/- is provided without any interest to employees.
- Medical Check-up Camps with Blood Donation camps are arranged twice a year.
- Medical Leave & Maternity leave for eligible staff members.
- The gym and the Music club are available for the staff to relax.
- For Students:
  - MET scholarship is provided to meritorious needy students.
  - A student scholarship was provided during the COVID pandemic.

**Avenues for Career Development/Progression:**

- The Institute has the following policies for the development of teaching and non-teaching staff:
- Teaching/Non-teaching staff is encouraged for higher education.
- Non-teaching staff acquiring higher education and having good teaching and communication skill are promoted to teaching.
- Reimbursement is given to staff for attending National/International Conferences, STTP, Workshops, and Orientation Programs, respectively.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

**6.3.2****Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**

**Response:** 47.72

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

2021-22	2020-21	2019-20	2018-19	2017-18
18	22	74	68	90

<b>File Description</b>	<b>Document</b>
Policy document on providing financial support to teachers	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	<a href="#">View Document</a>
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	<a href="#">View Document</a>

### 6.3.3

*Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years*

**Response:** 24.24

**6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
41	52	63	40	44

**6.3.3.2 Number of non-teaching staff year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
84	84	84	84	84

<b>File Description</b>	<b>Document</b>
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of the certificates of the program attended by teachers.	<a href="#">View Document</a>
Annual reports highlighting the programmes undertaken by the teachers	<a href="#">View Document</a>

## 6.4 Financial Management and Resource Mobilization

### 6.4.1

**Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)**

**Response:**

**Sources of funds are as follows:**

1. Fees: Fees from students are collected as per the fees approved by Fees Regulatory

Authority (FRA), constituted by the Government of Maharashtra.

2. Govt. / Non-Govt. / Other Grants:

- State, as well as Central Govt, provides support to the students of different categories viz. SC/ST/NT/VJNT/OBC/EBC/PMSS scholarship/free-ship schemes.
- Grants are also received from funding agencies viz. DST, MHRD, AICTE, BCUD SPPU Pune, GIZ, etc.
- Megger has supported the Institute in setting up skill development facilities for electrical equipment.

**Process in Budgetary Provision:**

- Every concerned faculty submits his/her budgetary requirements as per the curriculum/activities to the Head of the Department at the start of every financial year.
- Every Department Head submits the yearly budget requirements to the Principal on compilation at the departmental level.
- The budgetary requirements received from every Department are then compiled by the Principal and submitted to the Governing Council and Local Management Committee/College Development Committee for discussion and approval. For the said procedure, the institute has a

qualified practicing Chartered Accountant as the internal and external auditor.

- The fund's allocation is done for infrastructural needs and the purchase of lab equipment as per the revised curriculum. A provision is also made for planned and unplanned activities. The Principal and the Accountant exercise the essential budgetary controls. Necessary accommodations in the budget allocation are done in order to meet the requirements due to curriculum changes and unforeseen circumstances so that the teaching-learning process is not affected.
- The Lab consumables and equipment are procured in consultation with the concerned Head of the Department.

1. The audited statements of accounts of the institution are available on the Institution's website.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 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. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities**

#### Response:

Internal Quality Assurance Cell (IQAC) monitors and reviews the teaching-learning process, structures & methodologies of operations, and learning outcomes on a regular basis.

The IQAC has been performing Improvement in the quality of teaching-learning with OBE Philosophy by adopting a 360-degree Feedback mechanism i.e. regular inputs to all concerned based on feedback from stakeholders providing inputs for Academic and Administrative Audit and analysis of results for improvement in areas found weak,

Institute and Department prepare an academic calendar aligned with the academic calendar of SPPU. Courses to be taught are allotted by HOD to teachers after collecting course choices and subject area specialization. The teacher prepares course material, plans activities for the delivery of course content, content beyond syllabus, and curriculum gap to attain mapped COs-POs in concerns with the module coordinator, and the same is approved by DAB and uploads teaching plan aligned with the academic timetable on Institute ERP. Various pedagogical initiatives are taken by course teachers to deliver the course content. Along with traditional teaching aids like chalk and board, and presentation, course teacher follows various innovative teaching-learning methodologies including ICT-based tools and NPTEL videos to improve students' involvement and learning.

According to syllabus of SPPU, experiments are conducted in laboratories, Lab manuals are available for courses involving term work, practical &/or oral. Students are exploring e-learning facilities. Industrial visits are organized to make students aware of industry culture and reduce the gap between industry and institute. Training and workshops are organized for hands-on practice. Module Coordinator verifies the quality of unit test question papers with respect to blooms taxonomy level of the associated CO. Students association & chapters of professional bodies arrange guest lectures, competitions, and Tech-Fest including various technical and non-technical events.

The course teachers are motivated to participate in STTP/FDP to become aware and gain knowledge of recent trends and technologies. Industry and academic experts impart theory and practical knowledge. Course teachers are motivated to enroll and register for NPTEL/ Swayam courses. During academics, the attendance of students is monitored through ERP. Assignments are given based on real-time problems. Bright students are identified and encouraged to participate in various competitions. Weak students are identified and assisted by mentoring and conducting remedial classes and also encouraged to participate in various activities with bright students. Students' feedback for teaching is collected on a regular basis and corrective actions are taken. Parents-teacher meetings are organized on a regular basis. It helps to understand the problems of students and address them and also to have interaction with parents for the overall development of students. Result analysis is carried out, and PO and PSO attainment is calculated.

#### **Incremental Improvements on recommendations:**

With reference to the previous NAAC gradation report, the institute has taken initiatives for addressing suggestions in the area of practical-oriented courses, Training and placements activities, pass percentage, skill-based, employability enhancement, publications, digital programs, industrial training, guest lectures, and project-based learning. Institute has taken cognizance of the points and ensured that there is incremental progress in these areas.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

#### **6.5.2**

##### **Quality assurance initiatives of the institution include:**

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2.Academic and Administrative Audit (AAA) and follow-up action taken**
- 3.Collaborative quality initiatives with other institution(s)**
- 4.Participation in NIRF and other recognized rankings**
- 5.Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

**Response:** B. Any 3 of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	<a href="#">View Document</a>
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	<a href="#">View Document</a>
Link to Minute of IQAC meetings, hosted on HEI website	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>



## Criterion 7 - Institutional Values and Best Practices

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1

**Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.**

*Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words*

**Response:**

#### **A) Gender Equality Promotion Program:**

- The MET IOE has inculcated Gender Equality and Sensitivity through various initiatives, activities, and programs to create a safe, secure, and healthy atmosphere on campus.
- The objective is to promote education that would be sensitive to the needs of all genders and various sections of society.
- To ensure that students of all genders are given equal opportunities for education, the staff members ensure equal participation and involvement while forming teams and groups in almost all the activities including, sports events, cultural events, project groups, seminar groups, etc.
- Institute also shows gender sensitivity and ensures women's safety by forming the Women's Grievance cell which ensures Gender sensitization, prevention, and prohibition of sexual Harassment of women employees and students, institute also celebrates International Women's Day.
- The institute provides maternity leave, and Faculty having infant babies are allowed to visit their homes during working hours.
- Furthermore, to maintain gender balance institute has established the following committees:--Grievance Redressal Cell for Staff Members and Students, Equal Opportunity Cell, Internal Complain Committee, Working Women Cell

Students Development Cell, Student Grievance Redressal Committee

Women's Grievance Committee, Counseling Cell

#### **A) Safety And Security**

- The security agency is appointed by the college which provides well-trained and vigilant women security guards stationed across the campus.

- Security checkpoint at campus entry and exit.
- 24\*7 functioning surveillance network.
- Separate girls and boys' hostels with wardens.

#### **b) Counselling & Mentoring**

- counseling facility is available for needy students irrespective of gender.
- Mentors are allocated for students.
- The grievance Redressal cell is active.
- Moral And career counseling through arranging various expert talks of eminent personalities.

#### **C) Common Room**

- The Campus is with separate girls' common room facilities. A sanitary vending machine and disposal machine are also installed in the ladies' lavatory.

#### **B)The Institute celebrates and organizes various national and international commemorative days, events, and festivals.**

- The college strives to inculcate a sense of appreciation for the diversity and richness of India's cultural heritage by way of its protection, preservation, and propagation.
- The college pays homage to all national leaders on their birth and death anniversaries. It helps students to know about the contribution of these leaders in nation-building and imbibe moral and ethical values among them.
- Every year college celebrates National, International days and anniversaries such as Independence Day, Republic Day, International yoga day, Engineers Day, and Women's Day, with great pomp. All the staff and students attend the programs without fail.

Sr.No	Day /Event
1	Independence Day
2	Republic Day
3	International Yoga Day
4	International Women's Day
5	Teachers Day
6	Engineer's Day (15th September)

7	Birth Anniversary of Mahatma Jyotiba Phule
8	Birth Anniversary of Kranti Jyoti Savitribai Phule Phule
10	Death Anniversary of Rajshree Shahu Maharaj
11	Birth Anniversary of Dr. B. R. Ambedkar (14th April)
12	Marshal Art Training Workshop

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 7.1.2

#### The Institution has facilities and initiatives for

1. Alternate sources of energy and energy conservation measures
2. Management of the various types of degradable and nondegradable waste
3. Water conservation
4. Green campus initiatives
5. Disabled-friendly, barrier free environment

**Response:** A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	<a href="#">View Document</a>
Geo-tagged photographs/videos of the facilities.	<a href="#">View Document</a>
Circulars and report of activities for the implementation of the initiatives document	<a href="#">View Document</a>
Bills for the purchase of equipment's for the facilities created under this metric	<a href="#">View Document</a>

### 7.1.3

**Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following**

1. Green audit / Environment audit
2. Energy audit
3. Clean and green campus initiatives

#### 4. Beyond the campus environmental promotion activities

**Response:** A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	<a href="#">View Document</a>
Policy document on environment and energy usage Certificate from the auditing agency	<a href="#">View Document</a>
Green audit/environmental audit report from recognized bodies	<a href="#">View Document</a>

#### 7.1.4

**Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)**

**Response:**

MET's Institute of Engineering, Bhujbal Knowledge City is a renowned institute with the goal of comprehensive educational development of each and every section of the society. We believe that through the overall development of the student, who can not only do a job but also an entrepreneur and can fulfill their responsibilities towards their families while also thinking about society and obviously the nation. Even though admissions are centrally carried out by the Central Admission Program (CAP) by the Maharashtra State Government as per the rules and regulations. The students admitted to our institute are not only from Maharashtra but also from other states of India, and also have admission under PMSSS (Prime Minister's Special Scholarship Scheme) from Jammu-Kashmir and Ladakh.

Institute conducts Induction Program at the initial for the fresher students who entered the institute with various backgrounds, cultures, languages, atmospheres, various parts of society, etc. The main intent of the Induction Program aims to bridge the gap and integrate students from the school environment into the institute's environment. Obviously, our staff has completed the workshops and programs on Universal Human Values which are taken by AICTE so they are very well prepared for Induction Program. It helps new students adjust and feel comfortable in the new environment, inculcates in them the ethos and culture of the institution, and helps them bond with other students and faculty members, during this program, we mainly focus on the following things:

· 1. Physical Activity by yoga, meditation, exercise, and sports activities. 2. Mentoring and Universal Human Values. 3. Familiarization with Department/Branch. 4. Expert lectures by eminent personalities. 5. Creative Arts and Culture. 6. Visits to Local Areas 7. Extra-Curricular Activities in the Institute.

Various cultural events are organized and celebrated in the institute keeping the

holistic development of the students. Mainly teachers and students come together and celebrate the birthdays and death anniversaries of great personalities, on this day, flowers are offered and lighting a lamp to the image or statue of great men and brief information about them is presented through the students. The institute constituted a department-wise forum for holistic development and rights for the students, which works by the students for the students which is observed by the students' welfare committee of the institute. All forums organized various activities under the observation of staff, all the extracurricular, co-curricular, expert talks, exhibitions, seminars, workshops, fresher and fair-well events, and professional activities including sports participated by all students. Students are central to the institute but the teacher is like a god to every student so Gurupournima and Teacher's Day these two holly festivals celebrated by students for teachers in the college. The entrance of the Institute has a statue of Sir Mokshagundam Visvesvaraya, an inspiration to aspiring engineers. Students should get encouragement by his work and dedication to the nation, our institute enthusiastically celebrates his birth anniversary on the 15th of September every year by organizing some events like paper presentations, poster presentations, technical events, etc.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 7.2 Best Practices

### 7.2.1

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

**Response:**

**Best Practice-1:**

**1. Title of the Practice: Central Counseling & Student Development Cell**

**Vision**

To make the Counseling Cell a leading center for the resolution of students' Problem

**Mission**

To help students to resolve their personal, educational & behavioral problems. To support students to enhance & nurtured their potential through Individual, Group, career & Intellectual Counseling & mentorship Programs to make them enable sound personalities to face the challenging & competitive environment with Success.

**Objectives**

The main object of Counseling is to help the students to have a life which he/she can more fully enjoy with Confidence, Concentration & focus. It can help students to become the sort of overall developed professional person.

**Methodology:**

Display the Counseling awareness to all Institute notice Boards.

- 1.The direct approach of Students.
- 2.The direct approach of parents.
- 3.Recommended by faculty/ HOD
- 4.Group Counseling needs based address the question of students in the group.
- 5.Mentorship Model at Institute level.

**Counseling areas :**

- 1.Personal Counseling.
- 2.Career Counseling.
- 3.Study-related Counseling.
- 4.Academic Counseling.

**Institute Counseling Days :**

The days are defined institute-wise to Impart the Counseling to the students.

Monday: Electrical/Civil

Tuesday: Computer/IT

Wednesday: Mechanical

Thursday: MCA/Pharmacy

Friday: E & TC/Electronics

Saturday- Polytechnic/Faculties

For individual Counseling Priority may change based on the student's need.

**Counseling Cell :**

**Your Confidence, Your Concentration, Your deep concerns, Your Self-esteem, Your Identity, Your Career, Your Self-worth, Your Dreams, Your Pride, Your Dignity, and a Meaningful Life**

To support the students to achieve their goals the college established the Counseling Cell in 2012. There are many more success stories of the students who have availed the facility and transformed their Life.

The main benefit of counseling is that it helps you to have a life that you can more fully enjoy with

Confidence, Concentration & focus. It can help you to become the sort of person you want to be. It can also help you to more deeply enjoy your important relationships.

**Outcome:**

- Understand you know better & feel better about yourself. More focus & Confidence feel more at peace, more comfortable, or more secure in the world.
- Feel more effectively (and more joyfully) connected with others (including your family & friends).
- Reduce stress (which promotes physical health too). Work through problems with a skilled, and compassionate professional.
- Identify your goals. (those which can support the kind of life you would like to have)

**Best Practice-2:**

**2. Title of the Practice: Students Forum**

**Introduction**

MET's Institute of Engineering students forum for each department was established in 2012 with a vision to create a platform for the students, by the students, and of the students wherein students would come out of their shells to display their talent, innovation, and help them make a cut above the rest. Alongside academic excellence, the institute recognizes the importance of curricular, co-curricular activities and student engagement for holistic development. Students Forum plays a vital role in fostering student participation, encouraging creativity, and facilitating meaningful interactions among the student community.

**Objectives**

- Organize various technical and non-technical events to nurture students' interest and creativity.
- Enhance their leadership qualities.
- To provide a platform for solving real-life problems through engineering knowledge and improving skills such as teamwork, lifelong learning, ethics of society, and leadership quality.

**Purpose of this forum.**

- **A platform for Expression:** Student Forum provides a platform for students to express their interests, ideas, and concerns related to specific academic fields or extracurricular activities.
- **Skill Enhancement:** Through organizing and managing forum activities, students develop leadership, teamwork, and organizational skills.
- **Knowledge Exchange:** Forum facilitates the exchange of knowledge, ideas, and experiences among students, creating a conducive learning environment beyond the classrooms.
- **Networking Opportunities:** The forum encourages students to interact with peers, faculty, and industry experts, expanding their professional network and fostering collaborative relationships.

**Structure of Student Forum**

MET's Institute of Engineering Students Association has diverse forums, each focusing on a unique area of interest. The typical structure of a student Forum includes:

- **Core Committee:** Each forum consists of a core committee comprising elected student representatives who hold leadership positions such as President, Vice President, Secretary, and Treasurer.
- **General Members:** Any student with an interest in the forum's activities can join as a general member and participate in various events and initiatives.
- **Faculty Advisors:** Every forum has one or more faculty advisors who offer guidance, support, and mentorship to the student members.

### Activities and Initiatives

Student Forum at MET's Institute of Engineering is vibrant and engages in a variety of activities and initiatives, including but not limited to:

- **Workshops and Seminars:** Organizing workshops, seminars, and webinars on topics relevant to the forum's domain to enhance knowledge and skills.
- **Technical Competitions:** Conduct technical competitions and hackathons to encourage innovation and problem-solving abilities among students.
- **Guest Lectures:** Inviting industry professionals and experts for guest lectures, providing insights into the latest trends and practices in the field.
- **Community Outreach:** Undertaking social initiatives and community outreach programs to contribute positively to society.

MET's Institute of Engineering Students forum is very well known for its flagship event "**ENGINEERS WEEK**" organized annually, which includes varied technical and non-technical events. Participation from all overstate is observed for the same. Along with "Engineers Week" the student forum also organizes "**MET- NIRMAAN**", a national-level project competition and exhibition.

MET's Institute of Engineering Students forum believes in repaying society, so it takes part in initiatives like "MET-Dnyanda", where our members teach school children Computer Fundamentals and preliminary operating Skills. Throughout the year various eminent speakers and alumni talks are being organized for guiding the students on cutting-edge technology.

### The Outcome of Student Forum

The presence of a vibrant student Forum has a positive impact on the overall college experience for students:

- **Personal Development:** Engaging in forum activities helps students develop soft skills, leadership abilities, and self-confidence.
- **Collaborative Learning:** Student Forum foster a collaborative and inclusive learning environment, promoting peer-to-peer learning.
- **Well-Rounded Graduates:** Participation in student Forums complements academic learning, producing well-rounded graduates ready to face real-world challenges.
- **Career Opportunities:** Forum activities often lead to networking opportunities, internships, and job placements in relevant industries.



File Description	Document
Best practices as hosted on the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

## 7.3 Institutional Distinctiveness

### 7.3.1

**Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words**

**Response:**

#### **Entrepreneurship Development Cell (E-cell), MET's Institute of Engineering**

In today's scenario, where the unemployment level is rising and career path is becoming less well-defined, a more practical approach to teaching is needed to foster stronger business acumen in potential entrepreneurs.

Engineering professional practices today have changed dramatically and irreversibly due to:

1. Growing global competition and the subsequent restructuring of industry;
2. Shift to private enterprise as a major source of engineering employment;
3. An explosion of information;
4. Development of information and technology.

To meet these, Engineering education should equip graduates to demonstrate attributes which are similar to entrepreneurial characteristics and efforts are to be made to develop entrepreneurship in the students. The necessity of developing a creative design, methodology, or several of them to suit individual idiosyncrasy is unquestionable. But the fact remains that the methodology of creative thinking alone cannot turn an engineer into an entrepreneur unless he has the required amount of insight.

The changing economic environment due to liberalization, privatization, and globalization has posed certain challenges and has provided opportunities to Industrial Sector. Challenges are in the form of increased competition, shorter life cycles of products as well as technology, reduced protection due to lower tariffs, and a market-determined rate of interest. On the other hand, opportunities have come in the form of access to better technology, availability of a variety of raw materials and components, impetus to quality, efficiency, and opportunities to restructure and diversify. To face these challenges and grab opportunities, an entrepreneur has to adopt innovative product processes, productivity improvement techniques, and effective technology management for the sustainability of the unit. Here the innovative approach will be the remedy for an entrepreneur for sustainability.

Engineering, technological, and research institutions are surplus with intellectual cream. These

intellectual strata in society can be effectively utilized by incorporating entrepreneurship programs in engineering curricula. The ecosystem of Innovation & Entrepreneurship is therefore very essential to achieve all of these, an attempt in this direction was made by establishing an Entrepreneurship Development Cell (E-cell) at MET's Institute of Engineering, in the year 2010, with the following objectives:

1. To make the students understand entrepreneurial challenges and opportunities to motivate students to opt for Entrepreneurship as a career.
2. To conduct guidance sessions of successful engineer entrepreneurs.
3. To inculcate a culture of innovation-driven entrepreneurship through student projects.
4. To make the students abreast with the Registration Process, Modes of Funding.
5. To provide literature on Entrepreneurship
6. To create awareness about IP rights and patenting procedures.
7. To provide literature on Patents and Copyrights.
8. To advise and guide on the importance of IPR, especially Patents.

### ***Role of E-cell in nurturing Innovations & Start-ups***

In Engineering education, the pathway to entrepreneurship is through innovation the students offer through their projects. Students of pre-final and final years are exposed to this pathway. taken by Pune University (SPPU), the concept of 'Project Based Learning ' has been introduced in the curriculum from the very First Year of Engineering.

This way, an ecosystem of Ideation to Product validation can be developed, and for this E-cell has a great role to play. convert them into business ventures during or after the completion of their study.

### ***Efforts are being made the achieving the objectives of E-cell***

#### **1. Creating awareness of E-cell**

Faculty members of E-cell conduct sessions to create awareness about Entrepreneurship and its importance to Engineering students, in particular.

#### **2. Formation of E-cell**

The E-cell is formed by inviting students to become its member. The students from every department come forward and join E-cell voluntarily, without any compulsion.

#### **1..Collaboration with organizations**

An ecosystem of academic institutes with various government agencies along with bodies and organizations from Industries is a must for converting the ideas of innovators into reality. Our E-cell collaborates with small & medium enterprises in the Nashik arena, through the bodies like NIMA, MACCIA, etc. Government agencies like 'EDI Ahmadabad' has also collaborated with E-cell in promoting entrepreneurship among the students.

#### **4. Expert sessions**

In today's competitive world, Intellectual Property Rights are the wealth of Entrepreneurs, Professionals, and Enterprises. It is therefore essential to protect one's ideas through a legal framework. Expert sessions are conducted to make the students know the importance of Patents, Trademark, & IP rights.

Not only this, guidance sessions of experts from the Banking & Finance sectors are arranged to help the students understand financial matters.

#### **5. Interactive sessions with young Entrepreneurs, especially, alumni of MET.**

Though motivational lecture sessions from leading entrepreneurs/businessmen are helpful in motivating students, it has been observed that students get more inspired if their seniors, who opted for entrepreneurship as a career, come to the campus, interact with them, and share their entrepreneurial journey. Interactive sessions with such alumni entrepreneurs are conducted to boost-up the confidence of students.

#### **6. Industry visits**

Industrial visits are conducted to make the students know the professional culture of the business, the hardships faced by them, and the strategies they follow to stay competitive and relevant.

#### **7. Participation in Business plan competitions**

Students are encouraged to participate in events /competitions organized by Universities /IITs as well as other bodies from Commerce & Industry.

In today's competitive global business environment, sustainable growth shall only be possible with innovation & entrepreneurship. It is the technology that drives the economy, and since Engineers create technology, they are the real masters of growth engines and shall make society prosperous.

Every Engineering institute should therefore produce Entrepreneurs as possible, Engineering can be taught, but Entrepreneurship cannot, hence an academic institute cannot produce entrepreneurs in a big number, but the conducive environment created through the E-cell activities has helped some of our students become entrepreneurs. And with the initiatives of the Government, and its friendly policies, the culture of entrepreneurship shall spread further.

<b>File Description</b>	<b>Document</b>
Appropriate web in the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

## 5. CONCLUSION

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### Additional Information :

MET's Institute of Engineering, started **NPTEL Local Chapter** from January 2017. It is one of the value addition towards the institute.

NPTEL Course contents are useful for students and teachers to improve the quality of learning. In addition, the course materials are freely accessible by everyone independent of their geographic location. The contents helps for focused learning and providing a common set of standards for professional education in India through participation by everyone concerned under this MOOC platform.

SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.

Massive Open Online Courses (MOOC) is an asynchronous platform and a process for teaching through pre-recorded lectures, resource video materials, lecture notes, assignments and quizzes, which are usually online and provide self assessment in regular intervals during learning.

SWAYAM-NPTEL has been offering 10hr, 20hr and 30hr courses of 4, 8, and 12 weeks duration respectively in various disciplines that includes relevant exposure to tools and technologies.

Objective of MOOC SWAYAM-NPTEL Courses:

- To provide FREE enrolment and learning platform for students and staff.
- To provide flexibility of learning for the student as he/she can prioritize his/her time and work at one's own pace.
- To accommodate all the learning stakeholders of programs and courses - Engineering, Science, Humanities, Management, and many more disciplines, which enable the students, try pursuing learning in areas of domain and outside domain of interest as well.
- To build ecosystem to learner for clarifying doubts with course instructors – via email, discussion forum and other online media.
- To offer Networking Opportunities among students/staff and the peer group includes a mix of users from across the various colleges and industries.
- Enrich the learning experience across students/staff and professionals from the industry.
- To inculcate mode of self-learning
- To evaluate self on how learner by appearing to Certification Examination and compare against the pool of learners nationwide.

Teachers and students of our institute are using this facility by registering to various online courses from inception of Local Chapter.

### Concluding Remarks :

The institute governance comprising of different committees viz. Governing body, College Development Committee, IQAC, and others at the Department level. These committees play a significant role in alertness and

responsiveness toward changes in the surrounding academic environment. This has helped towards positioning the institute in the preferred list of stakeholders.

Institute believes in a conducive atmosphere with a culture of delegation of powers through strategic policies at different levels, helpful in confidence building and belongingness among the staff. This has resulted in good retention of the faculty to the institute.

**Salient Features:**

- Institute has a well-framed vision and mission considering societal needs;
- Best academics, infrastructure, laboratories, industry-institute interaction, entrepreneurship development cell (since last decade), and co-curricular and extracurricular activities are some of the points/features, that make students capable enough to face the challenges in their career path effectively;
- The active local chapter of NPTEL, by IIT Madras;
- The spoken Tutorials Chapter has a star ranking by IIT Bombay;
- Recognized Nodal Center from Amrita Vishwavidyapeeth under MHRD;
- ISRO selected seven geoscientists from India, and the faculty of our institute is among them;
- Institute has developed the Quality Education related parameters software MIS System for RUSA beneficiary Institutes in the State of Maharashtra, a project sponsored by the Government of Maharashtra;
- Student's forum of every department celebrates Engineer's Week, wherein different technical, and co-curricular activities are planned, managed, and executed by the students of the respective forums. The event is completely self-supported, sponsored by different segments of society. The saving from the event is used to disburse the study/sports material to the students of identified schools in tribal areas. This helps in inculcating a holistic approach and a sense of responsibility towards society among the students.
- Institute was Nodal Centre for the State of Maharashtra, "Rural Engineering Technology Club", under Council of Science and Technology for Rural India and Rural Technology and Business Incubator, IIT Madras;
- Counseling staff and students are helpful in developing a conducive atmosphere;
- Entrepreneurship Development Cell functioning since last decade starting showing results and students are inculcated towards self-employment as a career path;

Institute firmly believes that excellence is a continuous process and implements the policies/moves in that direction to meet it. The descriptive summaries and attached documents/enclosures under every criterion support the sincere efforts on

Institute in this direction is fully aware that the growth in infrastructure, academic excellence, research, and co-curricular and extracurricular activities covering societal and national issues are helpful in creating awareness as well as mitigating the issues, contributing in terms of inclusive socioeconomic growth of society.

With these achievements over the years and in line with NEP, the institute is continuously working towards capacity building by way of industry-institute interaction, meeting quality parameters, and developing new frontiers in education and research to meet future challenges.

## 6.ANNEXURE

### 1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p><b>Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)</b></p> <p>Answer before DVV Verification :</p> <p>Answer After DVV Verification :0</p> <p>Remark : As per the revised data and clarification received from HEI, based on that All the courses are offered by some different institutions/organizations in which students of the institute have participated so DVV input is recommended accordingly.</p>																				
1.2.2	<p><b><i>Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years</i></b></p> <p>1.2.2.1. Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>898</td> <td>499</td> <td>952</td> <td>848</td> <td>719</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.</p>	2021-22	2020-21	2019-20	2018-19	2017-18	898	499	952	848	719	2021-22	2020-21	2019-20	2018-19	2017-18	0	0	0	0	0
2021-22	2020-21	2019-20	2018-19	2017-18																	
898	499	952	848	719																	
2021-22	2020-21	2019-20	2018-19	2017-18																	
0	0	0	0	0																	
1.3.2	<p><b>Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)</b></p> <p>1.3.2.1. <b>Number of students undertaking project work/field work / internships</b></p> <p>Answer before DVV Verification : 2360</p> <p>Answer after DVV Verification: 2176</p> <p>Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.</p>																				
2.1.1	<p><b>Enrolment percentage</b></p> <p>2.1.1.1. <b>Number of seats filled year wise during last five years (Only first year admissions to</b></p>																				



be considered)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
449	334	314	406	328

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
449	334	314	408	328

**2.1.1.2. Number of sanctioned seats year wise during last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
642	582	552	582	582

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
692	632	552	582	582

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

2.1.2

***Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years***

**2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
321	254	207	286	249

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
159	110	123	153	136

**2.1.2.2. Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
321	291	276	291	291

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
346	316	276	291	291

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

#### 2.4.1 Percentage of full-time teachers against sanctioned posts during the last five years

##### 2.4.1.1. Number of sanctioned posts year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
117	114	114	115	121

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
117	114	112	115	121

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

#### 2.4.2 Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

##### 2.4.2.1. Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
26	22	20	18	12

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
24	20	18	16	10

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

#### 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1.9	2.0	24.102	1.5	8.8

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
1.9	2.0	24.102	00	8.8

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**3.2.2** *Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years*

**3.2.2.1. Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
13	1	14	14	10

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	3	4	4

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**3.3.1** **Number of research papers published per teacher in the Journals notified on UGC care list during the last five years**

**3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
95	47	39	38	39

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
5	8	11	8	16

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years**

**3.3.2.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
8	6	10	17	8

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
1	2	4	4	0

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**3.4.3 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.**

**3.4.3.1. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
20	18	49	60	53

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
2	1	9	1	0

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**3.5.1 Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.**

Answer before DVV Verification :

Answer After DVV Verification :14

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

4.1.2 **Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years**

4.1.2.1. **Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
10.75	10.81	8.61	26.20	54.80

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
10.56	6.31	6.45	19.44	47.35

Remark : As per the revised data and clarification received from HEI, and excluding the expenses on books and periodicals, based on that DVV input is recommended.

4.3.2 **Student – Computer ratio (Data for the latest completed academic year)**

4.3.2.1. **Number of computers available for students usage during the latest completed academic year:**

Answer before DVV Verification : 804

Answer after DVV Verification: 801

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

4.4.1 **Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)**

4.4.1.1. **Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
11	11	9	26	55

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
22.45	98.08	54.70	42.43	51.25

Remark : As per the revised data and clarification received from HEI, and excluding the expenditure made in the seminar,/conference industrial visits, staff welfare etc. based on that DVV input is recommended.

**5.1.3 Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years**

**5.1.3.1. Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
244	213	223	178	194

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
630	576	517	551	563

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**5.2.1 Percentage of placement of outgoing students and students progressing to higher education during the last five years**

**5.2.1.1. Number of outgoing students placed and / or progressed to higher education year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
273	254	268	242	230

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
263	253	264	214	209

**5.2.1.2. Number of outgoing students year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
540	560	480	522	521

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
612	572	508	481	515

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**5.2.2 Percentage of students qualifying in state/national/ international level examinations during the last five years**

**5.2.2.1. Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
12	9	2	2	3

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
11	9	2	2	3

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**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 last five years**

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
10	0	5	3	5

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	0	0	1

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

**5.3.2 Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)**

**5.3.2.1. Number of sports and cultural programs in which students of the Institution**

**participated year wise during last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
11	0	52	69	66

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
7	0	9	15	12

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

6.3.2 **Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**

6.3.2.1. **Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
21	26	91	100	144

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
18	22	74	68	90

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

6.3.3 **Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

6.3.3.1. **Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
42	53	70	43	49

Answer After DVV Verification :



2021-22	2020-21	2019-20	2018-19	2017-18
41	52	63	40	44

**6.3.3.2. Number of non-teaching staff year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
02	04	03	01	00

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
84	84	84	84	84

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

6.5.2

**Quality assurance initiatives of the institution include:**

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
2. **Academic and Administrative Audit (AAA) and follow-up action taken**
3. **Collaborative quality initiatives with other institution(s)**
4. **Participation in NIRF and other recognized rankings**
5. **Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

Answer before DVV Verification : A. Any 4 or more of the above

Answer After DVV Verification: B. Any 3 of the above

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

## 2.Extended Profile Deviations

ID	Extended Questions																				
1.1	<p><b>Number of students year wise during the last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>2374</td> <td>2184</td> <td>1810</td> <td>1922</td> <td>1973</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>2176</td> <td>2049</td> <td>1721</td> <td>1841</td> <td>1885</td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18	2374	2184	1810	1922	1973	2021-22	2020-21	2019-20	2018-19	2017-18	2176	2049	1721	1841	1885
2021-22	2020-21	2019-20	2018-19	2017-18																	
2374	2184	1810	1922	1973																	
2021-22	2020-21	2019-20	2018-19	2017-18																	
2176	2049	1721	1841	1885																	

2.2	<p><b>Number of teaching staff / full time teachers year wise during the last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="197 271 986 383"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>110</td> <td>112</td> <td>116</td> <td>120</td> <td>121</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1" data-bbox="197 463 986 575"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>110</td> <td>112</td> <td>112</td> <td>115</td> <td>121</td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18	110	112	116	120	121	2021-22	2020-21	2019-20	2018-19	2017-18	110	112	112	115	121
2021-22	2020-21	2019-20	2018-19	2017-18																	
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2021-22	2020-21	2019-20	2018-19	2017-18																	
110	112	112	115	121																	
3.1	<p><b>Expenditure excluding salary component year wise during the last five years (INR in lakhs)</b></p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="197 732 986 844"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>320.82</td> <td>588.31</td> <td>537.35</td> <td>588.07</td> <td>603.40</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1" data-bbox="197 925 986 1037"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>206.69</td> <td>458.65</td> <td>394.06</td> <td>406.76</td> <td>372.65</td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18	320.82	588.31	537.35	588.07	603.40	2021-22	2020-21	2019-20	2018-19	2017-18	206.69	458.65	394.06	406.76	372.65
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