SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

MIT ACADEMY OF ENGINEERING

DEHU PHATA, ALANDI (D), TAL- KHED, DIST-PUNE
412105
www.mitaoe.ac.in

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BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

MIT Academy of Engineering (MITAOE), Alandi, Pune, was established in 1998 under the Maharashtra Academy of Engineering and Educational Research (MAEER), Pune. The institute offers seven UG programs (B.Tech), three PG programs (M.Tech) in engineering and one UG program (B.Des) in Design. MITAOE is recognized by AICTE and affiliated with Savitribai Phule Pune University (SPPU).

- The UGC honoured the institute with ‘Academic Autonomy’ during 2016-17 considering the quality of pedagogical practices, research, faculty and the relevant infrastructure that meets global standards.
- The SPPU has also honoured the institute with the ‘Best Engineering College (Professional Courses) award. The institute has made its mark by excelling in academics and research and it continues to grow as a ‘Centre of Excellence’ in engineering education and research. The NBA Accreditation to all eligible programs (Tier-2 mode up to the academic year 2021-2022 and Tier-1 mode from the academic year 2022-23), ‘A’ Grade by NAAC in cycle-1(24 Sep 2014 to 31Dec 2021), the 2(F) & 12(B) status from the UGC, and ISO 9001: 2015 certification are the testimony to our pursuit of excellence.
- MITAOE is participating in NIRF since 2016 and ARIIA since 2019.
- Institute has designed an outcome-based curriculum in tune with the guidelines of the AICTE model curriculum. The curriculum contains a choice-based credit system from the first year in terms of specialization, emerging skills, and open electives. Institute also offers Honors and Minor degree programs in emerging areas approved by AICTE and SPPU.
- 28 student clubs at MITAOE provide a platform to students for their overall development in terms of technical, co-curricular and extra-curricular activities. Students from various clubs participated in various national/international competitions and bagged prizes.
- Student-centred approach blended with personal attention to all the students and effective implementation of their valuable suggestions received through the continual feedback mechanism and ‘Student-Teacher Interaction pedagogy’, make the teaching & learning process more effective.
- The institute endeavours to impart holistic education to its students in order to contribute to their all-around development.
- The students at MITAOE get an opportunity not only to enhance their technical skills but also their communication and soft skills.

Vision

To be a new age learning centre for holistic development of students into professional engineers, to cater to the changing needs of techno-society**.**

Mission

- To provide new-age infrastructural facilities blended with skill-based curriculum and activity-based pedagogical approaches to develop competitive engineering professionals to solve real-world problems.
- To prepare students for lifelong learning by transforming educational practices.
- To promote ethical and moral values by involving students into community services.

- To promote entrepreneurship and managerial skills by strengthening industry-institute interaction.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Academic Autonomy
- Skill Focus curriculum
- Student-Centric, ICT-Enabled Teaching- Learning Process
- Proactive and Energetic Entrepreneurial Development Cell (Top 25-50 ARIIA at All India Level)
- Good Digital infrastructure (Technology enabled Campus)

Institutional Weakness

- Faculty contribution in research and consultancy is very less
- Core Industries for campus placement
- Faculty cadre Ratio

Institutional Opportunity

- Interaction with Academic institutes and research organizations of repute
- Liberal approach of APEX bodies (Enhancing choice-based value-added courses)
- The synergy of Academic and research forefront areas
- Competitive Environment (More demanding market scenario)
- Scope for Project to Product in View of blend of Engineering and Design
- Availability of domain-specific experts/professionals.
- Industry Accreditation: To establish the Centre of Excellence

Institutional Challenge

- CSR and Foundation (Entrepreneurial) driven projects
- Fund mobilization for research activities
- Attracting more and more recruiters, especially from core engineering sectors

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

MIT Academy of Engineering is an autonomous institute affiliated with Savitribai Phule Pune University. Curriculum development is carried out per the AICTE norms to fill the gap between academics and industry. With the focus on NEP guidelines viz., Interdisciplinary learning, Practical learning, New-age technologies and Involvement of industry.

Curriculum aspects are implemented as follows

- Objectives are clearly defined and aligned with the overall goals of the program.
- Contents, assessment and evaluation details of the curriculum are defined through the curriculum structure and detailed syllabi.
- Teaching learning pedagogical methods to deliver the content of the curriculum is mentioned in the course description document.

A few skill-based courses are as follows-

- Design thinking
- Prototyping
- Process optimization
- Data structure and algorithms
- Java programming language
- Python
- AWS cloud services
- ASPEN ONE & EDR
- Plant Design Piping
- ETABS
- Open Road Designer
- QGIS
- Red hat Linux
- Web Technology
- Android Application Development
- .Net
- Computational Fluid Dynamics
- Mechanical Simulation
- Industrial Measurements and Instrumentation
- Computer-Aided Product Design
- CCNA
- EMB Linux
- System Verilog

The Choice Based Credit System (CBCS) is rigorously get followed through Open elective courses and department electives. The activity-based teaching-learning process helps in grooming the students for various skill development, Communication skill, Professional skills, Social responsibility and Presentation skills.

The curriculum offers project work at three different levels,

- Minor project topics in the second year
- Mini project in the third year
- The major project in the final year

Summer internship programs (SIP) and semester-long internship (SLIP) facilitating on-job training, helps to explore industry functioning, teamwork and application-based learning. In the last semester, students have the option to choose courses offered by the institute or complete the degree with a semester-long internship. The curriculum is designed for the overall sustainability of students globally, nationally and locally.

Teaching-learning and Evaluation

- MITAOE offers 08 undergraduate and 03 postgraduate programs. This includes UG-Design (from the 2020-21 academic year) and UG-Information Technology merged with UG-Computer Engineering from 2021-22.
- The Institute attracts fairly good quality students from Maharashtra and all over India. The seats are filled through the entrance examination conducted by the State and Central government of India and the average enrolment is 81.66%.
- The reserved category seats filled during the assessment period are 62.31%, based on the number of seats designated under the reserved categories by the rules and regulations made by the Government of Maharashtra.
- Competent faculty with good experience is the strength of the teaching-learning and evaluation process. The student-to-faculty ratio for the latest completed year is 22:1 and mentor to mentee ratio is 1: 22 for the same year.
- The average percentage of Full-time teachers against sanctioned posts for the last five years is 96.04% and 20.57% of the faculty members are with Ph.D.
- The faculty members upgrade their skills with the new-age technologies through training provided by IUCEE and NITTTR regarding the Teaching Pedagogies including Project Based, Problem-Based, Activity based, Collaborative learning, etc.
- All the faculties focus on ICT tools and student-centric methods for individual and collaborative learning.
- The institute prepares an academic calendar incorporating all the student development programs, and based on that departments prepare the departmental calendar for planning their teaching and student activities. The faculty uses the department calendar to plan their respective courses' teaching and internal assessment activities.
- The examination cell continuously monitors, reviews, and revises the conduction of internal assessments and semester examinations systematically, ensuring transparency. Also, they conduct re-examinations for those students who could not succeed on the first attempt during the semester.
- The average number of days taken for result declaration is 12.2 days.
- At the Institute level, the results according to courses are analyzed at the department level, detailed analysis is conducted along with the attainment of COs, POs, and PSOs. These attainment levels are further reviewed for further improvement.
- The pass percentage of the final year students during the lastest completed academic year is 92.34%.

Research, Innovations and Extension

The institute promotes innovation and technological development through its R&D Cell. This cell has:

- Research Policies
- Research Thrust Areas
- Provision of Seed Funding
- Research Facilities
- Entrepreneurship Cell

Faculty members and students present research papers at conferences, publish papers in reputed journals, and file patents. Institute has received research funds of Rs.10.46 lacs. Six faculty members are recognised as Ph.D. guides and four students have registered for Ph.D. under these guides in the last five years.

Institute has a well-developed innovation and entrepreneur ecosystem:

- Entrepreneurship courses for all the students in collaboration with Wadhwani Foundation are provided. Won three awards under ARIIA in the academic years 2019-20, 2020-21, and 2021-22. This cell has a well-developed incubation centre, and in the last 5 years, 28 startups have been working with this centre.
- Institute Innovation Council (IIC): Various programs on innovation, patent drives, and research awareness programs are conducted.
- The institute has formulated an Innovation and Startup Policy following the guidelines of National innovation and startup policy and 28 startups are established.

The institute follows a code of ethics. Ethics awareness is included as a part of the curriculum for courses like projects.

Students and faculty members are actively involved in innovation and projects. The outcomes of the projects are presented at conferences or published in journals, which are limited only to Scopus or Web of Science listing.

Following is the summary of the last five years' technical research papers.

- Conference publications along with book chapters: 238
- Journal publications in Scopus/ Web of Science listing: 99
- Average citation index: 4.65
- Institute h-index: 13

A revenue of Rs 29.66 lacs is generated from training consultancy to various industries in the last five years.

15 Various extension activities are carried out through National Service Scheme, Unnat Bharat Abhiyan, Swachh Bharat Abhiyan, Robin Hood Army, Green Club and received 11 awards. An average of 8.55% of students participated in extension activities.

Institute has signed 54 MOUs with reputed industries, and organisations for activities like Studnet Internship Programs, Semester Long Internship Programs, projects and training programs. The average number of collaborative activities per year is 432.8.

Infrastructure and Learning Resources

- The institute has a pleasant atmosphere with lush greenery and infrastructure with learning resources such as ICT-enabled classrooms, well-equipped laboratories, tutorial rooms, a language lab, seminar hall, library, internet centre, and lift along with other support facilities that cater to the needs of students. The Institute has 43 ICT infrastructure-enabled classrooms.
- The institute has 72 laboratories with the availability of advanced equipment and software. The college has a well-maintained seminar hall, common room, placement cell, entrepreneurship cell, counselling centre etc. Cultural activities and sports are facilitated and organized as Student Activities. There are 28 clubs which are distributed mainly into Technical, Cultural, Recreational, Social and Sports categories**.** The institute has allocated an average budget of 10.66 % for infrastructure augmentation, 91.03 % for books and journals and maintenance of support facilities.

- The institute has a spacious library with a rich collection of print and online resources covering print books, e-books, journals, e-journals, databases, CDs, NPTEL web and video lectures, back volumes, encyclopaedias, dictionaries, datasheets and handbooks. The Central Library is automated using ILMS software namely “SLIM21” - an integrated, multiuser, multitasking library management software that supports in–house operations of the library. WEB-OPAC facility is made available through the intranet as well as the internet.
- The institute has strong IT and ICT infrastructures. The Institute has a 500 Mbps bandwidth lease line and the campus is Wi-Fi enabled. Various digital resources like GoTo Webinar, MS Teams, Moodle, CollPoll-ERP, Open Broadcaster Software (OBS) Studio, Google Meet, Pen Tablet, Virtual Labs, VPN facility, etc. are being used to conduct effective delivery of online lectures. Infrastructure facilities are available for E-content development.
- Standard systems and procedures for maintenance of the physical, academic and support facilities for the laboratory, library, sports, computers, and classrooms are adopted. Amenities like a canteen, garden, cultural hall, vehicle parking, Vermicomposting pits, Biogas plant, RO plant for potable water, solar power panel, waste management system, CCTV system and stationery shop and photocopy facility are available. Institute has generators with a total of 420 KV capacity to ensure an uninterrupted power supply. A dedicated housekeeping facility and campus security are in place.

Student Support and Progression

- Institute provides all the required, necessary facilities and infrastructure for student support and progression activities and ensures an essential ecosystem for the holistic development of students.
- Financial support is provided to needy students through government scholarships and freeship schemes. The institute also provides financial support to academic achievers and needy students who qualify through the prescribed criteria of the institute.
- Series of guest lectures, workshops, seminars, and webinars in technical and professional domains are organised for the all-round development of students.
- The Institute has a dedicated Corporate Relations and Placement Cell through which career guidance, mock exercises and support for higher education entrance exam preparation are organised for the students. The placement numbers have consequently increased to 70 % post-autonomy.
- The institute follows a strict prevention of sexual harassment and ragging on the campus - zero tolerance statutory policy is followed. All student grievances are addressed timely through the Grievances redressal committee.
- The student helpline numbers and email IDs are displayed across the institution for easy access. 24*7 Online support is provided to students for Emotional well-being through the online platform “YourDost”. A physical counsellor is also available for needy students.
- The student council at MITAOE is formed to inculcate leadership and team-building qualities among students. Student council members are selected by the rules and norms stated by the Government of Maharashtra Gazette part 8, dated 11/01/2017.
- The Institute has 28 curricular and extra-curricular Students Clubs. These Clubs are solely managed by the students and for the students under the mentoring of the Student’s Affairs Cell. Students are

encouraged to participate in cultural, sports, social and technical events at international, national, State or University levels.

- The Alumni of MITAOE always contribute to the development of students by extending support in terms of providing expert talks, delivering seminars, mentoring in club activities providing Placements, internships and conducting various student-oriented activities. The Alumni Association of MITAOE is registered (Reg No: MAHA/ 1106/2019/Pune) and has a yearly financial audit.

Governance, Leadership and Management

- MITAOE strives to impart excellence towards realising its vision and mission and essential skills of the 21st Century while being driven by core values of Knowledge, Excellence, Integrity, Transparency and Empathy. The stakeholders, intrinsic as well as extrinsic to the organisational chart; are pivotal to the planning, implementation, support system and monitoring of the all-inclusive policies of the institute.
- To serve as an example, the effective deployment of the institute's strategic plan is personified in the Corporate-Relations-and-Placement-Cell(CRPC). Its noteworthy modality includes providing an excellent corporate interface and imparting soft-skills training to the students. The effective and efficient functioning of institutional bodies stems from the working of the governing body besides several statutory bodies. In order to enhance the interdisciplinary culture, select departments are merged in a School.
- The Institute trusts the contribution of its employees towards the overall development and progress of the institution. It also encourages the employees to utilize the several welfare measures in place for the teaching and non-teaching staff.
- To ensure the optimal utilisation and mobilisation of available financial resources, the institute adopts strategies like regular internal as well as external audits by certified auditors and finalisation of the institutional budget in discussion with the Trust and Chief Accounts and Finance Officer based on the proposed recurring/nonrecurring expenditure of the institute. The same is presented in the College Development Committee (CDC) and Governing Council (GC) meetings for final approval.
- As an umbrella to all the quality initiatives undertaken, Internal-Quality-Assurance-Cell(IQAC) is responsible to ensure the preferred level of quality at the institute. Quality parameters are set up at every point to ensure continuous improvement and that student learning is not only extended but also developed cumulatively. IQAC ensures the execution of all quality parameters and presents in quarterly meetings.
- IQAC is instrumental in monitoring and initiating timely actions to ensure the attainment of set objectives of accreditation (NAAC, NBA), ranking (NIRF, ARIIA), and quality standard certification (ISO 9001:2015).

Institutional Values and Best Practices

- Measures are initiated by the Institute for the Promotion of gender equity. Gender equity and sensitization are given due weightage in curricular, co-curricular and extra-curricular activities, additional facilities are provided for women on the campus.
- Energy conservation measures are of prime importance and hence facilities for alternate sources of energy such as solar energy, biogas energy, wheeling to the grid, etc. are implemented at the institute.
- Waste management - especially the treatment of biodegradable waste is addressed by Vermicomposting facilities in the Institution.
- Water conservation facilities such as rainwater harvesting bore well or open well recharge, construction

of tanks, wastewater recycling or maintenance of water bodies and distribution systems are available on the campus.

- Green and Sustainable Campus initiatives such as butterfly, medicinal herb gardens and drip Irrigation are implemented on Campus.
- Quality audits on the environment and energy are regularly undertaken by the institution. The institutional environment and energy initiatives are confirmed through the following - Green audit, Energy audit, and Environment audit. Active participation in Government of India initiatives viz., Swach Bharat Abhiyan, Unnat Bharat Abhiyan.
- The institution has a disabled-friendly, barrier-free environment with the provision of ramps/lifts for easy access to classrooms, disabled-friendly washrooms, signages, ample street lights, display boards and signposts, assistive technology and facilities for persons with disabilities (Divyangjan) accessible website and screen-reading software.
- The Institute provides an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities through various NSS and Unnat Bharat Abhiyaan activities.
- The students are also sensitized to the constitutional obligations so as to increase awareness about the values, rights, duties and responsibilities of citizens by way of an additional course on the Indian constitution. The Institution has a prescribed code of conduct for students, teachers, administrators and other staff.
- National and international commemorative days, events and festivals are celebrated with great fervour at the institute level and through the various clubs existing at the institute. Several best practices such as Project-based learning and Club activities are in existence in the institute benefitting students and society.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	MIT ACADEMY OF ENGINEERING
Address	Dehu Phata, Alandi (D), Tal- Khed, Dist-Pune
City	Alandi Devachi
State	Maharashtra
Pin	412105
Website	www.mitaoe.ac.in

Contacts for Communication					
Designation	**Name**	**Telephone with STD Code**	**Mobile**	**Fax**	**Email**
Director	Mahesh D. Goudar	020-30253500	9689907476	020-30253799	director@mitaoe.ac.in
IQAC / CIQA coordinator	Suyogkumar V. Taralkar	020-30253615	9011332500	020-30253799	iqaccoordinator@mitaoe.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	11-09-1998

Date of grant of 'Autonomy' to the College by UGC	13-10-2015

University to which the college is affiliated		
State	**University name**	**Document**
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recognition		
Under Section	**Date**	**View Document**
2f of UGC	07-01-2014	View Document
12B of UGC	07-01-2014	View Document

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	View Document	03-07-2022	12	Extension of Approval

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	Dehu Phata, Alandi (D), Tal-Khed, Dist-Pune	Urban	8.3	22196.86

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	**Name of Programme/Course**	**Duration in Months**	**Entry Qualification**	**Medium of Instruction**	**Sanctioned Strength**	**No.of Students Admitted**
UG	BTech,Civil Engineering	48	HSC Science	English	60	31
UG	BTech,Chemical Engineering	48	HSC Science	English	60	45
UG	BTech,Electronics And Telecommunication	48	HSC Science	English	120	120
UG	BTech,Information Technology	48	HSC Science	English	60	0
UG	BDes,School Of Design	48	HSC	English	90	67
UG	BTech,Computer Engineering	48	HSC Science	English	180	180
UG	BTech,Mechanical Engineering	48	HSC Science	English	180	147
UG	BTech,Electronics Engineering	48	HSC Science	English	60	60
PG	Mtech,Computer Engineering	24	BE or B.Tech.	English	15	3
PG	Mtech,Mechanical Engineering	24	BE or B.Tech.	English	15	1
PG	Mtech,Electronics Engineering	24	BE or B.Tech.	English	15	0

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	16				43				160			
Recruited	9	4	0	13	12	6	0	18	76	52	0	128
Yet to Recruit	3				25				32			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				171
Recruited	118	53	0	171
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				51
Recruited	45	6	0	51
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	7	4	0	9	4	0	19	5	0	48
M.Phil.	0	0	0	0	0	0	1	2	0	3
PG	2	0	0	3	2	0	56	45	0	108
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
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

Part Time Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
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

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	**Male**	**Female**	**Others**	**Total**
	28	17	0	45

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	511	23	0	0	534
	Female	205	13	0	0	218
	Others	0	0	0	0	0
PG	Male	3	0	0	0	3
	Female	1	0	0	0	1
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	50	51	31	35
	Female	14	18	15	11
	Others	0	0	0	0
ST	Male	5	5	6	8
	Female	3	0	2	3
	Others	0	0	0	0
OBC	Male	97	103	91	78
	Female	32	38	30	22
	Others	0	0	0	0
General	Male	214	238	247	246
	Female	81	68	57	44
	Others	0	0	0	0
Others	Male	142	99	85	78
	Female	36	32	23	25
	Others	0	0	0	0
Total		674	652	587	550

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Chemical Engineering	View Document
Civil Engineering	View Document
Computer Engineering	View Document
Electronics And Telecommunication	View Document
Electronics Engineering	View Document
Information Technology	View Document
Mechanical Engineering	View Document
School Of Design	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Education at MITAOE, Alandi is emphasising developing the Foundational, Cognitive, Critical Thinking, and Problem-Solving capabilities of the students. Social, Ethical, and Emotional capacities and dispositions of every individual are fostered for achieving full creative potential and Holistic Development. With a Vision of Multidisciplinary, Holistic Education and to ensure Unity and Integrity of all Knowledge, MITAOE started a program Bachelor of Design along with other Under Graduate and Post Graduate Engineering programs. MITAOE follows the National Credit Framework (NCrF) released by UGC in April 2023. There are approximately 160 credits for four-year undergraduate programs at MITAOE. The curriculum framework of MITAOE enhances the capability of a student from the employment viewpoint. Humanities and Social Science Courses are integrated along with STEM courses. The entire curriculum framework is designed to empower our students with four important and necessary skills of the 21st century, Critical thinking, Creativity, Collaboration and Communication. We offer flexible but rigorous academic programs and opportunities for participating in a wide range of professional and extracurricular activities. Academic Flexibility is almost 28% of credits through discipline electives, open electives, projects and internships. community engagement/ service and environmental education are integral parts of courses like design thinking,

	prototyping environmental science, and liberal learning. Interdisciplinary and multidisciplinary project work is encouraged through minor, major and capstone project courses and various experiential and project-based learning core courses in the curriculum. The Design Thinking course at the first year is creating a strong foundation for identification and finding solutions to society's most pressing issues and challenges. Interdisciplinary and multidisciplinary projects and teams resulting in excellent research outcomes such as Research Papers, Patents etc. Emerging area specialization courses tracks for all interdisciplinary and multidisciplinary students is among the most important best practices at MIT Academy of Engineering. This initiative is giving opportunities to all students to work and contribute in their interested area of specialization and problem-solving.
2. Academic bank of credits (ABC):	MIT Academy of Engineering is following the guidelines of Savitribai Phule Pune University and University Grants Commission communicated through circulars dated 15 October 2022 and 16 August 2022 respectively. The 95% student's ABC_ID creation is done and their data is currently being uploaded to the NAD portal.
3. Skill development:	To inculcate value-added education for the highest professional competence and character to constructively deal with the challenges and opportunities of the 21st century. In line with National Skills Qualification Framework (NSQF), MITAOE offers NSQF based on professional Theoretical Knowledge, Professional and Technical Skill/ Expertise, Employment Readiness and Entrepreneurship Skills and Mind-set, Broad Learning and Responsibility. Almost 19% of credits are assigned to technical skill development, projects and internships. Almost 12 credits are assigned for technical and professional skill development courses. Students' knowledge, skill and aptitude is progressively improved with almost 32 in demand technical skills choices along with Professional Communication and Employability and Career Development courses. MITAOE provides professional and vocational education to students with guiding principles of a broad and strong foundation, skilful training and a practical orientation towards solving real-world problems. Two audit

	internships, one credit-based internship of 4-6 Weeks and Credit based Semester Long Internships are an integral part of the curriculum offered by MITAOE. This prepares learners for jobs/employability that are based on manual or practical activities and directly develops expertise in a particular group of techniques or technology.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Joyful learning and active Learning through the system (teaching in Indian Language, culture, using online course): Problem Solving Sessions are among the best initiative at MITAOE. To improve the effectiveness of these sessions' faculties, provide classroom delivery in bilingual mode. The liberal learning course in the second year is having various choices as Chess, Dance, Singing, Creative Writing, Guitar, Art and Craft, Robotics, Introduction to photography, Drama, Yoga and Meditation, Automotive Skills, Empathy & Compassion, RC Plane, Drone Making. Student clubs like Language Club, Arts and Crafts, Drama, etc. are contributing to the appropriate integration of the Indian Knowledge System and Culture.
5. Focus on Outcome based education (OBE):	Student-centric teaching and learning methodology at MITAOE offers content delivery and assessment, planned to achieve stated outcomes of the courses and program outcomes. It focuses on measuring student performance as per Bloom's Taxonomy Levels.
6. Distance education/online education:	Online education at MIT Academy of Engineering is blended with experiential and activity based learning and enriched by Active, Cooperative, and Collaborative Learning using coherent ICT tools like GoTo Webinar, Microsoft Teams, and Google Meet. Faculty members are equipped with versatile tools like Pen Tablets, smart boards, Projectors, Cameras, Microphones, Headsets, and other necessary computing tools. The teaching plan for the entire semester is strategically designed with a focus on content delivery in every synchronous online session, accompanied by Polls/Quizzes/Surveys/Chats/Questions to assure Student attentiveness and Engagement. Learning Management System Moodle is used to share Unit wise Learning Material/ Pre- recorded Sessions/ Practice Problems/ Assignments/ Quizzes/Course specific Communication etc.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Electoral Literacy Club (ELC) has been established at MITAOE. The Electoral Literacy Club (ELC) is an initiative that aims to promote electoral literacy among citizens, especially the college students, and encourage their participation in the electoral process. The vision of an ELC is to create a society that is informed, engaged, and actively participating in democratic processes.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Students Co-Ordinator and Faculty Co-Ordinator are appointed for ELC at MITAOE. Student Co-ordinator: Sushil Hogale Student Executive Committee members: 1. Sanika Thakre 2. Koustubh Relekar 3. Shriram Kekan 4. Vaishnavi Kadam Faculty Coordinator (Nodal Officer) : Hussain Shaikh, Assistant Professor, School of Humanities and Engineering Sciences ELC Members: The 'Electoral Literacy Club' (ELC), consists of all the students (over 18 years of age) as members. The ELC is functional at MITAOE and conducted activities for Electoral Literacy.
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.	ELC has conducted voter registration and awareness session. A total of 430 students have applied online for the voter ID from MITAOE. The ELC members regularly make other students aware of voter registration and electoral literacy.
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.	An awareness drive was conducted for students. A total of 430 students have applied online for the voter ID from MITAOE.
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	ELC has conducted voter registration and awareness session. A total of 430 students have applied online for the voter ID from MITAOE. The ELC members

institutionalize mechanisms to register eligible students as voters.	regularly make other students aware of voter registration and electoral literacy.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
10	11	10	10	10

File Description	Document
Institutional data in prescribed format	View Document

1.2

Number of departments offering academic programmes

Response: 7

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3010	2880	3043	2941	2808

File Description	Document
Institutional data in prescribed format	View Document

2.2

Number of outgoing / final year students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
615	889	850	734	761

File Description	Document
Institutional data in prescribed format	View Document

2.3

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2893	2806	2966	2238	1490

File Description	Document
Institutional data in prescribed format	View Document

2.4

Number of revaluation applications year-wise during last five years

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

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
136	119	123	88	68

File Description	Document
Institutional data in prescribed format	View Document

3.2

Number of full time teachers year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
137	146	154	168	184

File Description	Document
Institutional data in prescribed format	View Document

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
200	203	135	138	177

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1639	1547	1811	989	504

File Description	Document
Institutional data in prescribed format	View Document

4.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
208	214	186	171	171

File Description	Document
Institutional data in prescribed format	View Document

4.3

Total number of classrooms and seminar halls

Response: 43

4.4

Total number of computers in the campus for academic purpose

Response: 888

4.5

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
760.56	726.24	753.89	1179.05	1106.91

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

MIT Academy of Engineering has established in **1998** and received autonomy status in 2016 affiliated with Savitribai Phule, Pune University, Pune. There is a total of **11 programs**, out of which eight are undergraduate and three are postgraduate programs.

Program Code	Program Name	Year of o
UG-CH	Chemical Engineering	199
UG-CV	Civil Engineering	201
UG-CS	Computer Engineering	199
UG-EX	Electronics Engineering	199
UG-ET	Electronics and Telecommunication Engineering	199
UG-IT*	Information Technology	200
UG-ME	Mechanical Engineering	200
UG-BD	Design (B. Des)	202
PG-CS	Computer Engineering	201
PG-ME	Mechanical Engineering (Heat Power)	201
PG-EX	Electronics Engineering	200

*From the academic year (2021-22) UG-Bachelor of Technology (B Tech.) Information Technology is merged to UG-Bachelor of Technology (B Tech) Computer Engineering

As an autonomous institute curriculum structure has been developed as per the AICTE norms. The curriculum design and development is a continuous inclusive process. Curriculum revision is carried out at every three years duration.

CREDITS				
1Lecture Hour = 1 Credit, 2 Lab Hours = 1 Credit, 1 Tutorial Hour = 1 Credit				
SL. NO.	YEAR	SEMESTER		TOTA
		1	2	
1.	First Year	21/19	19/21	40
2.	Second Year	21	20	41
3.	Third Year	22	22	44

4.	Final Year	21	15		36
TOTAL					161

While designing the curriculum relevance has been given to recent development and emerging areas globally. Prominent care of fundamental needs is taken care of while designing the curriculum structure.

As per the **National Education Policy**, the focus has been kept on various skill development of students by offering,

- Different skill-based labs and project work every semester
- Summer and winter internship programs
- Semester-long internship

Students are groomed for overall personality development and make them **Globally employable,** through the courses like,

- Foreign languages German and Japanese.

Curriculum also focuses on **Regional development** through the courses like,

- Communication,
- Psychology
- Professional skills
- Sociology
- Professional communication
- Liberal learning

National development is covered in curriculum by offering the courses related to,

- Electric vehicle
- Industry automation
- Data science
- Machine learning
- Artificial intelligence

Local issues are addressed in curriculum by inclusion of courses like,

- Environmental science
- Indian constitution etc.

Project design and implementation are focused on addressing social issues also. The various technical and non-technical clubs are formed on institute levels and they are consistently working on multiple issues like,

- Visit to an orphanage nearby to college.
- Visit to nearby rural areas to educate the kids.
- Students participate in technical events organized by renowned institutes like Baja, e-yantra, etc.

The non-technical club also drives the activities like,

- Blood donation camp in the institute is organised yearly.
- NSS team is also addressing the social issues by visiting nearby villages for adult education.
- Village cleaning drive
- Awareness of the traffic rules

As per the **National Health Mission,** students visit nearby villages and creats awareness about the national health policies and facilities available. All the institute's programs are striving for the development needs required globally, nationally, regionally and locally. Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution are reflected in each course.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 **Number of all Programmes offered by the institution during the last five years.**

Response: 11

1.1.2.2 **How many Programmes were revised out of total number of Programmes offered during the last five years**

Response: 11

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 71.49

1.1.3.1 **Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..**

2021-22	2020-21	2019-20	2018-19	2017-18
79	61	122	78	41

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 47

1.2.1.1 How many new courses are introduced within the last five years

Response: 251

1.2.1.2 **Number of courses offered by the institution across all programmes during the last five years.**

Response: 534

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

1.2.2.1 **Number of Programmes in which CBCS / Elective course system implemented.**

Response: 10

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3 Curriculum Enrichment

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

Response:

In order to integrate the cross-cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics, College has imbibed different types of courses in the curriculum, some enhance professional competencies while others aim to inculcate general competencies like social and ethical values, human values, environment sensitivity etc., thereby leading to the holistic development of students.

A basket of various courses on HSS (Humanities and Social Science) is designed in the curriculum to address these cross-cutting issues like Professional Skills and Employability Skills (HP202 and HP305), Project Management (HP304), Sociology (HP402). Apart from the curriculum, a unit of 100 students under NSS (National Service Scheme) and UBA (Unnat Bharat Abhiyan) conduct various activities to address the above issues.

1. **Gender Sensitivity:**

HP402 Sociology speaks about the meaning of Gender Sensitization, discrimination, violence and abuse to acquire a sociological understanding and to address the issues with appropriate behaviour in the society.

YourDOST- Emotional Wellness Coach for MITAOE organizes various webinars and personal coachings to all students and faculties to address these issues.

NSS addresses these issues during the 7 days of special winter camp which is residential in the villages by

door-to-door general talk and street plays.

1. **Environment and Sustainability:**

The course on Environmental Engineering (CV203) addresses Global Environmental Issues and Sustainable development. This course offers site visits and performs various activities including project work.

A group of 50 students participated in building the 5 EcoSan Toilets at the village Thakarwadi 5 km away from college under a special camp of NSS. Under UBA, 5 villages are adopted and projects for environment and sustainability are in progress. NSS unit of 100 students is actively participating to conduct various activities throughout the year to address this issue like tree plantation, Ganesh Idol Collection, Swacch Dindi Nirmal Dindi, etc.

1. **Human Values and Professional Ethics:**

In the curriculum, a basket of Skill Development and Projects (SDP) addresses this issue. 5 projects, 3 internships and 2 courses from HSS are addressing Human Values and Professional Ethics.

During the Induction program, First Year level Universal Human Values are discussed. 3 Faculties and 1 staff completed the AICTE-approved SIP (Student Induction Program) for one week and refresher 1 course.

All the students from First Year Engineering are going through the Design Thinking ME106, one of the key courses where they perform various activities like visiting the domain and interacting with people where they apply Empathy Mapping which builds the importance of Human Values and Professional Ethics among the students.

At the Second-year level Minor Projects (XX230) addresses Engineering Ethics in the 3rd week of the commencement of the project which focuses on understanding the importance of documentation and professional and research ethics. A rubric for the assessment of projects includes ethics.

NSS organized an Organ Donation Drive which sensitized the human values for society.

We strongly believe that these courses are vital for students to succeed in their life and their career path.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 25

1.3.2.1 **How many new value-added courses are added within the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
9	5	3	5	3

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document
Link for Additional Information	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 19.57

1.3.3.1 **Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
2414	241	72	101	98

File Description	Document
List of students enrolled	View Document
Link for Additional Information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 89.07

1.3.4.1 **Number of students undertaking field projects / internships / student projects**

Response: 2681

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document
Link for Additional Information	View Document

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: A. All 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document
Link for Additional Information	View Document

1.4.2 The feedback system of the Institution comprises of the following :

Response: A. Feedback collected, analysed and action taken and report made available on website

File Description	Document
Any additional information	View Document
URL for stakeholder feedback report	View Document
Link for Additional Information	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 81.66

2.1.1.1 **Number of students admitted year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
674	652	587	550	504

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

2021-22	2020-21	2019-20	2018-19	2017-18
804	804	714	654	654

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 62.31

2.1.2.1 **Number of actual students admitted from the reserved categories year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
101	138	118	110	121

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

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

Response:

Admissions Process

Admission to Engineering & Design is made through Common Admission Programme (CAP) rounds by the CET (Common Entrance Test) Cell, Directorate of Technical Education (DTE), Government of Maharashtra. The admission is based on students' performance in the HSC Board examination and the Common Entrance Test conducted by DTE for students of Maharashtra. Outside students will be selected based on their performance in the JEE (Joint Entrance Exam).

Identification of Slow and Advanced Learners

As students from different regions of the country can get admitted, the Institute ensures proficiency in the language from the very beginning of their semester to facilitate every learner to excel. Also, from the training and placement department, the feedback received from many recruiters was about the students' communication skills. Also, there are good job opportunities in countries like Japan and Germany. Hence, to address the above issues, we decided to focus on the student's communication skills.

Selection Strategy for Slow and Advanced Learners

- **Based on Language Proficiency**
  - After the admissions in the FY, students are supposed to choose a language of their preference from English/German/Japanese to study.
  - A special course has been introduced for the students to develop their language learning abilities and nurture their existing skills.
  - Students go through a diagnostic test followed by a personal interview to check and confirm their fluency in English.
  - The students with good English communication skills only will be permitted to choose alternate languages (Japanese / German) and others will learn English.
  - The selector ensures the utmost transparency in selecting the students. For the first round, i.e., diagnostic test, a pool of multiple-choice questions are asked, and they perform the test on a software named B Tech Guru.
  - Further, selected students from the test go through a round of personal interviews, where the following questions are asked like Introduce yourself, Review your favorite movie, Describe your daily routine, Narrate a memorable moment, etc.
  - They are judged on pronunciation, grammar, vocabulary, and fluency parameters. Only the students with excellent and fluent communication skills clear the interview and are given

German/Japanese.
    - The discussed process helps in assessing the learning levels of the students based on language proficiency.
- **Course Level assessment**
    - The course-level internal assessment is done using various collaborative learning activities like Jigsaw, Flipped Classroom, Think Pair Share etc.
    - Teachers identify the learning levels of the students during the interaction, classroom teaching, and lab sessions.
    - The student groups are formed heterogeneous to include learners of all levels and support them in their learning.
    - The student groups are formed heterogeneously using a combination of academically robust, medium, and poor students.
- **Diagnostic Test for Employability Assessment**
    - All the students register on AMCAT and BTechGuru Platform.
    - They practice the contents and give the diagnostic test on AMCAT for employability.
    - The slow learners are provided with emplobitliy counseling and retake the practice session and reappear for the test till they score good marks.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response: 22:1

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response:

MIT AOE believes in developing its students by adopting student-centric methods and involves them through participative learning, experiential learning, project-based learning and problem-solving methodologies. The various student-centric methods adopted by the institute for enhancing students' learning experiences are:

- **Experiential learning**- Project-based learning approach in courses like Prototyping, Engineering

Informatics, departmental core courses, Mini project, Minor project, and Major projects improves experiential learning. Students are designing prototypes and projects at different levels. Prototyping includes Digital and rapid prototyping with software, hardware, and 3D printing prototypes, starting from concept generation to product development. Courses are having hands-on practical components. While performing hardware experiments, 3-4 students are performing in a group, and for software experiments, individual students are getting the machine.

- **Participative learning** – teachers conducted various in-class and out-class active learning activities like Flipped classroom, Jig Saw, Roleplay, Think-pair-share, Group discussion, one-minute paper etc. to enhance the participation of students in the teaching-learning process.
- **Problem-solving methodology** – In the various courses from first year to final year, students are given case studies, and creative assignments based on real-life problems to enhance their creativity, critical thinking and problem-solving skills. Students are encouraged to participate in National and International level competitions. For example, the Design thinking course of first-year engineering focuses on Human-Centric problems to provide innovative solutions. It emphasises mainly desirability, feasibility and viability. Similarly, in the Electrical and Electronics Engineering course of First Year BTech, green energy generation is considered a real-world problem. Starting from consumer power requirements, solar power calculations, ideation and design of the solution for the problem are done by the students.
- **Real-world exposure:** Industrial visits and invited lectures by industry experts are conducted to provide a practical perspective of the real world of work. Apart from this, the institute has audit-based internships for students of SY entering TY and credit-based internship for students of TY entering final year BTECH. Six-month long internship program (SLIP) is also provided to the selected final-year students of the 8th semester. All these strategies provide the students with real-world exposure to industry and research.
- **Skill development:** Every program of the institute is offering skill courses to their students as per current trends and requirements of the industry.
- **Joyful Learning through students' clubs and participation in technical competitions:** There are total 27 clubs at MITAOE, the clubs are categorized as Technical, Recreational,Sports, Social and Cultural for students where students themselves manage to organize various activities under the guidance of one Teacher mentor. These clubs help in the intellectual, technical, physical, social, emotional, and ethical development of students in a holistic way. Peer learning and participative learning in a joyful environment happen through these clubs. Along with these activities, students get exposure to participating in various national and international competitions. The annual Technical event of the institute 'Equilibrium' is organized every year, where students not only participate and gain knowledge but also are involved in organizing the events. It helps to enhance team spirit and leadership skills.

File Description	Document
Any additional information	View Document

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

In today's era of technology evolution and to deal with millennial students, teachers are required to get themselves trained with the ICT tools to be used not only for instruction but also for assessment and evaluation. Institute has provided different platforms to the teachers as mentioned below. Apart from these, teachers have learned different ICT tools and developed e-contents.

LMS and online teaching Platforms:

1. LMS - Cloud-Based Moodle Server hosted by **eAbays Info Solutions Pvt. Ltd.,** Banglore - With 1000 Concurrent Students

www.moodle.mitaoe.ac.in

2. Go to Webinar, MS Team and Go to Meeting Web-based platform for the conduct of Online Lectures of the institute's Teachers and Guests Speakers. 6 Dashboards are subscribed from - LogMeIn Ireland Ltd.

3. G. Suite Domain for Education from which Teachers use the Google Classroom and Google Meet Tool while teaching.

4. Well established ERP System in place

5. Under the Microsoft Licenses Subscription Scheme Institute has Unlimited Licenses of MS Office 365 for Teachers and Students. Therefore, as part of Office 365 - MS Teams for Teachers and Students. It is used for the conduct of Online Theory, Practical sessions and assessments.

6. AMCAT Aspiring Mind Online Platform for the conduct of MSE and ESE examination and tests of placement Activity.

E-content development by teachers

Teachers are using lecture recording or screen recorder tools like Screencast-o-matic, PowerPoint screen recorder etc. to record their lectures. Some of the Teachers are developing their websites also.

Teachers record the videos of demonstrations of the practical in the laboratory by performing the experiments. Even virtual labs are created by chemical and computer departments. Apart from this, teachers are also creating youtube channels for their recorded videos and websites for their courses.

Sample links:

Virtual labs: 1. https://sites.google.com/chem.mitaoe.ac.in/separation-process-lab

2. https://smfe-iiith.vlabs.ac.in/exp/water-content/

3. https://phet.colorado.edu/sims/html/collision-lab/latest/collision-lab_en.html

YouTube Channel: 1. https://www.youtube.com/@nikhilbhalerao8305

2. https://www.youtube.com/playlist?list=PLC3Tsqcj-iX95rQC5-xlLu4ZkBlSrMtPF

3. https://www.youtube.com/@structuralaffairs4340

Course Web site: https://egrmitaoe.wordpress.com/

VPN Connectivity facility is available to access the shared resources of the labs so that students can access the licensed software from the department's lab and can perform practicals.

ICT Tools and Resources Available:

1. Institute has Branded IBM Lenovo and Dell Computers with Intel Pentium IV and above configurations – Intel Dual Core, Quadra Core, Intel I3, I5, and I7 Processor. All the Systems are connected through LAN.

2. Institute has a Secured WIFI Internet Access facility available for all the Teachers and Students either on their Smartphones or on their Laptops.

3. Classrooms are Equipped with LAN / WIFI Facilities and LCD Projector and Screen.

4. Institute has 500 MBPS Internet Leased Lines. Internet Connection is accessible to all Teachers Staff and Students after they get Authenticated through Radius Server from Sonic Firewall Secured Access. Internet is distributed through Cisco-based Network Switches and WIFI access Controllers and Access points.

File Description	Document
Any additional information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document
Link for Additional Information	View Document

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

Response: 22:1

2.3.3.1 **Number of mentors** ?????????????? ???????

Response: 137

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Link for additional information	View Document

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

Procedure for preparation of academic Calendar:

- The Institutional Academic Calendar shall be designed as per the requirement of all classes in every program.
- The number of instructional days in every academic term shall be decided as per the number of contact hours per week in the curriculum structure and the average hours required to complete all courses of a particular class.
- Guidelines of Savitribai Phule Pune University, UGC, and AICTE shall be considered for drafting the Academic Calendar.
- The Academic Calendar shall mention the period and the number of days required for different types of examinations, such as mid-term, end-term, oral, and practical.
- The Schedule of the Annual technical event, Annual cultural event, periodic Project Reviews, declaration of Detention List, result declaration, re-examination, and remedial terms as applicable and required shall be included in the Academic Calendar.
- Class Level Academic Calendar shall additionally mention Expert Guest Lectures, Field Visits, Industrial Visits, and Sessions for Content beyond Syllabus and exposure to the real world through various academic and industry experts.
- Academic Calendar shall be released to students after verification and validation from all Heads/Deans, Controller of Examination, and Director.

Procedure for Preparation of Teaching Plan:

- Faculty members shall creatively articulate course planning/Course Records to guide class learning for a specific course.
- The Institutional Academic Calendar, Class Level Academic Calendar, teaching scheme, and Examination Scheme shall be used to plan course content delivery and assessment.
- The course flow will vary as per the preference of the faculty members, the type of the course, and the needs of the students.
- Every session and flow of sessions shall be planned per the expected topic level, course outcome, program outcomes, and program-specific outcomes.
- The details of the course objectives, planning, assessment, and outcomes, shall be declared as a Course Description at the start of the academic term.
- There shall be at least 15 contact hours for one credit theory course and 30 contact hours for one practical credit course in a particular academic term.
- The course planning shall help the students to find strengths and weaknesses and target areas that

need additional work.
- Makeup sessions shall be provided to academically weak students and students who missed a few academic sessions due to medical issues/other specific issues.
- This shall help to formally review the progress of the course and make the necessary changes to reinforce or extend learning.

Adherence to the Academic Calendar and Teaching Plan:

- All Activities are conducted per Academic Calendar, and a report on adherence to the Academic Calendar is created at the end of each term.
- The Class coordinator's teaching/course plan is verified fortnightly and reviewed by School Deans monthly.
- If found variance, the plan for covering up the curriculum is done by Teachers and verified by School Deans.
- At the end of the semester, the dean of Academics reviews the teaching plan for the timely completion of academic activities.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 96.04

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 20.57

2.4.2.1 **Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit.* year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
40	33	32	28	25

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 8.36

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

Response: 1145.65

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 12.2

2.5.1.1 **Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
15	15	11	10	10

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0

2.5.2.1 **Number of complaints/grievances about evaluation year wise during the last five years**

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

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Response:

Examination procedures

- A completely equipped, functional Examination section exists since the grant of autonomy in 2016. All examination processes from course registration to the declaration of results are well-defined. Two examinations are conducted each semester. Question papers are set in line with the expected course outcomes and based on varying levels of the revised Bloom's taxonomy. These question papers are audited by internal and external subject experts.
- Proper guidelines are defined for the various processes namely paper setting, assessment, examination conduction and result declaration.
- The results are first moderated by the examination moderation committee and then published to the students.
- Additionally, re-examinations are conducted within ten days of the declaration of the result and remedial examinations, where the course is taught again, are conducted at the end of the academic

year, to provide more attempts to slow learners and unsuccessful students.
- During the Covid pandemic period all the examinations, theory and practicals, were conducted online. Currently, all examinations have been shifted to offline mode for the last year.
- Examination reforms are being explored. Many alternate methods of assessment based on problem-based and project-based learning have been explored and implemented.
- The end-semester results are declared within ten days of the conclusion of the examinations.

Processes/Procedures Integrating IT

- The entire examination process from registration to the declaration of the result is automated. An in-house developed ERP is used for handling all exam activities-starting with Exam Registration, generation of Admit cards, Exam Summary and Name List Preparation, issuing appointment orders to External and internal Examiners and paper setters, MarksEntry, preparation of Grade cards and generation of the final ledger of results.
- A new professional ERP is also being developed for examination management and other processes related to the examination. It will be implemented in totality within a couple of months.

Continuous Internal Assessment System

- Thirty percent of the total marks for each course are allotted to the continuous internal assessment component. These are earned by the students on the basis of their performance in the various assessment activities, throughout the semester, like Assignments, Quizzes and various collaborative learning activities. The concept of open-ended assignments has also been introduced and implemented.

- There is complete transparency in the assessment for all courses. All students are allowed to view their internal assessment marks and the marks awarded after the completion of each activity.

- The paper-showing activity is also a regular feature in the examination process. In this activity, the students are shown the assessed answer scripts of any and every examination that is conducted in the semester-including the mid-semester and semester-end examination. The students submit requests for re-evaluation and verification if required after he has seen their assessed answer script.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6 Student Performance and Learning Outcomes

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

Response:

Course Outcomes (COs)

COs are statements indicating what a student can do after completing a course. *The **Revised Bloom's taxonomy** will help to identify what kind of level of learning the learners acquire.* Each course can have a set of 3 to 6 Course outcomes. The course outcomes are formulated through the interactions of the course champions with all stakeholders, and they are compiled once approved by the Chairman, of the Board of Studies (BoS). Each Course Outcome must have an action verb and must be Specific, Measurable, Achievable, Relevant, and Time-bound.

Programme Outcomes (POs)

NBA specifies the Program Outcomes. All the POs are categorized among The Knowledge, Skill, and Attitude domain of learning. Among the 12 POs, PO1 to PO5 focus on the Knowledge domain, PO 6 to PO 9 focus on Attitude, and PO 10 to PO 12 focus on Skills.

Programme Specific Outcomes Outcome (PSOs)

If required, each program can add 2 to 4 Program Specific Outcomes (PSO), depending on the domain. PSOs describe what the graduates of a specific engineering program should be able to do. PSOs are defined based on the Forefront research areas of the Department.

Dissemination of COs, POs and PSOs

The COs, POs and PSOs are informed to the different stakeholders through different modes. The faculty also tells the students during the course discussions, and the parents are informed during the parent meetings. All the Alumni and Industry are communicated through email. The same is also available on the institute's website under IQAC.(https://mitaoe.ac.in/mitaoe-quality-assurance.php). Additionally, the display of all the COs, POs, and PSOs will be available in Dean's Office, Department Office, Laboratories, Department Library, Classrooms, Curriculum and Syllabi, Lab Manuals, Course files, News Letter, and Department Magazines.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document

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

Response:

Course Outcomes (COs)

COs are statements indicating what a student can do after completing a course. *The **Revised Bloom's taxonomy** will help to identify what kind of level of learning the learners acquire.* Each course can have a set of 3 to 6 Course outcomes. The course outcomes are formulated through the interactions of the course champions with all stakeholders, and they are compiled once approved by the Chairman, of the Board of

Studies (BoS). Each Course Outcome must have an action verb and must be Specific, Measurable, Achievable, Relevant, and Time-bound.

Programme Outcomes (POs)

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Programme Specific Outcomes Outcome (PSOs)

If required, each program can add 2 to 4 Program Specific Outcomes (PSO), depending on the domain. PSOs describe what the graduates of a specific engineering program should be able to do. PSOs are defined based on the Forefront research areas of the Department.

Attainment of Cos, POs and PSOs

The evaluation of the attainment of COs, POs and PSOs is done using Direct and Indirect tools. The direct tools are mid-semester, end-semester, continuous assessment, practical examination, project, seminar, etc. Indirect tools used are various surveys like the course exit surveys. Alumni feedback, Employer surveys etc.

The results of each course of every batch of passing out students have been considered in assessing the level of attainment of COs and POs. Initially, the faculty will assess the contribution of the different tools to the individual COs. Then for each CO weightages will be assigned and based on the actual performance of the students and the contribution of various tools, the CO scores will be obtained. Now the CO scores will be compared with the target set to assess whether the student had attained that CO or not. Depending on the number of students attaining the CO, the % of attainment will be calculated. All these are done in the Excel template at the end of the semester. Once the CO attainments are calculated, the direct attainment for the POs is done through the CO – PO articulation matrix and the actual % attainment for every CO. The exact process will be used for the attainment of PSOs also.

File Description	Document
Any additional information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 92.34

2.6.3.1 **Total number of final year students who passed the examination conducted by Institution.**

Response: 615

2.6.3.2 **Total number of final year students who appeared for the examination conducted by the Institution.**

Response: 666

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Any additional information	View Document
Link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all currently enrolled students	View Document
Upload any additional information	View Document
Link for any additional information	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

Research is an integral part of the curriculum at MIT Academy of Engineering. The institute envisages innovation and technological development through its R&D activities. The institute cultivates academic and research collaborations with reputed universities, Governments, and Industries to meet the immediate needs of society and industry. The institute also remains committed to long-term research as the foundation for future development.

Research Policies: Institute has well-defined policies, as mentioned below, to motivate faculty members to undertake research activities.

1. R&D Manual
2. Intellectual Property Rights Policy
3. Consultancy Policy
4. Code of Ethics for Research Publications
5. Research and Development Incentive Scheme.

The policies are updated in accordance with the National regulatory bodies such as AICTE, NISP, KAPILA, and UGC. The IPR policy has been updated in the academic year (AY) 2020-21 according to the guidelines of the National Innovation Start-up Policy. Consultancy Policy has been updated in the AY 2019-20.

Research Sensitization: To enhance research awareness by organizing national and international conferences, symposia, workshops on research methodology, IPR and patents, talks, and discussions with eminent researchers.

Research Thrust Areas: To promote intensive and dynamic research to get tangible research outcomes, the following schools have departments that have identified Research Thrust areas as given below:

1. School of Electrical Engineering

*a. Department of Electronics and Telecommunication***:** Signal & Image Processing, VLSI and Embedded System, Wired & Wireless Communication, Systems & Control.

*b. Department of Electronics Engineering***:** Signal Processing, VLSI and Embedded Systems, Power Electronics Technology, Mechatronics, Robotics.

2. School of Mechanical & Civil Engineering:

a. Department of Mechanical Engineering: Flow Physics and Computation Engineering, Materials and Manufacturing Systems, Design Development and Deployment, Robotics, and Automation.

b. Department of Civil Engineering: Mechanics, Material & Structures, Geotechnical & Transportation Engineering, Project Planning & Control, Environmental & Water Resource Engineering.

3. School of Computer Engineering and Technology

a. Department of Computer Engineering: Computer Networks & Communications, Database & Web Development, Computational Intelligence, Systems & Cloud Computing.

b. Department of Information Technology: Computer Networks & Communications, Database & Web Development, Computational Intelligence, Systems & Cloud Computing.

4. School of Chemical Engineering

*a. Department of Chemical Engineering***:** Process Engineering, Advanced Separation Processes, Reaction Engineering, Modelling, Energy, and Sustainability

Seed Money:

Institute biannually calls for proposals to support faculty and students' research work. Faculty and students can use this fund to initiate research work so that they can get quality research outcomes in terms of research publications /IPR.

Research Publications:

Institute encourages faculty members to publish research outcomes in Scopus/Web of Science-indexed journals. Faculty members and students are supported to present papers at National/International conferences.

Research Facilities:

Research Software:

Institute has research software such as MATLAB, Java, C++, CCNA and Embedded Linux, LABVIEW, ANSYS, Revit, CATIA, and ASPEN.

Research Labs Equipment:

State-of-the-art equipment like high-frequency structure simulator, ‘HFSS USRP SDR bundle’ in Advance Communication Laboratory, and ‘Cadence and Mentor Graphics front end and back design tools’ in the VLSI Design Laboratory. Equipment such as CNC grinding machines, Universal Testing Machine, and Wind Tunnel are a few to be mentioned.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 0.49

3.1.2.1 **The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
0.95470	0.83637	0.68065	0	0

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 0.13

3.1.3.1 **The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years**

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

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document

3.2 Resource Mobilization for Research

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

Response: 10.46

3.2.1.1 **Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
0.1	3.86	0	3.5	3

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by government and non-government	View Document

3.2.2 Percentage of teachers having research projects during the last five years

Response: 0.76

3.2.2.1 **Number of teachers having research projects during the last five years**

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

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 4.38

3.2.3.1 **Number of teachers recognized as research guides**

Response: 6

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 17.14

3.2.4.1 **Number of departments having Research projects funded by government and non-government agencies during the last five years**

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

3.2.4.2 **Number of departments offering academic programes**

2021-22	2020-21	2019-20	2018-19	2017-18
7	7	7	7	7

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Paste link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

Ecosystem for innovation, creation, and transfer of knowledge:

1. Establishment of Entrepreneurship Cell (E-Cell): The cell provides support systems for delivering sessions related to entrepreneurship and controls all the related activities.

2. Collaboration with Wadhwani Foundation for all E-Cell related activities: Wadhwani Foundation is a philanthropic trust who supported development and implementation of the courses related to entrepreneurship.

3. Institute Innovation Council (IIC): The council organises various events to benefit the students. The events are creating innovation awareness and motivation for research and innovation.

4. Incubation center at the institute: Provides physical space for the students under incubation and support systems for the incubation process.

5. Department Review Committees (DRC) for evaluation of research proposals, technical papers, and patents.

6. Collaboration with MS Law Partner firm for guidance on patent drafting, and patent processes (filing, publication, and examination).

E-Cell and IIC:

- Under our entrepreneurship (e-Cell) umbrella, the institute has organises workshops, competitions, webinars, and seminars on Innovation, IPR, and start-ups to inspire students for entrepreneurship and start-ups. Programs such as Practice Venture (PV), Institution’s Innovation Council (IIC), and participation in competitions such as the National Entrepreneurship Challenge are a part of the functioning of e-Cell.

- Besides PV and IIC, e-Cell also conducts its events with the support of the Wadhwani Foundation.

- With the collaboration of the Wadhwani Foundation, we offered two courses for the B.Tech program such as Basics of Entrepreneurship and Business Strategies.

- Winner at NEC-2019

- Start-up Club Award

- 4-Star performance at the Institute Innovation Council (IIC) an Initiative of MHRD-GOI,

ARIIA (Atal Ranking of Institutions on Innovation Achievements):

- In the first ARIIA - 2019 Ranking, MIT AOE stood in the top 100 at National Level.
- In ARIIA-2020 Ranking, MITAOE stood in the "Band B" top 26-50 institutions, under Private/Self Financed College/ Institute
- In ARIIA-2021 Ranking, MITAOE stood in the band of "Performer" under Private/Self Financed Technical Institute.

MITAOE Entrepreneurial Development Foundation:

- The journey of e-Cell and MITAOE Entrepreneurial Development Foundation started in 2018-19 to inculcate entrepreneurship and innovation culture amongst students and promote innovation, entrepreneurship, and start-up culture at MIT AoE campus.
- The MITAOE Entrepreneurial Development Foundation acts as an Incubation Centre within the campus for student start-ups, currently, 28 start-ups are working at Campus on their ideas and identifying problems.
- We are proud to share the achievements received within 1.5 years, Approval as a host institute for setting up Business Incubator under the MSME-BI scheme. In Maharashtra state, only 2 institutes received such approval and at the national level total of 26 institutes received the same.
- A Total of 8 start-ups have been incorporated and got recognition from DIPP, Start-up India Initiative.

Hence the institution has created an ecosystem for innovations, creation, and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation, etc.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response: 154

3.3.2.1 **Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
23	15	15	77	24

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Any additional information	View Document
Link for additional information	View Document

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the last five years

Response: 0.67

3.4.2.1 How many Ph.Ds are registered within last 5 years

Response: 4

3.4.2.2 Number of teachers recognized as guides during the last five years

Response: 6

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 0.63

3.4.3.1 Number of research papers in the Journals notified on UGC website during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
27	23	35	9	5

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 1.51

3.4.4.1 **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
39	92	31	41	35

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response:

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response:

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 29.66

3.5.1.1 **Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
3.332	10.8331	4.04	1.008	10.45

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Response: 0.85

3.5.2.1 **Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
0	.59788	0	0	.24795

File Description	Document
List of training programmes, teachers and staff trained for undertaking consultancy	View Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community,-sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

We, at MIT Academy of Engineering, firmly believe that apart from making the students sound and competent in technical education; it is our prime responsibility to create an environment for holistic development as well. A number of initiatives like the National Service Scheme (NSS), Unnat Bharat Abhiyan, Swachh Bharat Abhiyan, Robin Hood Army, and Green Club are also given priority to technical education with that intent only.

The extension activities, on the one hand, bridge the gap between community, academics establishing a lost connection, and more importantly, it makes the students aware of the social issues and sensitizes them about social debt thereby motivating and encouraging them to take coordinated efforts to ease the life of the community. It serves the purpose of “Education and Service” to the community and by the community.

The initiatives like rainwater management, cleanliness drive, and toilet building create awareness among the villagers to save water and keep hygiene to protect the family members from various diseases. Tree plantation drive, Ganesh Visarjan campaign builds environmental sensitivity among the people. Blood donation camps, different kinds of awareness drives like Government Schemes, and digital literacy on the one hand bring the villagers on an equal platform with the urban people and pave the way for active participation of the students in social life. While working in the community, students must confront many kinds of issues, problems and difficulties. They come out of their comfort zones and actively deal with real-time problems and issues. A mere focus on academics runs the risk of incomplete growth of the personality of the student. Such outreach programs help in shaping the various dimensions of the personality of the

student like empathy, compassion, resilience and leadership. The larger purpose which is served by such outreach programs is to inculcate the bond of patriotism, national integration, brotherhood, and communal harmony among students.

To summarise, the institute conducts various activities in the neighbourhood community and sensitises the students on various social and community related issues. This ensures the holistic development of the students.

File Description	Document
Upload Any additional information	View Document

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 11

3.6.2.1 **Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
2	1	6	1	1

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 17

3.6.3.1 **Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
4	3	3	5	2

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 8.55

3.6.4.1 **Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
326	392	118	320	100

File Description	Document
Reports of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Response: 432.8

3.7.1.1 **Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work**

2021-22	2020-21	2019-20	2018-19	2017-18
728	762	646	28	0

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document

3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 54

3.7.2.1 **Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
19	12	9	9	5

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The Institute has the new-age infrastructure and physical facilities to fulfil all current teaching-learning requirements. The institute keeps on updating infrastructure and physical facilities as per the changing requirements of the curriculum.

Classrooms

- The Institute has a total of 43 classrooms.
- The size of the classrooms is as per specifications stated by the AICTE. All classrooms are properly ventilated with natural light and adequate electric lighting.
- Supplementary fixtures and facilities for conducting: lectures such as whiteboards, notice boards, LCD projectors, Wi-Fi, microphones, and laptops are available in each of the classrooms.
- Larger classrooms also have well-equipped audio equipment including inbuilt speakers.

Laboratories

- The institute has 72 laboratories with modern facilities.
- These laboratories are well-equipped to meet the requirements of the curriculum. advanced software has also been installed in the laboratories' computing systems to meet the course requirements.

The institute also has Tutorial Rooms, Drawing Halls, Seminar Halls, a Counselling Centre and other special infrastructure for student support to meet the requirements of the curriculum.

Computing Equipment

- The institute has a robust IT infrastructure and computing equipment in all departments to meet the curriculum requirements.
- It has a massive network of 1091 computers, 100 printers, scanners, high-end servers, adequate license software, operating system SW, Microsoft campus license, required hardware, firewall systems etc. to meet the academic and research requirements.
- The campus is equipped with a 500 Mbps internet lease line for smoother conduct of teaching and laboratory sessions.
- Various digital resources such as GoTo Webinar, MS Teams, Moodle, ERP SYSTEM etc.
- Institute has its ERP System CollPoll which is developed, managed and maintained by Butterfly Innovations Pvt Ltd – Bengaluru. (Year 2020-21), Ion CUDOS (2021-22), Mastersoft ERP Solutions (2022-23), and Open Broadcaster Software (OBS).
- Studio: Recording, Google meet, Pen Tablet, Virtual Labs, VPN facility, etc. identified by the Institute to conduct effective delivery of online lectures and meetings. Besides, the institute also framed a monitoring core committee aimed to verify the faculty level, quality of internet, laboratory

equipment, voice clarity, video, quality of presentations, punctuality, inter-activeness during the live sessions, use of polling, etc.
- Upgradation of IT infrastructure by procuring new equipment such as laptops, tablets, Wi-Fi infrastructure, Webcams, headphones etc.

Library

- The Central Library has a rich collection of print and online resources like 48929 books, 142 periodicals, 2792 reference books, 835 bound editions, e-journals (IEEE,SD,ASME,ASCE, N-LIST) e-books (MGH, Wiley, Pearson, Elsevier, N-LIST), e-database (DELNET), digital libraries etc. to meet the academic curriculum requirements of the 137 faculty and 3010 student.
- 10 computers are specifically allocated in the Digital Library and Multimedia section of the Central Library to access the Digital Library facility equipped with network connections. The purpose of providing digital library facility is to access the subscribed, in-house resources and library databases available in the library without any hindrance with good internet facility.

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

4.1.2 The institution has adequate facilities for cultural activities, yoga, games and sports (indoor & outdoor); (gymnasium, yoga centre, auditorium, etc.,)

Response:

Cultural activities and sports are facilitated and organized as *Student Activities*. There are 24 clubs present in MTAOE. These clubs are categorized mainly into 5: **Technical, Cultural, Recreational, Social and Sports.** These clubs are open to all branches of students and nurture interdisciplinary teamwork among students. A well-organized student council is formed yearly which is a backbone for all events and activities in the college.

Cultural Activities

- MITAOE campus life is always very vibrant and cheerful due to lots of student activities.
- For cultural events, a student activity hall (approx. 1539 sq.ft.) is made available and can accommodate more than 200 students.
- The open Amphitheatre (11 X 26 meters; established in 1999) is where nearly 400 students can participate in various cultural activities.
- There are 5 different Cultural Clubs established i.e. dance, singing, drama, music and art and craft activities. Each club has an event calendar and is funded by the college to organize these events.
- The main cultural activities are Ganesh Utsav, Dandiya, musical concerts, art day celebration, annual social gathering, shiv Jayanti, Ambedkar Jayanti, a national art day- *Articia*, etc. where more than 2000 students participate throughout the year. Cultural club students always participate in national level multi-talent event *Firodiya Karandak.*

Yoga and Meditation

- The institute has been conducting Yoga and meditation activities throughout the year.
- International Yoga day, meditation programs, and health awareness programs are always organized by the Institute.
- The college lawn and open hall of design building are used for yoga activities.
- During the pandemic also many online Yoga and meditation sessions were organized.

Sport facilities

- We understand that Sportsmanship attitude plays a crucial role in developing the personality of students. The institute has a 53820 sq. ft. outdoor sports ground and 1539 sq. ft. indoor hall for sports. MITAOE students participate in various sporting events throughout the year.
- Outdoor games such as kabaddi, kho-kho, football, basketball, volleyball, and cricket and Indoor games such as table tennis, chess and carom are played by MITAOE students.
- Many of the students have achieved various accomplishments in it. A gymnasium is available to support a healthy lifestyle for the students.
- Students are encouraged to participate in the national, state as well as zonal level tournaments.
- Experts and coaches for various sports are made available for students.
- Facilities such as badminton or swimming are made available to the students on a need basis.
- Sports day is celebrated with various sports events like Athletics, Long Jump, Volleyball, Table Tennis, Cricket, Chess, and Carom etc. where both staff and students participate. Inter-departmental sports competitions are also popular among students and they strive to win for sport shield during an annual social gathering.

Following sports facilities are available at MITAOE

- Cricket ground
- Indoor game hall
- Place for Yoga
- Basketball Court
- Running track
- Volleyball Court
- football ground

File Description	Document
Upload any additional information	View Document
Geotagged pictures	View Document
Paste link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. *(Data for the latest completed academic year)*

Response: 100

4.1.3.1 **Number of classrooms and seminar halls with ICT facilities**

Response: 43

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Paste link for additional information	View Document

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response: 10.66

4.1.4.1 **Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
64.34	5.56	69.05	244.55	157.09

File Description	Document
Upload Details of Expenditure , excluding salary during the last five years	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

MIT Academy of Engineering’s central library was established in 1999 since the inception of the institute. Currently, it is housed in the D Block and it occupies the entire 2nd floor. The total area of the library is 795 sq. M. The central Library is well-ventilated and has adequate infrastructure to meet the students’ requirements. It has a centralized AC reading hall with a capacity of 250 students. The central library is open all days of the year except for 3 national and Holi/Diwali holidays.

- The central library system is automated using ILMS software namely “SLIM 21”.
- The college purchased library management software in 2001 and since then the library is operating

its day-to-day operation using SLIM++.

- In 2007 the library switched from SLIM++ to SLIM 21 (upgraded software) and after that, every year the library is getting an upgraded version (The software is maintained through AMC).
- SLIM21 is an integrated, multiuser, multitasking library management software developed using VB as the front end and Posture SQL on Linux as the back end that supports in-house operations of the library.

Name of the Software	SLIM-21
Version	3.9
Nature of automation	Automated
Year of Automation	2001
Last up-gradation	June 2022

The institute has purchased the following modules under the software

Acquisition: To create a database of newly arrived books.

Cataloguing: This allows preparing the database of books, journals, project reports and magazines available in the library as per title, author, subject, publisher, type of learning resource and year of acquisition.

Circulation: This module is used to track the status of the book such as issued, returned, borrowed, and renewed by either student or staff.

Serial control: This module allows the library to keep a record of the periodicals and magazines.

Utility: This module allows the creation of item types, borrowers, admin, supplier etc.

Statistics: This module allows to generate the statistics of the library transactions.

Web-OPAC: Online Public Access Catalogue provides access to library resources. This facility is made available through the intranet as well as the internet. Link : http://43.227.20.36:82/w27/

General Search: Users can search the library resources using Title, Author, Publication, Keywords and Classification number. Advanced Search: The searching can be done with various combinations such as Title etc.

Advanced Search: Author, Publication, Keywords, Classification number. Accession Search: Quick search of books can be done by using the accession numbers.

- Books in the Central Library are barcoded for maintaining records of circulation and other records.
- Central Library has developed a digital library, which consists, of project reports, e-books, a syllabus, an old question bank, list of various resources.
- We have integrated these resources with the web-OPAC (SLIM SOFTWARE) through which users can access digital library resources remotely.
- The Central Library is having 10 PCs in Digital Library and Multimedia Section, from where MITAOE-authorized users can access e-resources and the library database.
- The central library has a document scanner, printer, Xerox and CC camera surveillance system for security etc. available.

File Description	Document
Upload any additional information	View Document
Paste Link for additional information	View Document

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e-ShodhSindhu, Shodhganga Membership etc	View Document

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 13.53

4.2.3.1 **Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
23.27	0	11.07	25.18	8.13

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

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

Response: 11.73

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

Response: 369

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 ***Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities***

Response:

MITAOE Alandi, Campus is well equipped with the 500 MBPS (1:1 BW) Internet Lease Line. Internet is distributed through LAN and WIFI Connectivity. Which is provided on the Fiber Optic Cable Media as well as on RF Media.

- Secured Internet Access get provided through Dell Sonicwall Firewall.
- All the faculty / Staff and the Students can browse the internet using Sonicwall user credentials and authentication from Radius Server and Sonic Firewall. Sonicwall firewall unit is kept updated with its latest Firmware package.
- **Symantec Endpoint Protection Antivirus**: Besides Sonic Firewall, the institute also has Antivirus Software installed on every system for preventing the Systems and the Servers from virus attacks.
- **Secured WIFI Internet Connectivity** is available on Campus. Faculty and Students have to register their Laptops or Smart Phones MAC Addresses to avail the WIFI Internet access.
- Following is the Registration URL :
- https://goo.gl/forms/3iHHgeXx9WWI1C6q1
- **Budget allocation for IT facilities:** Institute allocates Every Department Separate Equipment Budgets to Purchase the necessary Computer Systems, required Software, Printers and other IT Related equipment. At the Institute Level, all requirements get collected centrally every year and accordingly get purchased and distributed.
- **Computer Systems:** Institute has IBM / Lenovo / Dell Based Desktop Systems / Laptops / Server Systems. The Institute continuously keeps on updating the latest Computer Systems for the Students and their Laboratory use.
- **Networking Equipment hardware/software:** The Institute has a Setup of its LAN/WAN Infrastructure equipped with CISCO Platform or D Link Network Switches, Access Points, WIFI Controller units and WIFI devices.
- **Language lab**: The Institute has a well equipped Laboratory for Language Lab with Multimedia based Computer Desktops, Headphones with MIC, Internet Access, and LCD Projector, where students from Rural Backgrounds who do not have a good command of English, get Trained by our Faculty in Oral and Written Communications Skills as well as Soft Skills. Those Students who are already good with their English Communication are provided training in one of the Foreign Languages like German or French.
- **Internet access with speed:** Institute has **500 MBPS 1:1 BW** Internet connectivity from Gazon

Communications India Ltd. for providing the latest LMS facilities Institute is continuously upgrading the Internet Bandwidth and its Speed for motivating the Faculty and Students for R&D activities.

- ERP SYSTEM: The Institute has its ERP System [CollPoll] which is Developed, managed and Maintained by Butterfly Innovations Pvt Ltd – Bengaluru. (2020-21), Ion CUDOS (2021-22), Mastersoft ERP Solutions (2022-23) which include the ERP Database of Admission Process, Students –Staff- Faculty Master Data, Students' Academics Data, Exam Data, Academic Management, Exam System, HR System, Management of various Service Desk for IT Services and etc.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 3:1

File Description	Document
Upload any additional information	View Document
Student - computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution.

Response: ?50 MBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.3.4 Institution has the following Facilities for e-content development

1. **Media centre**
2. **Audio visual centre**
3. **Lecture Capturing System(LCS)**
4. **Mixing equipments and softwares for editing**

Response: A. All of the above

File Description	Document
Upload Additional information	View Document
Institutional data in prescribed format	View Document
Link for Additional information	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 91.03

4.4.1.1 **Expenditure incurred on maintenance of 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
760.57	720.68	684.84	934.50	949.82

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

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

Response:

The MITAOE adopts standard systems and procedures for maintenance of the physical, academic and support facilities for the laboratory, library, sports complex, computers, and classrooms. The college has a full-time infrastructure and estate manager & team under the guidance of the Registrar to look after all types of maintenance. In addition to that the college has also external housekeeping services for the cleanliness of the college campus. Every School is allocated a separate budget for repairs and maintenance.

Classrooms :

- The designated staff meticulously maintain hygiene, cleanliness and infrastructure on the campus so as to provide a congenial learning environment. Classrooms, Staffrooms, Seminar halls Laboratories, etc. are cleaned and maintained regularly in terms of civil, mechanical and

cleanliness. Fire extinguishers are also placed at prominent locations and spots as a safety measure.

- The classroom schedule and assignments of the classroom are decided by the timetable committee, headed by the Deputy Director of Academics & Research and the Director. In addition, the school deans and timetable committee decide the allocation of the laboratories according to necessity in accordance with the timetable in such a manner that will ensure maximum utilization without any problems.
- Every classroom is equipped with IT facilities like an internet connection, LCD projection, smart board, etc. for an effective teaching-learning process.
- Classrooms are well kept by the housekeeping department and technical support in terms of projectors etc. is given by the systems department. Laboratories are cleaned by the school Peons and Housekeeping staff and the equipment are well maintained by the Lab Assistance through regular check-up and upgrades.
- We have standby DG set for power backup and UPS for uninterrupted conduction of classes and lab sessions. Guidelines and safety measures are displayed in all laboratories.

Library :

- The MITAOE Central Library has a well-qualified Librarian and other supported staff to ensure the efficient conduction of library functioning.
- The library has a good number of cleaning staff to maintain the cleanliness of its premises. The library has maintenance in charge of periodic cleanliness of ITC infrastructure, books, furniture and fixture.
- The Central Library also does have an Annual Maintenance Contract for the library software every year. The Library has installed a suggestion box at the entrance gate and also kept a feedback register at the circulation counter for getting suggestions from the users for continual improvement of Central Library.
- The library has an ample number of books and online resources, which are being continuously updated in terms of the latest books, journals, e-resources and digital library. The central library follows the standard procedure as per the Quality system manual (ISO).
- Central Library equipment and premises are cleaned and maintained by the library peons and housekeeping staff on a daily basis, apart from it, regular pest control is also conducted throughout the campus at regular intervals.
- Currently, the MITAOE Central Library offers a library membership only to its authorized faculty, staff and students to access its resources and facility. Our users refer to the books purchased in the year 1999-2000, so at present, we have not weeded out any book from the central library.

ICT Infrastructure :

- We have an in-house technical team, which takes care of all technical issues. In every Laboratory, Lab Assistants are also trained for primary-level error detection.
- MITAOE Lab assistants are proficient in testing and resolving basic faults. In case, the fault does not get resolved at their level it is reported to the System Department. Systems Department’s technical team solves the problem.
- The system department retains a few regular components/devices in stock for emergency replacements. If the fault is related to Mother Board – Component level or in case any functional board needs to be replaced, the equipment is sent for repairs to experts outside the campus.
- IT Network Infrastructure is maintained by the Systems Department itself. MITAOE has Dell NSA 4600 Sonic firewall, and Cisco Based Switches and Cisco-based Access points WIFI Controllers in

the Network.

Sports :

1. MITAOE has a Sports Ground, indoor games facility and a well-equipped Gym which is maintained and upgraded by the Physical Director.
2. Sports material is issued to the students in an issue/return register indicating the interest of the students as well as the utility and demand of the items. It also helps us to make proposals to be made for the next academic year.
3. Equipment related to various physical activities and sports is updated on regular basis. The sporting goods are maintained in an efficient manner through regular monitoring by utilizing the required workforce.

Civil, mechanical and Electrical maintenance:

The maintenance of civil, mechanical and electrical works is needed for getting uninterrupted services which facilitate the smooth and efficient functioning of the institution.A dedicated and qualified staff member is appointed by the institute for the above-said facility.

- Frequent maintenance of damaging components like window glasses, plumbing components, sanitary ware, floor tiles, doors, classrooms, benches, boards, furniture, faculty rooms, internal roads maintenance, proper water supply, sanitation in the campus, water tanker, etc. is done by the infrastructure head.
- The college has followed standard procedures for the service and maintenance of equipment and machinery.
- A dedicated faculty in charge and his team deal with the power supply and its maintenance for the smooth functioning of the college. Monitor electrical equipment such as generators, UPS, and Batteries monthly and enter the condition/Status of equipment in Logbook. The electrical maintenance team also maintain the solar power panels and institutional lighting and electrical transformer.

Medical and Ambulance service:

The institute has a dedicated medical doctor on campus. The institute also has a dispensary and MOU with a nearby hospital for the well-being of our staff and students.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 55.27

5.1.1.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

2021-22	2020-21	2019-20	2018-19	2017-18
1892	1828	1888	1322	1208

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Institutional data in prescribed format	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

Response: 0.5

5.1.2.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

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

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3 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. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 67.61

5.1.4.1 **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
1964	2823	1294	2816	1025

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 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

File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 54.47

5.2.1.1 **Number of outgoing students placed year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
494	440	482	330	311

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch).

Response: 9.59

5.2.2.1 **Number of outgoing student progressing to higher education.**

Response: 59

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 12.34

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

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

5.2.3.2 **Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
126	121	114	120	89

File Description	Document
Upload supporting data for student/alumni	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Response: 53

5.3.1.1 **Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (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
8	9	20	10	6

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at inter-university / state / national / international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The student council at MITAOE is formed to inculcate leadership and team-building qualities among students. The class representatives of all classes are members of the student council.

Class representatives, Student council members are selected by the rules and norms stated by the Government of Maharashtra Gazette part 8, dated 11/01/2017.

Thus Student Council is a group of elected students working together with the guidance of the dean, student affairs within the framework of a constitution or bylaws to provide a means for student expression and assistance in college affairs and activities. The major objectives of the MITAOE student council are as follows:

1. To initiate, implement, and complete projects and activities which will be of help to the school, the students, the faculty, the administration, the Board of Trustees and the community.

2. To develop and provide opportunities for leadership and service in the local school and in the community.

The President Secretary and Ladies representative of the Student Council is part of the College Development Committee (CDC). They put students' perspectives in the meeting and contribute to the development of the college. President, Ladies Representatives are part of student welfare and extra-

curricular and co-curricular committee. IQAC of college also has student council representation.

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 9.2

5.3.3.1 **Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
10	9	9	8	10

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

The institution has registered for the Alumni Association in the year 2019-20.

Registration number: MAHA / 1106 / 2019 / Pune, Date: 01 / 08 / 2019

The Objective of the MITAOE alumni Association is to provide alumni with resources, relationships and opportunities that help them make contributions of immediate and enduring value.

The launch of the MIT Academy of Engineering Alumni Association marks an exciting milestone in the history of the MIT Academy of Engineering. The Alumni website serves as a powerful communication

tool for enhancing the ties between the Alumni, its members and MIT AOE students. The launching of the website was the first step of a series of communications between MITAOE and the extended family of alumni and friends.

The Alumni of MITAOE always contribute to the development of students by extending support in providing expert talks, seminars, and placements and internships. Many of the Alumni have supported economically needy students. In this pandemic, support of Rs. 48000/- was given to one of mitaoe students.

Many of our alumni are working in the field of social work, so the same legacy is passed to our students by providing Social internships. Three different social internships have been provided by alumni to the students in the year 2021.

Alumni are contributing to curriculum development, they are working as active Board of Studies members at our institutes.

There are frequent interactions between alumni with the students, they always share their on-field knowledge and experience to enhance their capabilities. Alumni also play important roles in many co-curricular and extra-curricular events such as BAJA, Go-kart, Robocon, Aero modelling etc. They provide mentorship and sponsorships to these events.

The alumni association also started a Social awareness group for MITAOE students named AAdhar where students will take the lessons of Social responsibilities from their Seniors.

Thus the Alumni Association of MITAOE is helping the students as well as the entire institute to grow by all means.

The Portal developed for Alumni Engagement is also serving as a support platform for career opportunities for all connected alumni, They get a chance to know about better opportunities available for them across the globe. The Placement cell of MITAOE also extends support to alumni for their career opportunities.

Hope the bond of alumni gets strengthened over a period of time and results in great success for the betterment of students, alumni and the Institute.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

5.4.2 Alumni financial contribution during the last five years (in INR).

Response: C. 5 Lakhs - 10 Lakhs

File Description	Document
Any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Response:

The Vision and Mission of MITAOE are framed and appraised as per the global trends and requirements in technical education. To achieve the stated vision and mission the leadership is effectively designed as per the guidelines given by Apex bodies / statutory regulatory authorities and by-laws of the institute.
The Governance/Management of the institution is robust, transparent, hierarchical, decentralized and participatory. The management has delegated the power and authority to the Director to take decisions and execute them. The Governing Body and the Director jointly work towards designing and implementing of quality policies. The Director is ably supported by the Deputy Director, School Deans and other Deans to achieve the set goals and objectives for the holistic development of students and to horn the skill sets and proficiency of the teaching and non-teaching staff. There are various well defined Statutory and Non Statutory committees that assist in ensuring effective governance.

The Director forms the committees under the convener ship of faculty, non-teaching Staff, Students, industry representative, subject experts and local representatives for the overall management of the various operations of the institute The institute strives to address the needs of society through innovative practices and policies. In addition there number of technical and non-technical club which inculcate and strengthen the hidden potential of the students through various extra and co-curricular activities that enables them to contribute to society as a responsible citizen. The management mobilizes funds for the enhancement of infrastructure, laboratory, library and administrative requirements, apart from creating an environment-friendly campus.

VISION

To be a new age learning centre for holistic development of students into professional engineers, to cater to the changing needs of techno-society.

MISSION

- To provide new-age infrastructural facilities blended with skill-based curriculum and activity-based pedagogical approaches to develop competitive engineering professionals to solve real-world problems.
- To prepare students for lifelong learning by transforming educational practices.
- To promote ethical and moral values by involving students in community services.
- To promote entrepreneurship and managerial skills by strengthening industry-institute interaction.

MIT AOE's strategic plan is built upon five core values Knowledge, Excellence, Integrity, Transparency, and Empathy. All activities at MITAOE are people-centric, imparting essential skills of the 21st Century, i.e., Critical Thinking, Creativity, Collaboration, Communication, Career, and Life Skills. This is drafted with the involvement of all stakeholders – faculty, staff, industry professionals, alumni, etc.
This plan sets the strategy and targets for all functions and units of the Institute for five years at the macro level and three years at the micro level. The implementation of the strategic plan and progress will be reviewed quarterly to assure progressive performance. Each key area has been mapped to objectives, actions, and measurable outcomes. The measurable outcomes are monitored and measured every quarter,

the effectiveness of the actions taken is reviewed, and corrective and preventive actions are proposed and implemented ensuring continual improvement.
Thus the governance of the institute achieves the defined Vision&Mission through effective leadership that is implemented using a decentralized and participatory method.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

Response:

It is always desirable to have the ability to work efficiently. With the same intention and thinking in the same direction of creating new leadership full of creativity, the college and management have adopted the functioning in a decentralization style. Each person has the independent decision-making power, which they can utilize for the betterment and progress of the academics on campus.
For decentralization, various committees have been formed at the institute level. Each committee has its role and responsibilities to carry on. Each committee has its objectives and goal to achieve and work efficiently in the same direction. Following operational level committees are working together in an institute:
Statutory committees: The Governing Body and Statutory committees are responsible for decision-making and overall development of the Institute with future planning and vision setting. Director, Associate Director, Academic Dean, School Deans, section heads, and student activity dean are responsible for proper planning to achieve the goal and objectives set by higher-level management. Setting the milestones step by step objectives is achieved like decentralization is one of the steps.
Non-statutory committees: Various committees have been formed to work at a lower level, this is the actual members who are working at sight to achieve the set goal and objectives for the institution. Decentralization is adopted in every section in the Institute, finance, administrative, student, admission, store and purchase, human recourses, training & placement, and academic sections.
The objectives have been kept in the academic sections on decentralizing course design, the review process, content inclusion, teaching methodology, experiment conduction, and laboratory utilization. This objective of decentralization shows a significant impact on curriculum design also. Each faculty has the freedom to include the content in a course to design a curriculum in-line with industry standards. It is desirable to involve all the stakeholders in developing the course. With the same intention, some standard procedures get followed while designing the course. One of the significant, responsible team of faculties, an expert in the said domain, sit together and discuss content by referring to international universities, national universities, various autonomous institutes, IIT, and NIT courses. After the brainstorming discussion, the draft contents of the course are finalized. In the next step of course development, the draft is getting forward to various stakeholders like industry experts in the said domain, experienced academic experts, alumni of the institution, board of studies members, and intended review committee members. We seek an honest and realistic review and comments on the course contents. Most of the time, they depend upon the feasibility, and as per the industry need, revision/iterations are carried out in course design. Once

the course is filtered out after the rigorous review process, it gets finalized and offered to students. Course Design Record is the best example to explain the complete decentralization process adopted on campus for academic excellence.
The Institute believes in proper planning and execution regarding the five core and supporting areas identified in the strategic plan.

File Description	Document
Any additional informatiom	View Document
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The Institute has well placed strategic plan, which consists of ten focus areas, mainly

1. Teaching Learning Process
2. Research and Consultancy
3. Student Support and Success
4. Enhanced Students' Experience
5. Enhanced Alumni Engagement
6. People & Welfare
7. Social Media Connect
8. Entrepreneurial & Innovation Ecosystem
9. Campus & Services
10. Sustainability

Out of all the well-deployed core areas, a case study of one of the focus areas (Student support and success) is presented below:

- Student Support and Success:

MITAOE is a sought-after campus for the major multinational corporations for campus placements. The Corporate Relations and Placement Cell (CRPC) has a legacy of providing quality placements to the students. Top players visit MITAOE to recruit engineers with innovative and reengineering spirit. The CRPC offers an excellent corporate interface by arranging interactive sessions with industry veterans. Soft skills training is imparted to the students to make them corporate worthy. The CRPC endeavours to provide excellent job opportunities to the students. It also inspires the students to become first-generation entrepreneurs. MITAOE's vision and beliefs consolidate in its efforts to ensure that its students become self-developed industrialists of tomorrow. The department works on aptitude test preparation, personality

development, and industry-institute interactions. Students have a mission of adding value to society through technological innovation. Thus, the recruiters have always found value in the quality of students at MITAOE.

- Activity details:

o To provide employability-based training through different curricular as well as co-curricular activities. (Communication skills, professional skills and employability skills related to mandatory courses in the curriculum)

o To conduct major/minor career assessment tests through AMCAT and B Tech Guru placement-ready platforms from the second year onwards for all the students, followed by counseling sessions.

o To provide the necessary training&assessment platforms for the personality development of the students from the employability perspective.

o To organize various expert sessions, technical series, webinars, seminars, and panel discussions on current trends in technology or industry requirements in collaboration with various industry professionals.

o To encourage the students for industry-sponsored projects and consultancy works to solve the real-time techno-socio-economic problems.

o To provide maximum industrial opportunities for short-term (4-6 weeks during June-July) Student Internship Programs (SIP) which are mandatory for all students to enhance their soft and technical skills.

o To connect the students with various MNCs for Semester Long Internship Programs (SLIP) to provide the industrial opportunity for them, to work as full-time interns during their 8th semester.

o To organize campus recruitment drives for UG and PG students.

o To create opportunities for the students to work in the field of their choice with industry leaders.

- Industry connects and placement outcome

1. The Institute has established a long-term relationship with many corporates for industry-sponsored projects, various internship programs, technical training, industrial visits, campus placement, etc., to bridge the gap between industry requirements and academia.
2. Around 500+ industries support the MITAOE students for different employability-related activities every year.

The impact of various employability activities has been observed on overall campus placement.

File Description	Document
Any additional information	View Document
Link for Strategic Plan and deployment documents on the website	View Document

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

Response:

MITAoE is a multi-disciplinary autonomous engineering institute that functions under the aegis of MAEER. The Director is the executive head of the institute. He chairs the position which is the authority on all academic matters. He is also a member secretary of Governing Body and Chairman of the Academic Council. Three Deputy Directors (Academics, Corporate & Administration) and four Deans (Faculty and Staff Affairs, Research and Development, Dean Students Affairs) assist the Director in his executive roles. The Registrar and senior officials in specific areas (Academic Affairs, Estate Management, Materials Management, Human
Resource Management, Finance and Accounts, Administration, Students and Autonomy, Personnel Training and Development, Research Publications and Public Relations, etc.) perform other administrative functions. In addition to academics and research, Deputy Director (Academics and Research) takes care of the library and digital infrastructure related to academics. Deputy Director (Corporate) takes care of industry institute interaction, training and placement activities, entrepreneurial activities, overall placement, and higher studies and international collaborations. Deputy Director (Administration) takes care of all functions related to accounts, stores & purchases, estate & infrastructure development, student admissions, electrical maintenance, housekeeping, security, etc.

In addition to the governing body, there are several statutory and other committees(such as the Board of Studies, finance committee, Planning and Evaluation Committee, Institute Development Committee, Internal Complaint Committee, Examination Committee, Anti-ragging, and Disciplinary Committee, Caste Grievance Committee, Internal Quality Assurance Committee, etc.) placed to administer various activities related to academics, administration and extension activities. A considerable amount of work of the authorities is organized through these committees. Some are advisory, whereas others are constituted for a special purpose to deal with a particular matter under the guidance of various administrative heads. The examination committee monitors the evaluation procedures under the guidance of the Controller of Examination. A few committees scrutinize and examine a proposal and formulate and bring up concrete issues for consideration. These committees also support the development through planning and execution, budget, performance reviews, and policymaking.

Grievance Redressal Committee is constituted to prevent unfair practices and provide a mechanism for their Grievances. It is constituted in case any student, faculty, staff, etc., intends to report personal or professional Grievances.
There are seven heads of the department (viz., Chemical, Civil, Computer, Electronics, and Electronics & Telecommunication & Mechanical). Heads of the departments decentralize the responsibilities for the design of the curriculum, conduct BoS meetings, smooth planning of the semesters, Academic-calendars, the conduct of theory classes and laboratories, faculty and
student development programs, co-curricular and extracurricular activities for students, the conduct of

feedback from all stakeholders, taking corrective and preventive actions for continual improvement.
To enhance the interdisciplinary culture in the institution, the related departments/programs are merged to form schools.
There are six schools viz., School of Chemical Engineering, School of Computer and Engineering Technology (Computer & IT), School of Electrical Engineering (E & TC and Electronics), School of Mechanical and Civil Engineering, School of Design, School of Humanities and Engineering Sciences.

File Description	Document
Link to Organogram of the Institution webpage	View Document
Link for additional information	View Document

6.2.3 Implementation of e-governance in areas of operation

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	View Document
Institutional data in prescribed format	View Document
ERP (Enterprise Resource Planning) Document	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

Response:

The Institute provides various types of welfare measures to the teaching and non-teaching staff to boost their morals, to ensure their well-being and enable them to optimize their true potential.

Institute offers monetary and non-monetary welfare facilities for the professional as well as personal growth of its employee.

The following are the welfare measures available for the teaching and non–teaching staff:

- Employees Provident Fund (EPF)
- Gratuity for Non-teaching Staff

- Partial Reimbursement for medical insurance of employee
- Accidental and health insurance for driver and electrician
- Casual, Earned leave, Maternity leave, Vacation and Medical leave
- Special consideration of leaves during COVID pandemic and for reasons such as medical emergencies, Mis-happenings & Marriage etc.
- Covid Vaccination Drive
- Compassionate appointment of a family member consequent to the death of an employee.
- Reimbursement for a membership fee of professional bodies like IEEE/IET
- Promotion and increments based on Annual Appraisal Performance.
- Study/Lien leave for PhD and Post Doc
- Increment on award of PhD.
- Felicitation of Faculty and Staff for outstanding Academic, Research and Administrative performance during Annual Social gathering.
- Felicitation of employees for completion of ten years of services in institute and Best Teacher and Staff awards to employees which includes cash prize and citations to enhance motivating work environment within institute.
- Professional Development leaves for attending FDPs / Conferences/Workshops/etc…
- Financial support for attending FDP/ conferences/workshop/seminar
- Seed Money for research projects
- Financial support for Patents & publications in SCI/SCIE indexed journals.
- Research and Development Incentive scheme
- Yoga and meditation sessions, sports activities, health checkup camps for employees.
- MOU with YOUR DOST which provides 24*7 online counselling platform for emotional wellbeing of employee.
- Medical Officer available on campus.
- Unlimited free internet and Wi-Fi facility on campus
- Free uniforms provided to drivers and peons
- Access to general magazines periodicals (India Today, Business India, Frontline, Fortune India, Outlook, Readers Digest , Sports Star) and Newspapers
- Loan facility to the teaching and non-teaching staff through MIT Employee Society, Pune
- Diwali Bonus to consolidated salary holders for Class III and Class IV employees' base on the criteria decided by the management.
- 6th Pay commission recommendations as per the norms of AICTE

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

Response: 36.55

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
16	47	52	67	120

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Response: 10.4

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

2021-22	2020-21	2019-20	2018-19	2017-18
6	12	7	16	11

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 51.02

6.3.4.1 **Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise**

during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
78	94	83	73	67

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
IQAC report summary	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Financial planning and management is the foresight of the Institution in strategizing its growth and development activities. The Institution has a robust financial management system in place. The Institution conducts annual internal and external audits through authorized and recognized auditors to ensure financial compliance.

The Institute has a Finance Committee. The finance committee reviews the financial planning periodically.

The mechanisms used to monitor the effective and efficient use of financial resources are as below

- The annual budget for the institute is prepared and proposed prior to the commencement of the financial year for recurring and non-recurring potential income and expenditures involved depending on the requirements received from various departments /school/sections.
- The expenses incurred are scrutinized by the accounts department as per the budget allocated to the respective department/school/section.
- The parent body of the institute has appointed qualified professionals to verify and certify the financial statements.

The Institute has appointed. N.R. Kabra Co. as an internal auditor and A H Joshi & Co. as external auditor.

Process of the internal audit:

- Qualified and certified internal auditors are appointed to conduct the audit regularly.
- The auditors perform the audit on
- All payments, receipts, and journal vouchers of the transactions, cash book, ledger account and all bank accounts are
- The Income and Expenditure statement, Balance Sheet, and depreciation statement is prepared by accounts department & verified by Internal and External Auditor.
- As an act of transparency, the audited financial statements are published on the institute website and sent to the statutory and regulatory bodies.

Process of the external audit

- The accounts of the institute are audited by a chartered accountant regularly as per the.
- The auditor ensures that all payments are duly authorized after the audit, and the audit report is sent to the management for review.
- Any queries, in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits.
- The institution did not come across any major audit objection during the preceding years

All these mechanisms show that transparency and adherence to financial discipline are maintained in financial matters.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

Response: 0

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

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

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

MIT Academy of Engineering is a self-financed institute affiliated with Savitribai Phule Pune University, Pune (SPPU). The main source of funds is the tuition fee of the students which is approved by the Fees Regulatory Authority.

Mobilization of Funds: The institute has a well-defined mechanism to monitor the effective and efficient utilization of available financial resources

Source of Revenue generation: The main source of income being

- 86% funds through Student tuition fees regulated by the government of Maharashtra,

social welfare scholarships,

- 12% development Fees
- 2% other Miscellaneous receipts
- Grants received from government funding agencies- (AICTE, SPPU)
- Honorarium for Research consultancy services.
- Registration fees & Sponsorships for conducting seminars/workshops/ Symposium Association.
- Activities/Faculty Development programs/Conferences from AICTE,etc.
- Parent Institute (MAEER) contributes major funds for infrastructure development
- Financial assistance from SPPU through Earn and Learn Scheme
- Financial assistance from SPPU under quality improvement program for conferences, seminars, workshops, Earn & Learn Scheme, NSS etc.
- Revenue generated from renting Infrastructure to conduct various examinations such as NEET, MPSC, SETetc.

Utilization of funds

- Optimal utilization of the fund is ensured through a budget plan.
- All School and sections submit its forecast budget with tentative requirements well in advance before commencement of the every financial year. Along with this, all school deans, other deans, section heads and different cells viz., R& D Cell, T&P Cell, etc. also submit their budget requirements.
- The consolidated budget is prepared and reviewed by the department which is approved by the Institute Development Committee and MAEER trust. Funds are allocated accordingly. Any deficit would be managed by seeking funds from the parent trust or other sources.

- The funds allotted are utilized for infrastructure development, salary, seed money grants for promoting research, training activities, procuring ICT tools, green campus initiative, extension activities, transport, maintenance, welfare measures, and purchase of library resources. Strengthening sports and cultural activities etc.
- Financial support is provided for seminars/workshops/symposiums Association
- Activities/Faculty Development programs/Conferences.
- Scholarships are provided to economically challenged students.
- The utilization of the allocated funds is monitored periodically and audited at the end of every financial year.
- The fund is also utilized for placement, training, and development programs
- Organizing extension activities
- They periodically review the mobilization of and utilization of funds in their meetings.

Transparency and accountability are ensured by conducting an annual audit of the statements.

Half-yearly internal audits and yearly external audits through the charted accountant ensure that the mobilization of the resources is done appropriately. The distribution and utilization of the fund is reflected in the income and expenditure statement.

The institute provides high-quality engineering education to the students per the regulating bodies' directions. The institute has a social commitment to serving society and thus sincerely contributes to the mission of the government and partners in the progress of the state and nation at large, in a manner through empowering the young generation.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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 visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

Internal Quality Assurance Cell (IQAC) at MIT Academy of Engineering (MITAOE) got established on 20/03/2014. IQAC plays important role at MITAOE to impart quality assurance in terms of academics, administration, etc.

IQAC at MITAOE contributed significantly in the following way.

NBA Accreditation:

1. UG program in Electronics Engineering, Electronics & Telecommunication Engineering, Computer Engineering and Chemical Engineering got accredited by NBA in tier-II mode for the period of academic year 2016-17 to 2018-19 (upto 30th June 2019).
2. UG programs in Information Technology and Mechanical Engineering got accredited by NBA in tier-II mode for the period of academic year 2016-17 (upto 30th June 2017).
3. UG programs in Electronics Engineering, Computer Engineering and Chemical Engineering got accredited by NBA in tier-II mode for the period of academic year 2019-20 to 2021-22 (upto 30th June 2022).
4. UG program in Mechanical Engineering got accredited by NBA in tier-II mode for the period of academic year 2020-21 (upto 30th June 2021).
5. Ug program in Electronics & Telecommunication Engineering, Chemical Engineering, Computer Engineering and Mechanical Engineering for accredited by NBA in tier-I mode for the period of academic year 2022-23 to 2024-25 (upto 30th June 2025)

NAAC accreditation:

MITAOE got accreditation by NAAC with ‘A’ grade (CGPA 3013 on four-point scale) from 24th September 2014 to 23th September 2019. Further the accreditation validity extended upto 31st December 2021.

Autonomous Status:

University Grants Commission (UGC) conferred academic autonomy to MITAOE from academic year 2016-17.

ISO Certification:

MITAOE is compline with ISO 9001: 2015 certification for its quality standards upto 25th October 2025.

NIRF Participation:

MITAOE participating in National Institute Ranking Framework from 2017.

Following are the few of the key initiatives taken by IQAC at MITAOE.

- Teaching-Learning system: Online to offline mode
- Assessment reforms
- Enhancement of compatibility of students with external world through B Tech Guru and AMCAT
- Enhancement in quality research publications by faculty and students
- Enhancement in Startup activities through Entrepreneurship Development Cell
- Students participation and technical and non-technical activities
- Organization of seminar/workshops for faculty and students on topics related to research, IPR, consultancy, etc.
- Revision in curriculum
- Signing MOU to enhance industry-institute interaction
- Stakeholders feedback on curriculum

File Description	Document
Link for additional information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

IQAC pledges essential steps to the quality of the teaching-learning process through consistent and constant follow-up arrangements. The institute followed the Choice Based Credit System(CBCS) and implemented the AICTE curriculum model of 160 credits for autonomy curriculum. The faculty members of institute designed and developed individual courses curriculum by taking consideration of inputs from all stakeholders.

Following are the major actions taken for education transformation at MITAOE:

Faculty Development Programs: Faculty members undergone through various faculty development program related to teaching-learning pedagogy, subject specific, technical, etc through IUCEE and NITTTR.
Blended Learning and Engagement: Teaching-learning process at MITAOE consist of blended learning and its engagement. Few of the courses are taught in online mode and assessment was conducted in offline mode. During the pandemic period, entire teaching-learning process was in online mode. Effective use of ICT tools like Moodle, Kahoot, Canvas, etc in teaching learning process.

Academic Flexibility: The curriculum at MITAOE is so flexible that students can choose courses as per their choice and interest. Almost 28% academic flexibility is given in curriculum to students.
Skill Development: 36% courses are skill courses available in curriculum to enhance students skill during their undergraduate studies.
Creative and Critical Thinking: Students are encouraged for creative and critical thinking through various activities like projects, prototypes, etc.
Summer Internship (SIP) and Semester-long Internship (SLIP): Summer Internship after first year to final year during summer vacation is compulsory for students. To get life experience, students after first year completed internship as per their choice and hobbies. To get domain specific and industrial experience, students are allowed to complete internship in core industries after second and third year. Semester long internship is made available to final year students during eight semesters (4 to 6 months).

Honors and Minor certification: Institute has implemented honors and minor certification programs with additional credits of 20 through approval from Savitribai Phule Pune University.
Minor and Major Project: Second year students are undergoing two term minor project in terms of interdisciplinary and multidisciplinary approach. Major project is three semester project and consist of design, implementation and evaluation phases. Final year students are having capstone project, which

consist of technical problem statement, digital portfolio and graduation book.

Entrepreneurship Development: The entrepreneurship development cell at MITAOE encourages students for startup, writing patent, etc. total 15 startups are initiated by ED cell at MITAOE.

The assessment and attainment of Courses Outcomes (CO) and Program Outcomes (PO) has been done by considering Direct and Indirect assessment tools. It is regular process to calculate the attainment of CO and PO at the end of each semester.

File Description	Document
Link for additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
2. **Collaborative quality initiatives with other institution(s)**
3. **Participation in NIRF**
4. **Any other quality audit recognized by state, national or international agencies (ISO Certification)**

Response: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document
Paste web link of Annual reports of Institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

Gender encompasses socially constructed and culturally based roles of men and women with a view to understanding how unequal power relations between them are shaped and operated. Gender and its accompanying power relations are built-in in all society's families, educational institutions, workplaces, beliefs, norms, etc. It helps people in examining their personal attitudes, and beliefs, questioning the 'realities'. Gender sensitization acquaints men and women with each other's existence and to gain fruitful results in an organization as well as at home. Gender is determined socially; it is the societal meaning assigned to males and females. All institutions of society exhibit gender disparity as thought to be important and hardly understood and addressed. Gender roles are socially constructed according to their needs; when needs change these roles are also needed to change. Gender sensitivity helps to generate respect for the individual regardless of sex. Educationists, academicians, and faculty.

a) Safety and Security:

CCTV facility is provided in each corridor on the campus. We have one lady guard on the campus as well as at each check post there is one guard. For lady staff, we do not extend working hours beyond 6.00 pm. Also, college timing for students is 8.30 am Upto 5.00 pm. In an emergency, we provide institute vehicles for lady staff, if they work beyond the working hour.

b) Counselling (Yourdost App):

The institute also arranged the 'Yourdost' app where students could lodge complaints any time and there are counsellors who attend to those complaints by keeping 100% privacy. This is very much helpful, especially during the lockdown.

c) Common Room:

The institute has common rooms, which serve as areas of amenities. Those rooms provide students with the facility for sitting, drinking water, and taking rest.

d) Internal Complaint Committee (ICC):

The Institute organizes webinars/workshops on Gender Sensitization & Sexual Harassment. The institute has constituted the Internal Complaints Committee (ICC). The objective of the ICC is to evolve a permanent mechanism for the prevention of and redress of sexual harassment cases and other acts of gender-based violence at the institute. And to uphold the commitment of the institute to provide an

environment free of gender-based discrimination.

e) Other Relevant Information:

Expert talk on gender sensitization

The Institute also conduct a gender sensitization program and also organizes counselling sessions of Dr Bapat for each department during academic hours. Dr Bapat addressed the personal queries of students. The institute organized the program on Universal human values which also focuses on Gender sensitization and equity during F.Y.B.Tech induction program.

Student Council

The election is held and equal numbers of seats are reserved for boys and girls students. The institute every year nominates and elects ladies' representatives for each department. And also take care while forming the student committees.

Women’s Day celebration

MITAOE celebrates every year women’s day. The objective is to commemorate the cultural, political, and socioeconomic achievements of women. The day emphasizes on women's rights movement and brings attention to several issues such as gender equality, reproductive rights, and violence and abuse against women.

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b.Counselling c.Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Annual gender sensitization action plan	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. **Solar energy**
2. **Biogas plant**
3. **Wheeling to the Grid**
4. **Sensor-based energy conservation**
5. **Use of LED bulbs/ power efficient equipment**

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **E-waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

The MIT Academy of Engineering facilitates several techniques for the management of degradable and non-degradable waste.

In addition to this, the institute creates awareness among the students and employees on the implementation of these techniques effectively. Through academic courses such as Environmental science and programmes such as Universal value addition, students are motivated from time to time. It was stressed that we should avoid plastic items to the best possible capacity.

For solid waste management, different bins have been placed in different departments. This ensures that solid waste is segregated at the source. It is also ensured that the recycling of all these components is done with minimum cost and labour. Suitable techniques are applied for disposing of solid waste.

MITAOE promotes the principle of 3R'S (Reduce, Reuse and Recycle). In our institute, we make full justice to this principle with the help of the Vermi Composting plant,

- Reduce- Prevention of waste generation. Most importantly reducing the waste which might contain toxic constituents.
- Reuse- During the resource recovery maximum fraction of the waste that can be recovered in any way has to be segregated and brought into use.
- Recycle- The waste that can be processed in some manner to produce any desirable product which can be brought into use has to be segregated.

MITAOE has implemented a waste minimization strategy. By reducing the generation of waste at the source, MITAOE has successfully achieved the objectives of waste management and recycling.

Bio-Degradable Kitchen Waste Management, Organic Solid Waste Management: The vermicomposting and biogas plants help generate useable, clean energy. Sustainability is the way of life at MITAOE. Presently, sewage management is carried out in association with the Alandi Municipal Council. By adopting innovative techniques, sewage treatment will get done within the campus premises by removing contaminants from wastewater and producing treated wastewater that will be safe enough for release into

the environment and used for irrigation and washing.

For personal protection, it has been advised to use masks while handling the waste. Moreover, wearing head gear, eye covers, an apron, gloves and boots as they help in fighting the transmission of infection.

The institute has organized Swatch Bharat Abhiyaan. Under this banner, the utility of recycling solid and other waste has been elaborated. People from different aspects of life delivered their talks about the proper usage of waste. Moreover, the NSS volunteers have also demonstrated the proper procedure of disposing of the waste in a selected village called Thakur wasti, Alandi and around the town.

The water which is released from the outlet of the RO plant is ionized and we are utilizing it for agriculture and gardening. Some amount is also used for cleaning the floor and classrooms.

Waste recycling involves the collection of waste materials and the segregation of the waste material. Moreover, the institute is also looking for possible substitutes to reduce waste to the best possible extent. Hence, MITAOE is determined to provide all possible facilities to deal with degradable and non-degradable waste.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geotagged photographs of the facilities	View Document
Any other relevant information	View Document

7.1.4 Water conservation facilities available in the Institution:

1. **Rain water harvesting**
2. **Borewell /Open well recharge**
3. **Construction of tanks and bunds**
4. **Waste water recycling**
5. **Maintenance of water bodies and distribution system in the campus**

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

7.1.5 Green campus initiatives include:

1. **Restricted entry of automobiles**

2. **Use of Bicycles/ Battery powered vehicles**
3. **Pedestrian Friendly pathways**
4. **Ban on use of Plastic**
5. **landscaping with trees and plants**

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. **Green audit**
2. **Energy audit**
3. **Environment audit**
4. **Clean and green campus recognitions / awards**
5. **Beyond the campus environmental promotion activities**

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

1. **Built environment with ramps/lifts for easy access to classrooms.**
2. **Divyangjan friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

MITAOE is undertaking various initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. We have various clubs and committees to organize and monitor various activities.

The institution believes in the equality of all cultures and traditions as is evident from the fact that students belonging to different castes, religions, and regions are studying without any discrimination. Though the institution has diverse socio-cultural backgrounds and different linguistics, we do not have any intolerance towards cultural, regional, linguistic, communal socio-economic and other diversities. With great fervour the national festivals, birth anniversaries and memorials of great Indian personalities like Mahatma Gandhi, Dr Bhimrao Ambedkar, and Sarvapalli Radhakrishnan. To build a nation of youth, the college organizes and conducted several activities to build and promote an environment for cultural, and spiritual values among students and staff.

Dance Club:

MITAOE have a dance club which conducts various programs and workshops for the students. The dance club has a huge menu comprising Indian and other countries menu which provides an inclusive environment. We celebrate the birthdays of Eminent personalities, National Festivals. NSS activities bring students and faculty from different religions and diverse backgrounds to work together.

Nakshatra:

MITAOE organizes an annual gathering in the month of March. This gathering provides a platform for students as well as teachers to showcase their skills and talents. This helps to build tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities.

International level program to bring peace and religious harmony:

The institute organizes a program at the International level to bring peace and religious harmony on 2nd October at MITADT Loni under the World Peace Dome.

Cleanliness Awareness programs:

MITAOE organizes Cleanliness Awareness programs every year. During Alandi –Pandharpur Palkhi Wari, students volunteered near the Indrayani River and Dyaneshwar Maharaj Temple. Volunteers made sure that people used only Disposable plates and requested people use mobile toilets. In this campaign, nearly 35 to 40 students participated from diverse backgrounds.

The courses such as Constitution of India, Environmental Science, Science of Nature, and Soft Skills are made mandatory for all students across disciplines. On the college campus, we organize special weeks, do some social activities and visit Government Schools from Alandi and interact with children. We also organized Traffic control awareness programs, to create awareness in our college student's nearby villages about following traffic rules. We also organized a stationary donation camp and a cloth donation camp for students and needy people. On the occasion of Mahatma Gandhi Jayanti, volunteers organized a cleanliness drive at Alandi Ghat. In which all volunteers cleaned both Ghats. The institute conducts a convocation ceremony every year. The convocation address is delivered to inspire and motivate the students for future journeys.

We have different clubs technical, and non-technical such as Singing, Dance, Yoga, meditation, etc. The institute always encourages the students to organize and participate in different programs organized by colleges, inter-college, universities, and other Government or non-government organizations like Firodaya, Nakshatra, and Yoga sessions.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

MITAOE sensitizes the students and the employees of the institution to the constitutional obligations of values, rights, duties, and responsibilities of citizens which enables them to conduct themselves as responsible citizen. India, as a country, includes individuals with different backgrounds viz., cultural, social, economic, linguistic, and ethnic. MITAOE Alandi makes it compulsory for all to attend Independence Day and Republic Day. Due to the pandemic, it was celebrated online mode. In observation of the importance of inculcating the constitutional obligations, values, rights, duties and responsibilities in both staff and students of MITAOE, the college has taken the initiative of introducing the Constitution of India as an audit course awareness programme in the college regarding Human Rights, Fundamental Rights, Legal Awareness, Traffic Awareness, Civil Safety, Values etc.

India, as a country, includes individuals with different backgrounds viz., cultural, social, economic, linguistic, and ethnic diversities governed and guided by the Constitution irrespective of caste, religion, race sex. MITAOE sensitizes the students and the employees of the institution to the constitutional obligations of values, rights, duties, and responsibilities which enables them to conduct themselves as a responsible citizen. To equip students with the knowledge, skill, and values that are necessary for sustaining one’s balance between a livelihood and life by providing an effective, supportive, safe,

accessible, and affordable learning environment. These elements are inculcated in the value system of the college community. The institute conducted awareness programs on the reduction of plastics, cleanliness, Swachh Bharat, etc. involving students. The course Constitution of India is made mandatory to all students across disciplines.

Food and Book distribution

Various programs such as the distribution of Food, books, and clothes are done at various Ashrams around the city. To equip with the knowledge, skill, and values that are necessary for sustaining one's balance between a livelihood and life by providing an effective, supportive, safe, accessible, and affordable learning environment. These elements are inculcated in the value system of the college community. The students are inspired by participating in various programs on culture, traditions, values, duties, and responsibilities by inviting prominent people.

Rural development:

The institute conducted awareness programs through NSS on rural development, cleanliness, Swachhta Abhiyaan, Unnat Bharat Abhiyaan etc. involving students. The college establishes policies that reflect core values.

Ethics:

Guest lectures and workshops are arranged by eminent personalities to deliver lectures on ethics, values, duties, and responsibilities and on saving the environment. Ethical Values, rights, duties, and responsibilities of citizens are some of the topics that are enlisted in Elocution, debates, and class presentation.

A code of conduct is prepared for everyone should obey the conduct rules. The affiliating University curriculum is framed with mandatory courses like Professional ethics and human values, and the Constitution of India as a small step to inculcate constitutional obligations.

A separate NSS unit is started exclusively for the students and the unit is successfully conducting activities to serve the society for Child education, and Literacy programs. Blood donation, a Medical camp, and a Yoga program were also conducted.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document
Any other relevant information	View Document

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

1. **The Code of Conduct is displayed on the website**
2. **There is a committee to monitor adherence to the Code of Conduct**
3. **Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
4. **Annual awareness programmes on Code of Conduct are organized**

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

MITAOE is committed to promoting ethics and values amongst students and faculty to encourage the same. Our students are on a mission towards bettering India by breaking the boundaries of religion and caste. Thoughts of great Indian personalities sowed into the young minds through the exhibitions and programs conducted on these days. The institution practices a pluralist approach towards all religious functions and encourages students and faculty to showcase the same. Institution celebrates/ organizes national and international commemorative days, events and festivals. National festivals play an important role in planting seeds of Nationalism and Patriotism among the people of India. Our institution celebrates these events with great enthusiasm to commemorate the ideology of nationalism and to pay tribute to our great National Leaders.

The institute organizes National festivals as well as Anniversaries for great Indian Personalities this includes.

1. Teachers' day (5th Sept) As the birthday of a great teacher Dr Sarvapalli Radhakrishanna

2. Engineers day (15th Sept) The Birth anniversary of Sir M. Visvesvaraya the great Engineer of the country.

3. International Women’s day (8th March)

4. International Yoga day (21st June)

5. Independence day(15th August)

6. Republic day(26th Jan)

7. World environment day(5th June)

8. Ganesh Festival

Birth and Death Anniversary of great personalities:

1. Shivaji Mahraj Jayanti (19 Feb)

2. Mahatma Gandhi (2 Oct)

3. Dr. B. R. Ambekar (14 April)

Republic Day- The institution celebrates Republic Day on 26th January every year, commemorating the adoption of the Indian constitution and spreading the message that India is the largest democratic country in the world. This is a day to remind the students about the constitution of the country and the need to abide by it at all times. The celebration includes the hoisting of the national flag and the spreading of a warm message.

Independence Day is celebrated every year on the 15th of August, parades and flag hoisting are organized and is celebrated to mark the freedom of India from British rule. The institution encourages students to remember our national leaders and their sacrifices.

Gandhi Jayanti is celebrated every year on 2nd October to understand the ideology of our great leader Mahatma Gandhi wherein a pledge is taken by students and staff. In today's times, we inspire students of our institution to follow the Gandhian ideologies of truth and nonviolence and inspire them to contribute towards the peace and prosperity of the Nation.

International Yoga Day is celebrated on 21st June every year. The yoga Instructor organizes the yoga camp and a speech is conducted to make everyone aware of how Yoga embodies unity of mind and body; thought and action; restraint and fulfilment.

Shri Chhatrapati Shivaji Maharaj Jayanti is celebrated on 19th February every year. It was attended by students including teaching staff. The objective of this program is to make the students and teachers aware of the leadership qualities of the Great Leader Shri Chhatrapati Shivaji Maharaj. To make students understand the importance and sacrifices Shri Chatrapati Shivaji Maharaj did during his life.

https://mitaoe.ac.in/AjaanVriksha.php

File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

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:

1. Best Practice: (A) Project-based Learning

2. Objectives of the Practice:

Self-directed learning: During the slots, students are facilitated to self-formulate their learning objectives for specific topics, and they are then required to review their goals periodically.

Solving problems: This helps students become more motivated to learn, think critically, write better, and improve their communication abilities. This could be done by having students study data and draw conclusions from case studies.

Teamwork: During discussions, the students are expected to collaborate and work as a team.

3. The Context

Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. It is an instructional approach designed to give students the opportunity to develop knowledge and skills through engaging projects set around challenges and problems they may face in the real world. The project-based learning system is the upcoming trend of learning best suited for the technical branches of engineering.

4. The Practice

Minor and Mini Project: (These projects are different from projects developed at a course level). In the autonomous curriculum, the institute has started these projects from the second-year level. We are offering a multidisciplinary approach to the project. Students of different disciplines can perform in a team to complete the project work. For example, a group of 3 students may have students from Chemical Engineering, Mechanical Engineering and Electronics & Telecommunication Engineering.

Major Project: General practice for the projects of the UG program starts in the 7th semester and ends in the 8th semester (final semester). It is observed that if the student has to work on innovative project ideas

or industry-sponsored projects; this span is too small and many projects cannot be completed with good results. Hence, we have extended the span of this major project to 02 years. (Third year to Final year)

During the 6th semester a course “Mini Project” is offered to the students. The mini-project can be a part of a major project with a condition that at least 30 % of work of the Final year major project should be completed in the TE Mini project.

5. Evidence of Success

Students that participate in PBL acquire valuable knowledge about how to handle projects. Their capacity for empathy grows over the course of their development. They become able to think of things in terms of systems, come up with answers to difficulties, and set off on a path of discovery. They become more committed to the process of learning and are ready to participate in the research-oriented platforms as a result of this growth. Students participating in PBL are given the opportunity to practise a mode of thinking that can lead to varied thinking. In addition to this, a significant number of students discover remarkable connections between seemingly unrelated ideas.

6. Problems Encountered and Resources Required.

The first distribution of project guides, selection of subjects, and organisation of student groups were not without its difficulties. When it comes to anything that is student-directed, low productivity is one of the most typical difficulties that might arise. Teachers do provide them with freedom and choice. It is empowering for students to have choice and autonomy, however, they may not know what to do with this freedom, especially if they are new to student-directed project-based learning (PBL). Because of this, they frequently opt to do nothing further with it.

1. Best Practice: (B) Technical and Non-Technical Clubs

2. Objectives of the Practice:

Technical and Non-technical clubs create small communities on campus. They attract people who share the same interests such as in robotics, aeromodelling, language, music, arts, sports, etc. Club activities help students develop a sense of unity and teamwork, learning how to work with others in reaching the same goals. It strengthens their co-curricular activities which are carried out outside the normal classrooms. They supplement the academic curriculum and help in learning by doing. The various clubs enable students to develop problem-solving, reasoning, critical thinking, creative thinking, communication, and collaborative abilities.

3. The Context

The actual need of the hour is to raise responsible, sensitive, creative, and civilized citizens. Our fundamental goal is to create an environment conducive to the development of such citizens. MITAOE's student development initiatives strive to give all of the necessary facilities and infrastructure to transform an engineer into an ideal citizen. The main aim is to provide and maintain a secure, healthy, favourable environment and culture that integrates students' intellectual, technical, physical, social, emotional, and ethical growth. The institute has 16 clubs in all. Each club has a well-defined organization that is overseen

by a faculty member. Each club has a semester plan for the events that it will arrange. In addition, each club seeks prestigious contests in its specific domain. Achievements, publications (including technical and non-technical), product developments, creative models, artifacts, or performances are examples of club outcomes.

4. The Practice

The institute is home to 16 clubs that are divided into two categories: technical and non-technical. Technical clubs include things like robotics, Hacker Rank (which is a programming club), the Robotics Club, the Automotive Club, the Design Club, Google Student, and Firefox Club, and so on. Drama Club, Music and Dance Club, singing club, Art Elated Club, Ignited Minds (A social club), Shutterbugs Photography Club, Vidyudanu – Electronic Hardware club, Prakruti - the life Club, Literary Writing and Speaking Club, Yoga and Meditation Club, and MIT Master Blasters' Sports Club are the non-technical clubs that are offered at MIT. Other non-technical clubs include Prakruti - the life Club. Every one of the clubs follows a set of procedures and guidelines to run its operations. Along with a faculty coordinator, each club is given a secretary and president to lead its activities. For the purpose of ensuring that all of a club's events and activities run smoothly, there is always a provision for an annual budget. At the local, state, and national levels, these groups are responsible for organising a variety of events and activities. The entire operation of all the clubs is planned, managed and efficiently executed by students which lead them to develop their leadership skills in a holistic way.

5. Evidence of Success

The clubs have put together a huge quantity and range of different events and activities. The students take part in a wide variety of events and competitions on both the state and national levels. Students have accomplished a great deal, as seen by the accolades and prizes they have received.

6. Problems Encountered and Resources Required.

One of the most prevalent challenges that club faculty coordinators come up against is students' lack of awareness regarding the clubs. They need to start by getting the students to sign up for the clubs and participate in them. As soon as people become aware of the club's activities and the benefits associated with those events, the clubs are inundated with participants. Because there are a restricted number of seats available, the faculty coordinator is required to conduct interviews as part of the selection process.

File Description	Document
Best practices in the Institutional web site	View Document
Any other relevant information	View Document

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:

The main objective of MIT AOE is to prepare students to brave the challenges of the competitive world. The institute focuses on creating ample opportunities for students' self-employment. Entrepreneurship is one of the key functioning of students' development. The journey of MIT AOE Entrepreneurial Development Foundation started in 2018-19 intending to inculcate entrepreneurship and innovation culture amongst students at the MIT AOE campus. We are proud to mention the achievements received just within 2-3 years, such as Winner at NEC-2019, Startup Club Award, 'Band B Rank 26-50th' under the Self Finance Private Institute Category, in the ARIIA rankings, 75 teams won "Certified Potential Real Venture" MITAOE got approval as a host institute for setting up Business Incubator under MSME-BI scheme, 4-Star performance in the year 2019-20 at Institute Innovation Council (IIC) an Initiative of MHRD-GOI.

The visionary cell of the institute is one of the leading contributors in the field of entrepreneurship and startup incubation to cultivate, foster and stimulate entrepreneurial aspirations and provide an ecosystem to create innovative, sustainable, profitable and job-creating Startups. The institute provides mentoring, networking & handholding support to students/ alumni for real venture/Startups in sector-agnostic industries. To date, entrepreneurship education has been provided around1800+ students and 8 faculties have been trained as entrepreneurship educators. The EDF also plans to offer a minor specialization for UG students in innovation, Entrepreneurship, and Startups. With the collaboration of the Wadhwani Foundation, we have offered two courses for the BTech program namely Basics of Entrepreneurship and Business Strategies.

E-Summit '21 is a national-level virtual annual flagship event organized by the Entrepreneurship cell, MIT AOE. The purpose of the event is to provide a common platform for aspiring entrepreneurs, startup and business enthusiasts, and Academicians to deliberate upon emerging trends and challenges. It also provides a premier interdisciplinary forum to present and discuss the most recent innovations, trends and concerns, practical challenges encountered, and the solutions adopted in the various fields.

A startup incubator is a collaborative program designed to help new Startups succeed. Incubators help student entrepreneurs to solve some of the problems commonly associated with running a startup by providing workspace, seed funding, mentoring, and training. Currently, 19 Startups are working on their ideas and have identified unique problem statements. It has identified a variety of economic and socioeconomic policy needs, which may include job creation, fostering students' entrepreneurial climate, technology commercialization, diversifying local economies, accelerating growth of local industry clusters business creation, encouraging minority entrepreneurship, and identifying potential spin-in or spin-out business opportunities.

MIT AOE Incubator support provides technological facilities, initial growth funds, network and linkages, co-working spaces, lab facilities, mentoring, and advisory support. These incubators can recommend Startups for availing benefits under the Startup India Scheme also. To realize the vision of transforming their start-up into a sizable flourishing enterprise, student entrepreneurs benefit from startup incubators.

Major Achievements under Entrepreneurship Cell

- “Recognition of MIT Academy of Engineering as Host Institute (HI) to Set Up/ Establish Business incubator (BI) for implementation of the namely 'Support for Entrepreneurial and Managerial Development of MSMEs through scheme incubator'” by Ministry of Micro, Small & Medium Enterprises, Government of India.
- Establishment of MITAOE Entrepreneurial Development Foundation.
- Launched incubation centre. More than 15 incubates work on the campus.
- Four Star for successfully achieving the milestone by IIC the Institution's Innovation Council.
- Winners at NEC IIT Bombay. We won the National Entrepreneurship Challenge by IIT Bombay in 2019.
- Best Startup Club Award-2018 by Wadhwani Foundation E cell MITAOE.
- E-Summit '21- A national-level virtual and annual flagship event.
- Mr Tejas Sonkule and the team of Kisanlends Fintech Pvt Ltd also received recognition from Startup India, DIPP
- Mr Karan Patil and a team of HunarPro Skilling Pvt. Ltd. received recognition from Startup India, DIPP
- Mr Hardik Arora and a team of Mickey Creation and IT Consultancy Pvt. Ltd received recognition from Startup India, DIPP
- Mr Shaji Daniel has been shortlisted among 10 at the Indian level for “Pay Forward-Support the Next Gen Entrepreneurs” by Wadhwani Foundation
- Prof. Tukaram Sonawane sir has been appointed as one of the founding members of the India Coaching Federation (ICF) and received a Level-2 certificate of Entrepreneurship Educator by NEN, Wadhwani Foundation.
- 59 PV’s, (Practice Venture) & 38 PRV’s (Potential Real Venture) groups have been recognized and qualified at the global jury evaluation conducted at the ‘You Noodle’ Platform by WF
- ‘**MIT AOE Entrepreneurial Development Foundation**’ has been approved by the Experts Advisory Committee (EAC) of (SISF-Startup India Seed Funding) with a total commitment of Rs. **2** crore financial support.
- Recently in December 2022 our incubator got selected under Startup India Seed Funding Scheme and received approval with the financial support of Rs.2cr
- 11 ventures are at the pre-incubation stage and are in process of the Incorporation stage
- Under the private institute category at the Indian level, only 19 institutes have been approved by DC-MSME, in Maharashtra state only 2 institutes finally qualify for this and we are among one them.
- A Plant and machinery Institute will get 1 cr funding Idea Name: “Digital Artificial Insemination Device” has got the approval of Rs: 12.75 Lakh under the MSME-BI scheme.

Under our entrepreneurship (e-Cell) umbrella, organized more than 55 events including workshops, competitions, webinars, and seminars on Innovation, IPR, start-up events, etc. to inspire students for the entrepreneurial journey. The various Programs such as Practice Venture (PV), Institution’s Innovation Council (IIC), and participation in competitions such as the National Entrepreneurship Challenge which is part of the functioning of e-Cell. Besides PV and IIC, e-Cell also conducts its informative advanced events. To broaden the frontiers of Entrepreneurship Research, ED-Cell is planning to establish a Centre for Innovation in Entrepreneurship Education and Development to investigate a range of issues surrounding the small and medium enterprise sector and establish a network of researchers and trainers by conducting biennial seminars on entrepreneurship education and research.

File Description	Document
Any other relevant information	View Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information :

MIT Academy of Engineering (MITAOE), Alandi, Pune is an autonomous institute affiliated with Savitribai Phule Pune University, Pune. MITAOE got accredited by NAAC with an “A” grade in 2014 in cycle-1. During the assessment period, all eligible UG programs were reaccredited by the National Board of Accreditation (NBA) in tier-II mode and from the academic year 2022-23 four UG programs (Chemical Engineering, Computer Engineering, Electronics & Telecommunication Engineering and Mechanical Engineering) got accredited by NBA in tier-I mode for three years (2022-23 to 2024-25) and SAR for UG – Civil Engineering is submitted to NBA in TIER – I mode.

MITAOE participates in the National Institutional Ranking Framework (NIRF), and Atal Ranking of Institutions on Innovation Achievements (ARIIA) every year since 2017 and 2019 respectively. MITAOE achieved Band B all-India Ranking (26-50 rankings) in ARIIA – 2020.

Institute is compliant with ISO 9001: 2015 standards since 2000. Received appreciation certificate from the Government of India Ministry of Skill Development & Entrepreneurship for commendable contribution to the exceptional performance of the Indian contingent at the WorldSkills Competition 2017 (Abu Dhabi, UAE) and 2019 (Kazan, Russia).

The Entrepreneurship Development Cell of MITAOE received Rs. 84 lakhs from approved funds of Rs. 200 Lakhs from the Startup India seed funding scheme, Government of India. MITAOE-EDF Received 8.92 lakhs under the MSME-BI scheme for digital artificial insemination devices.

MITAOE TEDX is being organized for three years and all the talks are on the official youtube channel of TED.

Student Achievements

• Won 25 first prizes in different Hackathons and Smart India Hackathons since 2019.

• World Skill India – mobile application development national (silver medal) and zonal (bronze) winner

• Go-kart national champions for three years consecutively

• Won Four prizes in SAE India Southern Section Aero Design Challenge 2022.

• Medallion of Excellence award in the skill of mobile robotics at world skill competitions in 2017 and 2019.

• Champions in national as well as state chess and swimming competitions.

Concluding Remarks :

The Academic Autonomy has assisted the institute to align the curriculum content, flexibility, pedagogy and assessment to address the dynamic needs of the industry, society and core values of accrediting bodies viz., NBA and NAAC. The same is achieved as follows

a) Efforts towards thrust areas of the Nation: In view of the Academic autonomy flexibility we got an opportunity to align the curriculum to

- Social internships - Audit and credit based.
- Ecosystem for Entrepreneurship
- Activities supporting SDG (Sustainable Development Goals) of the United Nations
- Inclusion of courses like Economics, Psychology, Environment Studies, Design Thinking, Prototyping

b) Students on par with Global competency requirements.

- Skill based curriculum
- Entrepreneurship course and Incubation Center ecosystem.
- Eight months of credit-based internship.
- The choice for Global certification as part of the assessment.
- Three-term Projects for strategic implementation of projects
- Participation at the University level, state level, National Level and international level competitions in co-curricular activities viz., Hackathon, World Skills India, World Skills International, Society of Automotive Engineers

c) Value-based education for students

- Universal Human Value Education a part of the curriculum
- NSS Activities
- Participation in Government initiatives like Unnat Bharat Abhiyan, Swatch Bharat Abhiyan
- 28 clubs (Technical and non-technical)

d) Technology Enabled Campus

- Learning Management system (Moodle) for curriculum delivery
- ERP at institutional level
- Provision for Blended teaching learning (Offline and Online))
- Swayam - NPTEL Credit Transfer
- 500 Mbps leased line (1:1 dedicated line)
- Secured Wi-fi enabled campus
- Digital library with remote login.

e) Strive for Excellence

- Center of Excellence in collaboration with industry
- Publication of quality Papers in journals of repute.
- Participation in NIRF ranking, ATAL Rankings
- MSME (Ministry of Micro, Small & Medium Enterprises) and DIPP (Department for Promotion of Industry & internal Commerce & Industry, Government of India under Startup India Seed Funding Scheme) approved Incubation center.