

SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

**MARATHWADA MITRA MANDAL'S INSTITUTE OF
TECHNOLOGY**

SURVEY NO. 35, PLOT NO. 5/6, LOHGAON PUNE

411047

www.mmit.edu.in

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NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

About the Trust

The trust "**Marathwada Mitra Mandal, Pune**" is established in 1967 by Hon. Late Shri. Shankarraoji Chavan, the Former Home Minister, Government of India as the "Founder President". The trust was formed with an initiative of distinctive personalities including academicians, industrialists and socialists with motto "Yethe Bahutanche Heet" – (Welfare of Masses). Mass education, co-education and dedication towards an overall development are the watchwords of the trust.

About the Institution

The Marathwada Mitra Mandal's Institute of Technology, Lohgaon is established in 2008. The institution is affiliated to Savitribai Phule Pune University, Pune, approved by AICTE, New Delhi and is recognized by DTE, Government of Maharashtra. At the institution, efforts are directed to accommodate and address expectations of every student in line with the vision of the trust of imparting quality education for professional excellence and holistic development through continual improvement and team work.

The Institution's Location

The institution is located in the vicinity of the North-East of the Pune city (Maharashtra State) at latitude and longitude of 18.610 and 73.940 respectively. It is located at a distance of 7 kms from Pune Lohgaon Airport, 14 Kms from Pune Railway Station and 17 kms from Central Bus Stand (Shivaji Nagar). The postal address of the institution is - Survey No. 35, Plot No. 5/6, Vadgaon Shinde Road, Lohgaon, Pune – 411047.

Vision

The vision of the institution is "***Techno-Social Excellence***".

Mission

The Mission of the Institution is to

- Enhance technology transfer
- Implement entrepreneurship
- Promote global competency
- Integrate innovative pedagogy
- Create excellent human resource

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- The State- of-the-art infrastructure facilities including specially designed classrooms, well equipped laboratories, tutorial rooms, central library, hostels and staff quarters
- Pertaining to motto of the trust “Welfare of Masses”, responsibility of economically weaker students to continue their education by financial assistance
- Spacious and excellently landscaped green campus with eco-friendly atmosphere
- Experienced, devoted and self motivated faculties
- Effective Guardian Faculty Member system for addressing students’ needs
- Conducive learning environment with student centric methodology
- ICT based teaching-learning practices
- Courses on add-on technical and soft skills as per industry requirements
- MOUs with industries and organizations for conducting various students’ centric activities
- Students’ services in various social causes through NSS activities
- Encouraging and supportive management for fulfilling vision of the institution
- Dedicated playground of area 6.7 acres

Institutional Weakness

- Less number of patents, funded research and book publications
- Limited number of consultancy activities
- Limited approachability by public transport system
- Lack of foreign University collaborations.

Institutional Opportunity

- Increasing in number of funded research projects
- Research publications in indexed national and international journals
- Need to improve Faculty-Cadre ratio
- Improving collaboration with corporate world
- Strong networking with alumni to improve the academic and placement activities
- Active participation and contribution to address the Techno-Social issues like Digital India, Clean India, Smart Cities and Smart Villages at National level

Institutional Challenge

- To enhance the placement in core companies and anticipating changes in global scenario
- Overall decline in engineering admission scenario
- Adopting the fast changing world with cutting edge technology

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Marathwada Mitra Mandal's Institute of Technology (MMIT) is a self financing engineering institution. The institution follows the curriculum designed by the affiliating Savitribai Phule Pune University (SPPU). The curriculum is developed by SPPU integrating factors such as employability, recent trends and social needs *etc.* The curriculum is revised to develop students from every aspect and serve the requirements of the society. Faculties are involved in designing and implementing the University curriculum. Senior faculties of the institution are involved in various bodies and committees of the University such as local selection committee, staff selection committee and examination committee. An academic planner of the institution is prepared in-line with the academic calendar of the University. Every department designs an academic calendar in line with the academic planner of the institution. Academic, co-curricular and extra-curricular activities are conducted as per the academic planner. The institution provides flexibility by introducing various add-on courses, industrial visits, industry oriented elective courses and arranging final year project exhibitions which help to bridge the gaps between industry and the institution. The institution integrates cross-cutting issues relevant to gender, environment and sustainability, human values, professional ethics into the curriculum. Deserving students are motivated for paper presentation in national and international journals by providing financial support. Students are also motivated for undergoing industrial projects for participation in Go-KART, All Terrain Vehicle (BAJA), Robot design and development. Feedback of stake holders is obtained about the institution and existing syllabus. The suggestions are forwarded to university for further consideration.

Teaching-learning and Evaluation

The institution adheres to the rules and regulations of Savitribai Phule Pune University (SPPU). The admission process of the first and direct second year is transparent and the Centralized Admission Process (CAP) is monitored and regulated by the Directorate of Technical Education (DTE), Government of Maharashtra. Students from different diversity including category, gender and locality are enrolled in the Institution. The institution has an effective Academic Monitoring Committee (AMC) which monitors and conducts periodic meetings to enhance teaching-learning processes. The faculties prepare and follows curriculum plan for effective teaching-learning and evaluation process. At the end of every semester, a review of the teaching-learning process is carried out and subject distribution for the next semester is done. Thus, faculties get sufficient time to prepare course content. A review of syllabus coverage is taken in every academic month. The institution has a transparent process to recruit experienced and qualified faculties. Teachers and students also attend workshops and conference for enhancing their knowledge. Faculties are encouraged to use ICT-based tools, webcasting, NPTEL videos, DELNET Software, e-resources, language lab software, ERP software and Goggle Apps etc. to enhance the teaching-learning process at the institution. Course Outcomes (COs) – Program Outcomes (POs) mapping of every course is carried out for all departments. After assessments of COs - POs and COs-PSOs, the outcome is used to identify attainment level of program outcome. The institution has a well defined student feedback mechanism that helps in improving overall teaching-learning process and also the competency of the faculty.

Research, Innovations and Extension

The institution has Research and Development (R&D) Cell, chaired by the Principal, industry person and senior faculty members from each department for resource mobilization. Research and Development Cell of the institution promotes research culture among faculties as well as students. The role of Cell is to guide and promote faculty members to carry out research work. The institution organizes various workshops, guest lectures, conferences for cultivating the research atmosphere. At present, the institution has six Ph.D. holders and nine faculties are pursuing Ph.D. from renowned universities. Institution is setting up Incubation Centre to

promote entrepreneurship through Industry Institute Interactions. Students participate in various technical activities and events. The institution provides financial support to the faculties and students for publishing their research work in reputed national and international journals/conferences. Various social activities are conducted in rural areas under National Service Scheme (NSS) unit of SPPU. Every year, NSS unit organizes a camp in a village to identify rural problems and help to solve a few of them. Other activities of the NSS unit are a blood donation camp, visits to schools in rural areas and orphanages and donates needful items. The purpose of these activities is to nurture humanistic values among the students and to support the needy students. The institution organizes youth empowerment programs on yoga, life skills development and personality development, *etc* in association with NGOs. The institution has signed 14 Memorandums of Understanding related to organizing student centric activities.

Infrastructure and Learning Resources

The institution has a significant concern for providing the state-of-the-art infrastructure and learning resources to enhance learning experiences. The institution is spread over 13.99 acres with excellent architecture, landscaping, spacious ventilated hexagonal class rooms are well-equipped with ICT tools, internet connectivity and audio-visual facilities. Tutorial rooms and well equipped laboratories are made available. A well maintained seminar hall equipped with audio visual equipment along with power back up is made available for conducting workshops, seminars, guest lectures and various college functions. A spacious playground of 6.7 acres caters to the need of extra-curricular activities. The adequate infrastructure with necessary facilities is available to play indoor games table tennis, badminton, carom and chess. The separate space is provided for gymnasium activities. The institution has well furnished separate hostels for girls and boys in campus and the capacity of hostels is 288 students. The central library consists of conventional library and digital library with text books, reference books, journals/e-journals, NPTEL videos with spacious reading hall and photocopying facilities. SLIM software is used for library management system. The institution has 51 Mbps internet leased line. The internet connectivity inside the campus is provided either with LAN / Wi-Fi. Computer-Student ratio is 1:2. CCTV cameras are installed at the institution for ensuring safety measures and monitoring activities. Institution is adopting smart class room technology. The institution has functional committee of 'Maintenance, Housekeeping and Write-off' for maintaining laboratories, support facilities, physical verification.

Student Support and Progression

The students admitted in the institution are from diversified background. Schemes of the government such as free-ships, scholarship, EBC are implemented in the Institution. The institution provides financial assistance to needy students and extends support through self-financed 'Earn and Learn scheme'. Institution provide technical and financial support to students for publishing their research work in national and international journals/conferences, to participate in technical activities like BAJA, Robocon, Go-KART and Hackathon *etc*. Various programmes are implemented for academics and progression towards employment, higher education and entrepreneurship. Training and Placement Cell of the institution functions under the Corporate Relations Division Cell (CRD) of the trust. The cell takes efforts for training, placement, industry relations and also for, preparation of competitive examinations like GATE, MPSC, UPSC, IBPS, PSUs and Engineering Services, *etc*. The academic progress of students is monitored by Academic Monitoring Committee (AMC). The institution organizes annual social gathering "ANUBHUTI" and technical event "SAMVITTI" to provide platform for the students to explore their hidden talent. Many activities are organized by the NSS unit of the institution throughout the year. Students are active members of various institution level committees such as Women's Grievance cell, Anti-ragging Committee, Hostel, Mess and Academic Committees etc. The

institution has registered Alumni Association which conducts alumni meets every year. The alumni guide the present students about industry requirements and recent trends in industry.

Governance, Leadership and Management

The vision of the institution is “*Techno-Social Excellence*”

The mission of the institution is to:

- Enhance technology transfer
- Implement entrepreneurship
- Promote global competency
- Integrate innovative pedagogy
- Create excellent human resource

The Management, Principal, Heads of the Departments, Deans, Section Heads and Administrative Officer play a vital role in achieving the Vision and Mission statements of the institution. The institution pursues a transparent work culture. Student’s centric activities are carried out by participative management. Faculties are involved in different functional committees as a part of decentralization practices. The institution takes efforts for recruiting experienced faculties through established procedures and policy. Performance appraisal of faculties is carried out every year by the Principal along with Heads of the Departments on the basis of parameters like teaching skills, students’ feedback and result analysis. Institution provides financial support for attending and organizing the conferences, workshops, skill development FDP, etc to upgrade the professional competency of the staff. Consolidated annual budget of institution is prepared after receiving the budget from each department. Management conducts regular meetings with the Principal about the requirements of the institution such as infrastructure development, financial needs, recruitment of faculties and staff as per the existing resource mobilization policy. Internal and external audits are carried out in the financial year for income and expenditure of the institution. Overall internal Quality is assured by Internal Quality Assurance Cell (IQAC) of the institution through periodic interactions. Institution conducts AAA for achieving academic excellence and continuous improvement of quality.

Institutional Values and Best Practices

Institution always strives for achieving its vision “Techno-Social Excellence”. The institution conducts a green audit from accredited organization. Solar water heating system, rain water harvesting, biogas plant for solid waste disposal, sewage treatment plant (STP), e-Waste management, RO plant are installed and functional in the institution. The Institution facilitates differently-abled (Divyangjan) by availing of physical facilities, provision of lifts, ramp, Braille software/facilities and rest rooms. The institution has several best practices for achieving objectives and an overall development. One of the best practices is **Professional Skills Enhancement of Students**. Students are shortlisted and selected for teaching by faculty and training by expert-professionals. Students are funded to participate in various competitions. Efforts are taken by the institution to train students and participate in national contests such as Robocon. The teaching and hands-on training is conducted for ~ 30 hrs. A training workshop for 2 days is conducted by professional robotics experts. Apart from Robocon, the institution supports students financially for technical activities such as SAE BAJA, Go-Kart,

HACKATHON etc. Another best practice followed by the institution is **Promoting Social Activities**. In accordance with the vision of the institution, various social activities are conducted such as a blood donation camp, gender equality programmes, tree plantation and fund generation for needy people and NSS. Distinctiveness of the institution is taking the responsibility of financially weak students by providing **Financial Assistance to Students** in college and hostel fees through institutional funds. This helps to ensure their continuation of higher education.

NAAC

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	Marathwada Mitra Mandal's Institute of Technology
Address	Survey No. 35, Plot No. 5/6, Lohgaon Pune
City	Pune
State	Maharashtra
Pin	411047
Website	www.mmit.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Rupesh V. Bhortake	020-7447786623	9049008003	020-7447786624	principal@mmit.edu.in
Associate Professor	Umesh P. Moharil	020-27150047	9850359802	020-20261613	umesh.moharil@mmit.edu.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of establishment of the college	19-06-2008

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recognition

Under Section	Date
2f of UGC	
12B of UGC	

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	19-06-2008	12	Extended every year

Details of autonomy

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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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	Survey No. 35, Plot No. 5/6, Lohgaon Pune	Urban	13.99	18784

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	BE,Electronics And Telecommunication Engineering	48	HSC and CET	English	60	0
UG	BE,Computer Engineering	48	HSC and CET and DIPLOMA	English	120	82
UG	BE,Mechanical Engineering	48	HSC and CET	English	120	43

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	8				16				48			
Recruited	0	0	0	0	1	1	0	2	21	19	0	40
Yet to Recruit	8				14				8			
Sanctioned by the Management/Society or Other Authorized Bodies	2				0				28			
Recruited	2	0	0	2	0	0	0	0	19	9	0	28
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				22
Recruited	15	7	0	22
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				19
Recruited	16	3	0	19
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	1	1	0	1	2	0	5
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	2	0	0	0	0	0	28	26	0	56

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	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	8	3	0	11

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	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

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

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	214	4	0
	Female	37	1	0	0	38
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	28	17	21	28
	Female	15	4	2	8
	Others	0	0	0	0
ST	Male	0	1	0	1
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	57	49	66	74
	Female	14	10	13	20
	Others	0	0	0	0
General	Male	112	89	125	122
	Female	30	20	49	52
	Others	0	0	0	0
Others	Male	31	27	23	33
	Female	4	3	9	6
	Others	0	0	0	0
Total		291	220	308	344

3. Extended Profile

3.1 Programme

Number of courses offered by the institution across all programs during the last five years

Response : 388

Number of self-financed Programmes offered by college

Response : 0

Number of new programmes introduced in the college during the last five years

Response : 0

3.2 Student

Number of students year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
890	1053	1068	1098	960

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

2016-17	2015-16	2014-15	2013-14	2012-13
262	236	209	209	186

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

2016-17	2015-16	2014-15	2013-14	2012-13
310	301	241	242	207

Total number of outgoing / final year students

Response : 310

3.3 Academic

Number of teachers year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
79	77	73	80	72

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

2016-17	2015-16	2014-15	2013-14	2012-13
76	76	73	72	68

Number of sanctioned posts year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
76	76	76	72	68

Total experience of full-time teachers**Response : 599****Number of full time teachers worked in the institution during the last 5 years****Response : 139****3.4 Institution****Total number of classrooms and seminar halls****Response : 17****Total Expenditure excluding salary year wise during the last five years (INR in Lakhs)**

2016-17	2015-16	2014-15	2013-14	2012-13
347.44	407.77	343.39	401.45	477.82

Number of computers**Response : 431**

Unit cost of education including the salary component(INR in Lakhs)

Response : 0.8920169

Unit cost of education excluding the salary component(INR in Lakhs)

Response : 0.3557650

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4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

Institution is affiliated to Savitribai Phule Pune University (SPPU) and follows the curriculum prescribed by the same university. The curriculum is designed by the faculty of all colleges under the guidance of Board of Studies of University. Institution has a structured academic plan, for effective curricular planning and implementation, as per following documented process.

- Academic planner of institution is prepared in accordance with academic calendar of university before commencement of every academic year.
- Each department prepares detailed departmental academic calendar as per the institutional academic planner by incorporating commencement of the term, examination schedule, department and institution level activities, workshops, guest/expert lectures, industrial visits, display of defaulter list and end of the term etc.
- Faculty members give choices of the subjects for new semester as per their expertise. To finalize the elective subjects, students' choice is taken into consideration.
- Head of each department allocates the theory and laboratory courses to faculty members according to faculty choices, subject taught, area of specialization and experience.
- Departmental time table coordinator prepares time tables class-wise, classroom-wise, laboratory-wise and faculty-wise. These time tables are finalized by HoDs and college time table in-charge and approved by Principal, then circulated to faculty members and students. The timetables are displayed on common notice board, website, ERP (Enterprise Resource Planning) and Google Apps.
- Theory and practical teaching plans, course files and lab manuals are prepared by the faculty members before start of semester.
- The contents in the curriculum and beyond curriculum are delivered by faculties through classroom teaching, laboratory demonstration, project based learning, seminars, webinars, guest lectures, workshops, etc.
- For enrichment of teaching-learning process faculty members use ICT tools.
- Industrial visits are organized to bridge the gap between curriculum and industry requirements. The projects undertaken by the final year students help them to identify industry and social needs. A group of 3-5 students is mentored by each faculty.
- Every faculty maintains a daily attendance for lectures and practical.
- For a group of 15-20 students, one teacher is appointed as a Guardian Faculty Member (GFM) to monitor student's attendance and academic progress. GFM also addresses the non-academic issues.
- Performance and attendance of all the students is regularly communicated to parents through GFM by telephonic conversation and SMS.
- Parent Teacher Meeting (PTM) is arranged in each semester to communicate the performance of their ward and to interact with the parents for academic progress of students.
- Academic Monitoring Committee (AMC) monitors the progress of theory and laboratory courses

conducted according to teaching and laboratory plans. AMC conducts academic audit regularly to ensure the quality of academics.

- The slow and advance learners are identified based on their test performance and class room interactions. Extra efforts are taken by conducting additional classes.
- The remedial classes are also conducted for the failure students to improve their results.
- Views of experts from industry, academia, parents and alumni on curriculum are taken for improving teaching learning process and academics.

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

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 20

1.1.2.1 Number of certificate/diploma programs introduced year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
03	06	05	04	02

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	View Document

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 72.83

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
61	75	60	53	20

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

<p>1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years</p> <p>Response: 47.94</p>	
<p>1.2.1.1 How many new courses are introduced within the last five years</p> <p>Response: 186</p>	
File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	View Document
Any additional information	View Document
<p>1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented</p> <p>Response: 100</p>	
<p>1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.</p> <p>Response: 03</p>	
File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Name of the programs in which CBCS is implemented	View Document
<p>1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years</p> <p>Response: 52.99</p>	
<p>1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year wise during the last five years</p>	

2016-17	2015-16	2014-15	2013-14	2012-13
608	678	629	150	573

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Response:

Gender Issues:

- Institution has established Internal Complaints Committee/Women's Grievance Cell to create and maintain an environment in which students, teacher and non-teaching staff can work together in an atmosphere which is free of gender violence and gender discrimination.
- Institution follows rules of All India Council for Technical Education (AICTE) and Directorate of Technical Education (DTE), Government of Maharashtra for reservation of male and female.
- Different events such as workshops on Awareness of Sexual Harassment of Women, International Women's Day, Health Checkup Camp and Save Girl Child are conducted in the institution to address the issues.

Environment and Sustainability:

- The institution conducts Green Audit to improve the Environment Conditions and Energy Audit to optimize the use of electricity.
- The institution has a biogas plant for utilization of waste food in the hostel mess. The biogas produced from plant is used for cooking purpose.
- Sewage Treatment Plant (STP) of 40,000 liters capacity is set up in the institution to treat the waste water which is utilized for gardening.
- Drip irrigation water system is installed to save water and to maintain the green campus.
- Rain Water harvesting system is operational in the institution to increase underground water level.
- The institution saves electricity by the use of solar system and LED lamps all over the campus.
- The courses such as Basic Civil & Environmental Engineering and Road Safety are offered to the students at different levels.
- Institution is moving towards paperless office by implementation of ERP.
- The institution has a lush green and pollution free campus spread over an area of 13.99 acres. Environment Awareness Programs conducted by the institution are:

- Tree Plantation
- NSS Special Camp
- Plastic Free Pune
- “Swacchta Hi Seva” Rally 2017
- Care River Clean River drive
- Swachata Abhiyan

Human Values and Professional Ethics:

- Integration of human values is one of the prime mottos of the institution. Imparting effective human values through education helps to identify and adopt personal and social values for the welfare of the society.
- The institution has formed an anti-ragging committee chaired by Principal.
- Intuition takes additional efforts through National Social Service (NSS) for making students sensitive towards Human values. Every year on 26th February, institution conducts a Blood Donation Camp in the memory of Founder President, Late Shri. Shankarraoji Chavan.
- Institution adopted Dhamari village under NSS since 2015-16 for social and digital awareness.
- The institution celebrates various national days like Constitution Day, Yoga Day, Youth Day, Teachers day, Engineers day, Republic day, Independence Day etc. to percolate values about nationalism and integrity.
- Institution frequently visits to Orphanage home nearby institution for extending help.
- Institution has MoU with Adiwasi Vikas Prabodhini, Pune who works for upliftment of rural, tribal and differentially able communities.
- The institution takes efforts to inculcate professional ethics amongst students and faculties through different activities like Vittiya Saksharata Abhiyan, Helmet Awareness Program, Personality Development Program, Street Play etc.

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

1.3.2 Number of valued added courses imparting transferable and life skills offered during the last five years

Response: 24

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 24

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 44.51

1.3.3.1 Number of students undertaking field projects or internships

Response: 365

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Structured feedback on curriculum obtained from 1) Students 2) Teachers 3) Employers 4) Alumni 5) Parents For design and review of syllabus semester wise/ year wise

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
Any additional information	View Document
URL for stakeholder feedback report	View Document

1.4.2 Feedback processes of the institution may be classified as follows:

A. Feedback collected, analysed and action taken and feedback available on website

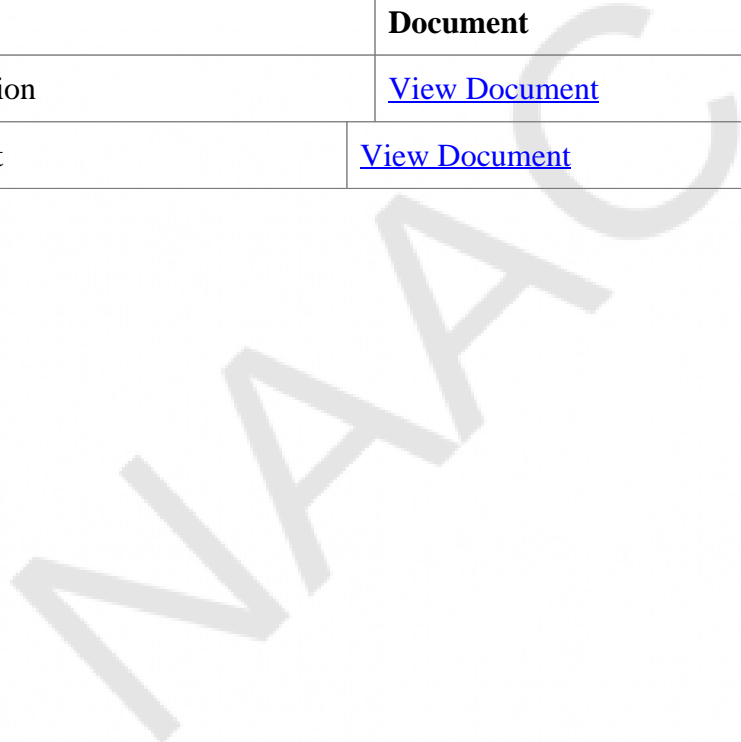
B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

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

File Description	Document
Any additional information	View Document
URL for feedback report	View Document



Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 1.85

2.1.1.1 Number of students from other states and countries year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
19	21	18	16	19

File Description

Document

List of students (other states and countries)

[View Document](#)

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 66.53

2.1.2.1 Number of students admitted year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
291	220	308	344	326

2.1.2.2 Number of sanctioned seats year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
539	489	435	435	389

File Description

Document

Institutional data in prescribed format

[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per

applicable reservation policy during the last five years**Response:** 66.67

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

2016-17	2015-16	2014-15	2013-14	2012-13
149	110	134	170	157

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

2.2 Catering to Student Diversity**2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners****Response:**

Institution organizes orientation programme for newly admitted students. Institution identifies slow learners and advanced learners on the basis of qualifying marks. Students learning levels (slow and advanced learners) are evaluated based on their performance, results in internal and external evaluation of Institution and University examinations.

Teaching material is shared on Google Apps for all learners to understand concept concisely and comprehensively. Motivational lectures are arranged to bring positivity and self confidence among students. Institution arranges additional sessions on soft skills, personality development, career counseling, group discussion, expert lectures, personal interviews and aptitude enhancement for holistic development of students. Considering the levels, assignments are designed to address the need of slow and advanced learners.

Various measures adopted for slow and advanced learners are as follows.

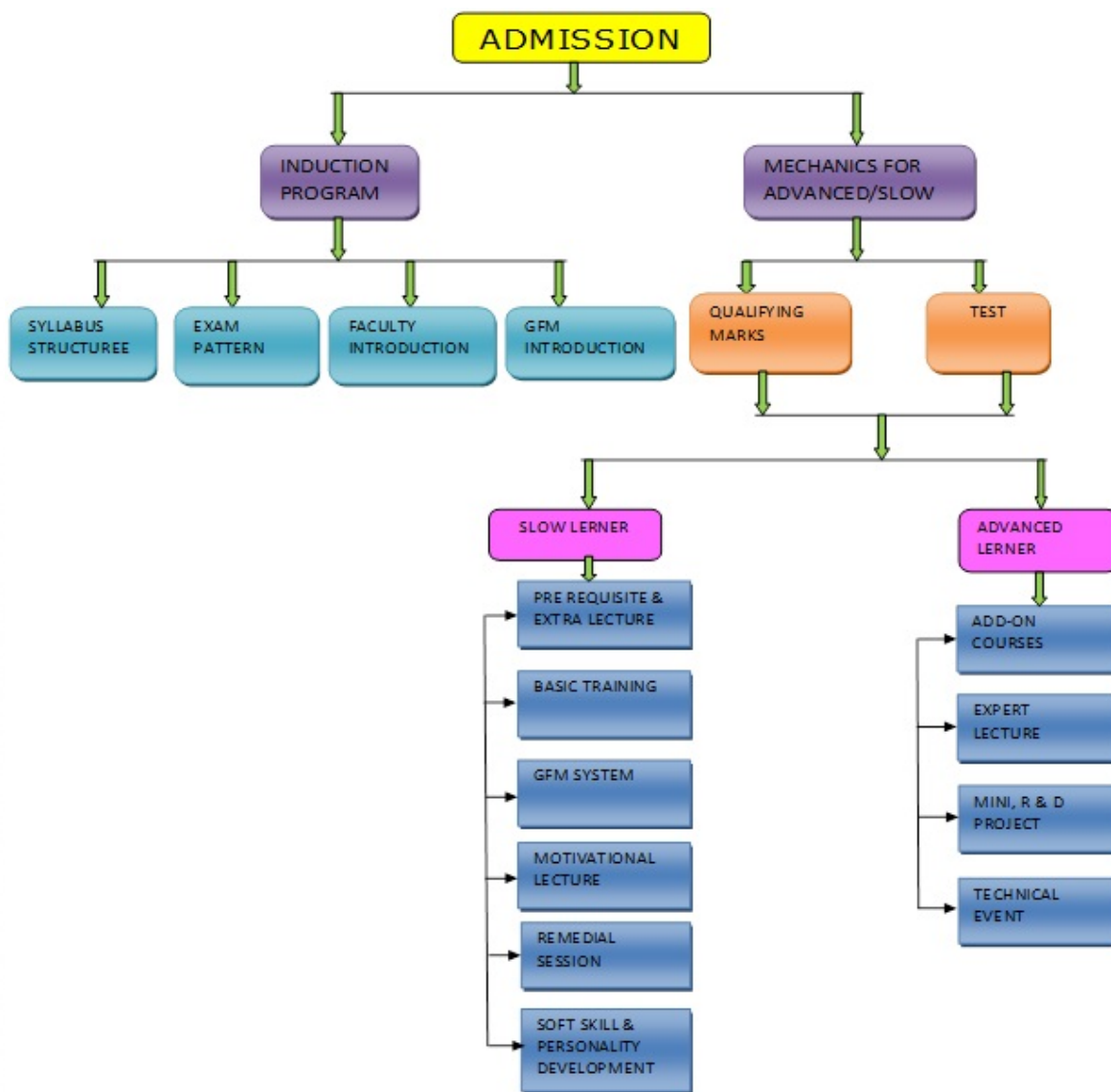
For slow learners

- Guardian Faculty Member (GFM) is assigned to a group of 15-20 students to resolve their academic and personal related issues. Regular interaction of GFM with parents helps to know the requirement of such students to improve their learning capabilities.
- Basic training is given for use of mini-drafter and scientific calculator.
- Extra lectures are incorporated in the time table for prerequisites of subjects.
- Remedial sessions are organized to improve the performance in particular subject.

- Mock oral and practical sessions are conducted.
- Institution provides web based portal MyExamo to conduct practice sessions for on-line examination which helps to improve their on-line result of University examination.
- Personality development programs such as Barclay's workshop, theatre based workshop, mock interviews, etc. are organized.
- The institution conducts term-end theory examinations. This helps slow learners to practice writing theory papers of university examination.

For Advanced Learner

- For advanced learners, Institution provide platform like Gokart, BAJA, Robocon, MESA, EESA, ICON and SAMVITTI- technical events.
- Students are guided by the faculty members to perform MINI PROJECTS.
- Add-on courses like CATIA, CREO and PCB Wizards are introduced for advanced and interested learners.
- Resource persons from industries and academic institutions are invited to deliver guest lectures on advanced topics and for innovative projects of the students.
- Advanced learners are guided to participate in workshops, paper publications in conferences/journals.
- Internships and industrial sponsored project are chosen through Industry Institute Interaction. Institution EDC Cell and Incubation centre help the advanced learner for innovative ideas in association with alumina.
- GATE and GRE preparatory sessions are conducted by experts.
- Central library has a collection of GATE, CAT, MPSC, UPSC and GRE books required for preparing competitive examinations. Digital library has a collection of e-books, e-journals and NPTEL Videos.



2.2.2 Student - Full time teacher ratio

Response: 11.39

File Description	Document
Institutional data in prescribed format	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.24

2.2.3.1 Number of differently abled students on rolls

Response: 2

File Description	Document
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	View Document
List of students(differently abled)	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:

For better understanding of subjects, institution adopts and emphasizes on students centric methods. The institution has implemented Google Apps, Enterprise Resource Planning (ERP) Software and MOODLE for interactions with teachers and accessing learning resources. The required necessary facilities are provided to staff for enhancing the development of students. The institutional efforts related with experimental learning, participative learning and problem solving methodologies are summarized below:

Experiential learning

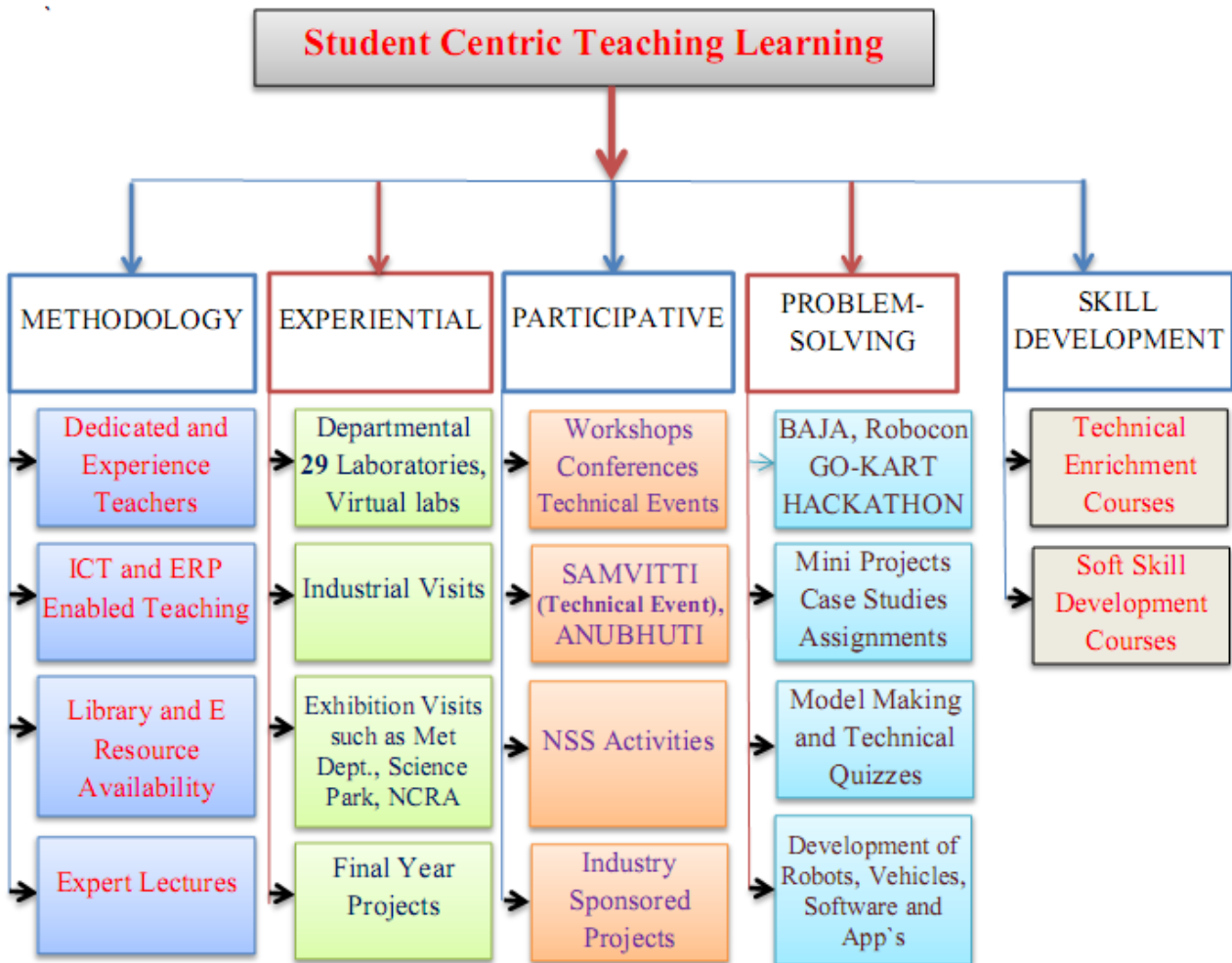
- Institution has invested Rs. 4,35,11,921 (Rs.4.36 Cr.) for developing fully equipped 29 laboratories and workshop to conduct the practical sessions to validate theory and practical results.
- **Virtual labs** are used as a tool in experimental learning.
- The institution arranges industrial visits regularly to bridge gaps between academia and industry.
- Visits to Meteorological Department, IT Expo, National Centre for Radio Astronomy (NCRA), Science Park, and Auto Expo *etc* are organized frequently to gain the additional knowledge.
- As a part of experimental learning students are guided by teachers to carry out final year projects.

Participative learning

- Guidance and financial assistance is provided to students for participation in International and National conferences. Workshops are organized by the institution to exhibit technical skills of students.
- The institution organizes event 'SAMVITTI' to develop technical skills of students and encouraged to participate in competitions like poster presentation, project competition, smart city competition, robo-race, lathe-war, CAD-Holix, web designing, codeathon and innovative ideas, computer gaming (CS and NFS), Smart circuit build, Tech snake and ladder, best out of waste, etc.
- As a part of participative learning, projects are carried out in a group of 3-5 students.
- Annual Social Gathering "ANUBHUTI" is organized every year to provide a platform for hidden talents of students and develop their leadership qualities.
- The NSS unit of the institution, in coordination with SPPU, organizes social awareness programmes to develop a sense of societal and civic responsibilities among the students.

Problem solving methodologies

- Students are encouraged, mentored and financially assisted to participate in national level competitions such as BAJA, GO-CART, HACKATHON, ROBOCON. In these competitions, problems/tasks are given to students by organizing authorities to achieve the task in a specific period.
- Students work on mini projects and case studies under the guidance of faculties, which improves their problem-solving skills.
- Assignments, model making and technical quizzes are carried out to enhance problem-solving skills of students.
- Additional enrichment technical courses like CATIA (basic, intermediate and advanced), Raspberry Pi, PLC, JAVA, C++, Android, etc are conducted in the institution for skill development of students.
- Students are mentored to prepare Robots, ATV's, Software and Apps
- As a part of experimental learning, students are guided by teachers and industry experts to carry out Industry Sponsored Projects to work on the real world problems



2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 72

File Description	Document
List of teachers (using ICT for teaching)	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 16.73

2.3.3.1 Number of mentors

Response: 49

File Description	Document
Year wise list of number of students, full time teachers and students to mentor ratio	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

The institution ensures to provide quality education by integrating innovative and creative methodologies for the effective teaching-learning process.

Some of them are elaborated below:-

ICT based Teaching-Learning Activities

The institution provides ICT-based tools which helps staff in administration and planning of teaching-learning. Faculties share study material to students on Google apps in advance. This results for making sessions interactive and attentive for the effective teaching-learning process. Teachers use PPT, demonstration and discuss case studies to represent difficult concepts more effectively. Teachers use software such as PCB WIZARD, MATLAB, ANSYS, CATIA etc for practical based learning / simulation / modeling to get better awareness about the applications of the subject. Institution has setup of smart classrooms. Smart classroom tools are attractive methods of teaching due to audio-visual senses. National Program on Technology Enhanced Learning (NPTEL) Video lectures is made available to students to understand the subject thoroughly. Teachers also make use of e-resources to deal with complex concepts. Virtual labs are used as a tool in experimental learning for simulation and optimization.

Creative Teaching-Learning Activities

Teachers use different models and cut sections made from wood, paper, plastic, etc to deliver lectures

effectively. Students perform various tasks in laboratories to enhance their practical knowledge. The required standards are followed during the conduct of experiments. The innovative operating manuals for each setup are developed by faculty members and are made available to students for use. Students develop mechanisms, models, kits, equipment and software under the guidance of teachers. Teachers engage students in classroom discussions, group activities, debates, quizzes, etc. It helps to enhance the creativity of students.

Open Teaching-Learning

Open learning, beyond formal teaching learning pedagogy, broadens learning opportunities. Students are mentored to prepare Robots, ATV (All Terrain Vehicle), Software and Apps for different National Level competitions. Expert lectures and workshops are arranged to enhance the practical knowledge and skill sets. Students prepare models for competitions from waste materials. Students are encouraged and guided by teachers to innovate new technology.

Facilities and Faculty Training for Effective Teaching-Learning

White & green boards and projectors are made available in the classrooms. Teachers are supported to attend “Student Centric Teaching–Learning” workshops, FDP for effective teaching. Teachers and students also attend workshops and conference for enhancing their knowledge.

Institution provides e-Resources anytime anywhere in the campus with the availability of high broadband Wi-Fi. The institution has NPTEL chapter and teachers undergo NPTEL certification courses for enhancing their subject knowledge

2.4 Teacher Profile and Quality

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

Response: 99.21

File Description	Document
List of the faculty members authenticated by the Head of HEI	View Document
Year wise full time teachers and sanctioned posts for 5 years	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 4.39

2.4.2.1 Number of full time teachers with Ph.D. year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	3	3	4	3

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document

2.4.3 Teaching experience of full time teachers in number of years

Response: 8.32

File Description	Document
List of Teachers including their PAN, designation,dept and experience details	View Document

2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 10.94

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
12	18	8	2	1

File Description	Document
e-copies of award letters (scanned or soft copy)	View Document
Institutional data in prescribed format	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 6.99

2.4.5.1 Number of full time teachers from other states year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
6	7	6	4	3

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

Evaluation process adopted by the institution aims at testing the skills and knowledge acquired by students during the completion of course. Since the adoption of credit system by University, the focus of internal evaluation is focused around student. Continuous evaluation is performed through direct tools like MCQs, unit tests, assignments, practical, Phase I, II examinations and in-sem examination and indirect tools like quiz, debate, survey, competitions and discussions. The reforms adopted by the institution as follows:

Online Practice Examination: The institution conducts practice for online multiple choice questions examination on MyExamo web portal. Students can create their own tests and can assess their own performance. Model answers with explanation are also provided for self-assessment. The online test of the students has relieved the faculty to certain extent from assessment work thereby making more time available to resolve students' problems.

Term End Examination: The institution conducts term-end theory examinations at the end of the semester. This helps students to practice writing of theory paper as per the university examination pattern.

Mock Oral and Practical Examination: These examinations are conducted to develop confidence among students to face university examinations which are evaluated by an external examiner.

Retest: Students absent for the unit test and students with poor performance are advised to appear for a retest to improve their performance.

Quiz: Technical quizzes are conducted to develop the interest about the subjects.

Assignments: Assignments are given to students and their evaluation is regularly monitored by the subject teachers. Continuous evaluation through assignments helps student in improving their capabilities to deal with subjective matter, express alternative and creative solutions.

Term work: Term work evaluation is carried out based on term work assessment sheet. It includes student's attendance, assignments, unit test marks and completion of lab journals.

Seminars: Communication and presentation skills of students are evaluated through conduction of seminars which are carried out in two stages. This helps them to get acquainted with the current technological developments. Seminar evaluation of students is carried out based on presentation skill, literature review of topic, understanding of topic, timely submission of report and regular interactions with guide.

Projects: The institution encourages students to carry out industry-sponsored projects to work on the real world problems and to be familiar with industry environment. Project evaluation of the final year students is carried out in various stages by the project guide, head of the department, project coordinator and industry experts. The factors considered for evaluation of project are synopsis, understanding of project topic, design or synthesis, mathematical modeling, presentation, experimental results and project report.

Feedback System: Institution collects feedback from different stakeholders for improvement in internal evaluation processes. One of the tools to assess and evaluate the institutional processes is selection of candidate in various companies' on-campus and off-campus.

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

The mechanism adopted for internal assessment ensures transparency as elaborated below:

Transparent mechanism of internal assessment:

- The institution conducts unit tests for the assessment of student's performance in academics. The unit test answer sheets are assessed by subject teachers and discussed with students for further improvements.
- Model answer paper is also shared with students for a transparent assessment.
- Continuous assessment of students during practical's is updated in the attendance record file in his/her presence for timely submission of assignments and lab journals.
- Term work marks of students are filled in term work assessment sheet regularly.
- Monthly attendance of students and performance in unit tests are displayed on notice boards. It is communicated to parents and discussed in the parents-teacher meet.
- Online question papers are generated through auto-generation and the results are available to the students directly and immediately.
- Assessment of activities like seminars, projects, final year term work, oral, practical examinations along with external examiner brings transparency in the process.

Robust mechanism in terms of frequency and variety:

- The university examination pattern, marking scheme and schedule are informed to students in advance.
- Students are made aware that the term work is evaluated on the basis of attendance of students, performance in unit tests, timely submission of lab journals, performance in practical and submission of assignments.
- The evaluation sheet is prepared by the academic monitoring committee

The frequency of assessment is decided as follows:

Assessment head	Frequency of assessment
Practical	Weekly
Unit-wise assignment	Two weeks
Seminar and project	Monthly
Unit Test	Twice in a semester
Online test	Twice in a semester
End Semester Test	Once in a semester
Feedback	Once in a semester

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient**Response:**

To address the grievance of students related to examinations, the institution has constituted examination cell which consists of department level examination coordinators for smooth conduction of online examination, In-semester examination, End semester examination, Practical examinations of the university and all type of internal examinations. The cell is headed by College Examination Officer (CEO) as per the norms of Savitribai Phule Pune University.

Grievances related to University examinations

- Inability of submission of Examination form by student within time
- Online/in-sem marks carry forward
- Non issue of Hall ticket for Examination
- Appointment of writer to student on medical ground
- Non declaration/withheld of result of student
- Non receipt of mark sheet after declaration of result
- Incorrect entries in the hall ticket and mark sheet
- Change of elective subjects
- Revaluation

The above grievances of student are forwarded by institution within stipulated time and resolved by the university and the same is communicated to concerned student.

After declaration of results, students who wish to apply for photocopy and revaluation has to submit online application form on university website as per the schedule declared by the university. Hard copy of application with necessary fees has to be deposited in the college office. University provides soft copy of answer sheet on student's email ID in stipulated time. With the photocopy of answer sheet received, the student can further apply for revaluation if not satisfied with assessment. The change/no-change in the revaluation of answer sheets is communicated by the university to students.

Thus, the mechanism to deal with examination grievances is time bound and efficient.

Grievances related with internal examinations

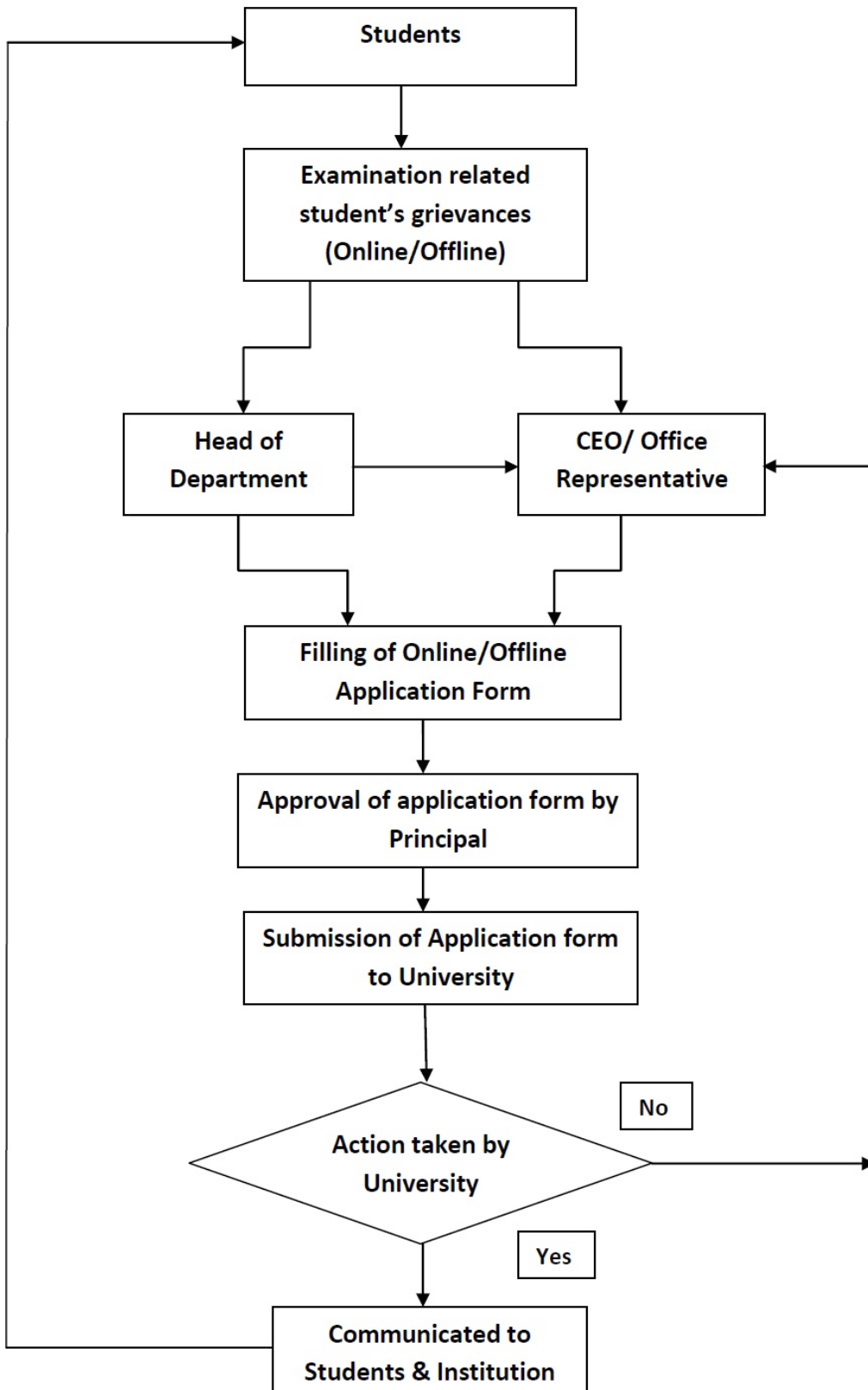
The institution examination cell is responsible to solve grievances of students related to internal examinations. The cases will be attended promptly on receipt of grievances from the students. Following procedure is adopted for internal examination grievances. Students can contact their respective HOD for any grievances of examinations at institutional level.

- HOD takes a note of their grievances and takes appropriate action.
- HOD may contact CEO for any suggestion and query.
- Students can even contact subject teacher for grievances on internal marks of any subject.

Because of the above transparent process, very less grievances are observed for internal marks evaluation.

NAAC

Mechanism to deal with examination related grievances



2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

At the beginning of each academic year, the affiliating university (SPPU) provides guidelines about the academic schedule of the semester which includes the dates of commencement and end of the semester, schedule of examinations, etc. Accordingly, the Academic Monitoring Committee, Dean Academics and the Principal prepare an academic planner for the institution in the beginning of a semester. After approval of the academic planner, the respective department prepares an academic calendar of the department. It includes a schedule for unit tests, term end exam, technical events, guest lectures, parents meet, co-curricular and extra co-curricular activities of the department. Academic calendar of each department is displayed on the institution website and also circulated among the faculties and students. In concurrence with the academic calendar, mock online tests are conducted for the first year and second year engineering students to practice university online examinations. Unit tests are conducted in the mid-term for the third and fourth year engineering students to practice for university in-sem theory examinations.

The subject teacher prepares a monthly attendance report and the same is conveyed to students for further improvement. The record of a continuous assessment is maintained by the subject teacher and performance of students is evaluated at the end of a semester. A periodic review of the progress of the syllabus is taken and extra hours are added in time table to meet the academic deadlines.

The institution faces some problems in following the academic calendar due to late admission of direct second year students. Due to late admissions, it is difficult to cover the syllabus on time. In such cases academic monitoring committee schedules extra lectures on Sundays or holidays to cover the syllabus in due course of time.

Meetings of Principal and HODs are conducted to review the syllabus coverage and related academic activities. The HODs, in turn, organizes departmental meetings and initiate the required steps for syllabus completion.

Faculties prepare teaching plan and session plan according to curriculum of SPPU. The staff members adhere to teaching plan and deliver the lectures according to methodologies decided in the plan. The continuous internal evaluation is carried out during practical sessions and to have one-to-one interaction with students. Regular review is conducted by faculties to monitor the progress of syllabus coverage. A periodic audit of each department is carried out to ensure that the assessment activities mentioned in the academic calendar are as per schedule and corrective actions are initiated if required. Accordingly, if required, the provision of additional/extra lectures is made in the time table.

File Description	Document
Any additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Institution has stated Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) for all the programs. Program Outcomes (POs) are the extent of knowledge, skills and graduate attributes which should have attained by students at the time of graduation. Program Specific Outcomes (PSOs) are defined at the department level in alignment with the vision and mission of the department. Course Outcomes (COs) are defined for each course which should be achieved by the student at the end of the course. The faculties modify COs of respective course, if required. Teachers are involved in the formulation of COs and PSOs. Also they will get brief idea through meetings. Staff trainings are arranged for achievement of corresponding COs, POs and PSOs.

Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated, displayed and communicated through the following ways:

- POs and PSOs are uploaded on the institution website: www.mmit.edu.in and published on curriculum documents like academic manuals, lab manuals, course files, etc.
- POs are displayed at appropriate places like the entrance of the institution and departments, administrative office, classroom corridors, library, etc.
- PSOs are displayed at the respective department locations like head of the department's office, classroom corridors and labs.
- COs are displayed at the respective course laboratories and also uploaded on the institution website.
- COs are discussed with students in the lectures conducted by the respective subject teachers.
- POs and PSOs are communicated to students and parents through various events like parents teacher meets, induction programs, etc.
- HOD meeting with faculty members is an effective mechanism to communicate program outcomes, program specific outcomes and course outcomes. Guardian Faculty Members conducts meeting with students and discuss POs, PSOs, COs.

File Description	Document
Any additional information	View Document
COs for all courses (exemplars from Glossary)	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

Outcome based education is the assessment of the learning outcomes. At the end of each course, the COs

need to be assessed and evaluated to check whether it has been attained or not. A method to evaluate the attainment of the COs has been developed. Mapping of the COs with POs and PSOs is carried out for the respective courses. COs are mapped with POs with the rating of 'low', 'moderate' and 'high' as per the level of the attainment of POs. The attainment of COs directly reflected into the attainment of POs.

Selection of various assessment methods for each course is defined for all courses on the basis of examination pattern defined by the university. Attainment of COs is carried out by individual faculty through internal and external assessment methods.

The Institution regularly monitors the attainment of COs through various direct and indirect assessment tools which include end semester exams, oral / practical exams, in-semester exam, online exams, unit tests, mock online exams, assignments, presentations, quizzes etc.

Tools' contribution to attain particular CO is defined percentage wise. Percentage attainment sheet for each course is prepared.

Course Outcome Attainment Sheet

Roll No	Internal Assessment Methods							External Assessment Methods							
	CO1				CO2			CO1				CO2			
	Unit Test	Term End	Assignment	Total Attainment	Term End	Assignment	Total Attainment	Online Exam	End Sem Exam	PR/OR	Total Attainment	Online Exam	End Sem Exam	PR/OR	Total Attainment
	30%	30%	40%	100%	50%	50%	100%	30%	50%	20%	100%	30%	50%	20%	100%
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
Average =				Average =			Average =				Average =				

Average of students' marks of each course outcome is taken as target for achieving that particular CO.

The level of attainment of COs is evaluated on three scales of levels. The levels of attainment are defined as below

Level 1: 40% of students scoring more than target

Level 2: 50% of students scoring more than target

Level 3: 60% of students scoring more than target

Percentage attainment of each PO and PSO is carried out by multiplying their mapping level with percentage attainment of respective CO.

POs and PSOs Attainment Sheet

COs	Program Outcomes (Pos)												PSOs	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
CO5														
CO6														
Average Attainment of Pos & PSOs														

2.6.3 Average pass percentage of Students**Response:** 91.49

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

Response: 1301

2.6.3.2 Total number of final year students who appeared for the examination

Response: 1422

File Description**Document**

Institutional data in prescribed format

[View Document](#)**2.7 Student Satisfaction Survey****2.7.1 Online student satisfaction survey regarding teaching learning process****Response:****File Description****Document**

Database of all currently enrolled students

[View Document](#)

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years

Response: 42.52

3.1.1.1 Total Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year wise during the last five years(INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
21.34	2.71	8.10	2.82	7.55

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

3.1.2 Average number of research projects per teacher funded by government and non government agencies during the last five years

Response: 0.24

3.1.2.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 33

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

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

- Institution is setting up Incubation Center under the Entrepreneur Development Cell (EDC) to enhance research activities and to promote entrepreneurship through Industry Institute Interactions. The Incubation Cell is well equipped with PCs, LCD projectors, printers and books.
- The institution promote students to develop technical skills by encouraging them to participate in national, international events like COEP BHAU I2I, AICTE Smart India Hackathon, BAJA, Gokart, etc.
- Special training is given to a team of students every year to participate in ROBOCON. Institution bagged the best Rookie Award by ABU-ROBOCON in National Robocon Contest 2013.
- The students from Mechanical Engineering Department have secured the First Rank as 'Best Innovative Project' at BHAU Institute of Innovation, Entrepreneurship & Leadership, Pune.
- The students of Computer Engineering Department were shortlisted for 'Grand Finale for Smart India Hackathon 2017' held at Nagpur.
- The institution library has a state of art infrastructure and resources such as reference books, journal papers, e-journals, NPTEL videos and DELNET software, etc. for enhancement of knowledge.
- To enhance the technical skills among students, the institution organizes the technical event "SAMVITTI". In the event, the students can participate in technical competitions, paper & poster presentation, project competition, etc.
- Each department interacts with the industry to assure its needs and fill the gap in the curriculum. The institution organizes different workshops by inviting industry personnel to address students on recent trends in the technology and to update their knowledge.
- The institution also arranges industrial visits/field trips for students and faculties at different places to understand the industrial culture and functional challenges.
- The institution provides financial support to the faculties and students for publishing their research paper in reputed national and international journals/conferences.
- The institution has published a number of research papers in different national and international journals during last 5 years.
- Faculties and students are encouraged to participate in university level competition, AVISHKAR organized by the Savitribai Phule Pune University every year.
- Guest Lectures on Entrepreneurship and 3 day Entrepreneurship awareness Camp was arranged at MMIT.

File Description	Document
Link for Additional Information	View Document

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 61

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
13	21	11	07	9

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

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document
Institutional data in prescribed format	View Document

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
List of Awardees and Award details	View Document
e- copies of the letters of awards	View Document

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

Response: 0.55

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

2016-17	2015-16	2014-15	2013-14	2012-13
60	45	36	33	27

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

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

Response: 0.42

3.3.4.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
76	15	26	26	11

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

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

In line with the motto of our trust “**Welfare of Masses**”, we always encourage our students to participate in various extension activities that improve their awareness of the needs of neighboring community. We strive to achieve our institution’s vision “**Techno-Social Excellence**” for holistic development of students. Students have participated in the following extension activities.

- The NSS Unit of our institution is conducting 7 days camp since last three years in collaboration with Grampanchayat, Dhamari and SPPU, Pune. During the camp, various activities are carried out like:
 - Swacha Bharat Abhiyan
 - Digital Awareness Program
 - Pani-Aadva-Pani-Jirva Campaign
 - Tree Plantation Program
 - Street Play on Women Empowerment & Cashless Transaction
 - Andhashradha Nirmulan Program

- Cultural Program for Villagers
- Medical Checkup Camp
- New opportunities are opened for the development of skills and leadership in students by organizing Social Activities, Cultural Programs, Awareness Programs and Medical Camps. This help student to identify the real life problems of rural areas. Students contribute to the village development in consultation with the local authority and complete the activity during the camp period.
- Every year the institution organizes Blood Donation camp as a tribute to Late Shri. Shankarraoji Chavan, Founder President & Late Shri. Vilashraoji Deshmukh, Former Chairperson of the Trust in which students and faculty actively participate.
- “Vidyarthini Arogya Upkram”, an initiative of SPPU for health awareness of girl students has been successfully conducted by the institution.
- Students of our institution always extend their help to the nearby orphanage called “Nihar”.
- By organizing Youth Day and International Yoga Day, our students always participate in Youth Development Programs.
- Students actively participate in the survey of School Drop Children, so that they understand the social and economical problems of such children.
- Every year the institution’s library organizes “Reading Motivational Day” on the occasion of the birth anniversary of Late Dr. A. P. J. Abdul Kalam that motivates students to read the books.
- Institution have organized various seminars and workshops like
 - Workshop on “Awareness of Sexual Harassment of Women”
 - Seminar on “Road Safety”
- Moreover, Institution also have organized programs like-
 - Awareness on “ Global Warming ”
 - Computer Awareness Program for Housekeeping Staff
 - Campus Cleaning Awareness Program
 - Helmet Awareness Program
- Every year Institution arranges tree plantation in the campus at the start of monsoon.
- The students and faculties from the institution have provided financial support to two students Mr. Mayur More (**Rs. 26,430/-**) and Mr. Swapnil Mane (**Rs. 11,550/- as contribution and Rs. 10,000/- from MESA**) for medical treatment of brain surgery and arm injury respectively.
- Institution have provided special financial assistance, **Rs. 30,000** /- to Mr. Yash Naik for medical emergency in arm surgery.
- Students also participated in various campaigning like Care River Clean River, Save Girl Child, Save Tree, Save Water, Save Life, Beti Bachao, Beti Padhao, etc.

File Description	Document
Link for Additional Information	View Document

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 14

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

2016-17	2015-16	2014-15	2013-14	2012-13
5	4	3	1	1

File Description**Document**

e-copy of the award letters

[View Document](#)

Number of awards for extension activities in last 5 years

[View Document](#)**3.4.3 Number of extension and outreach programs conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc., during the last five years****Response: 57**

3.4.3.1 Number of extension and outreach programs conducted in collaboration with industry,community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc.,year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
14	16	10	10	7

File Description**Document**

Reports of the event organized

[View Document](#)

Any additional information

[View Document](#)

Number of extension and outreach programs conducted with industry,community etc for the last five years

[View Document](#)**3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years****Response: 80.19**

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
827	1053	879	821	489

File Description	Document
Average percentage of students participating in extension activities with Govt. or NGO etc.	View Document
Any additional information	View Document
Report of the event	View Document

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 59

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
17	22	9	6	5

File Description	Document
Any additional information	View Document
Number of Collaborative activities for research, faculty etc.	View Document
Copies of collaboration	View Document

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

Response: 14

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
6	4	2	1	1

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

Availability of infrastructure facilities is integral part of the institution. The institution has taken care to maintain and upgrade the infrastructure facilities to fulfill the requirements as per AICTE norms. In many aspects the available infrastructure exceeds the norms providing healthy, comfortable and conducive atmosphere.

Land Availability:

The institution has spread over an area of 13.99 acres as against the minimum area requirement of 2.5 acre. Uniqueness of institution lies in availability of dedicated playground of 6.7 acres area, hostels and staff quarters.

Built-up Area:

As against the built-up area requirement of AICTE (7880.25 sq.mtr.), institution has spacious infrastructure covering built-up area of 18784.29 sq.mtr.

Classrooms and Tutorial Rooms:

Each classroom is specifically designed in spacious hexagonal shape with area 110 sq.mtr. and six tiered comfortable sitting arrangement for effective communication between teacher and students. Institution has 15 classrooms which are well equipped with ICT facilities to adopt appropriate teaching methodology. For conducting tutorials and academic counseling, students are divided into smaller groups and the activities are carried out in tutorial rooms.

Seminar Halls:

The fully equipped seminar halls are available to interact with large crowd or to conduct expert lectures, curricular, extra-curricular and other activities.

Laboratories:

Fully equipped 29 laboratories are available in the institution to conduct the practical and virtual lab sessions to validate theory and practical results. The spare area and facilities are provided for accomplishment of skill development activities and innovative work for designing and fabrication of components for the events like BAJA, Go-Kart, Robotics, etc. Total Investment of laboratory is around Rs 4,35,11,921 /- (Rs. 4.36 Cr.)

Workshop:

The workshop of the institution is fully equipped with ample availability of machineries viz. one CNC machine, 20 lathe machines, horizontal milling machine, radial drilling machine, wood turning lathe, etc for hands-on experience. Students are free to carry out fabrication in the workshop even after institutional working hours. Total Investment in workshop is around Rs. 48.3 lakhs.

Computational Equipment and Facilities:

Computational facilities are provided in all departments. The computer to student ratio is 1:2 which provides almost exclusive use of computers. A dedicated computer centre, Blade server (IBM X3650 M4 Rack Server) and language laboratory are provided. All computers are in LAN. The campus is Wi-Fi enabled including hostels, mess and canteen. The internet bandwidth of 51 Mbps provides adequate internet connectivity.

Library:

The Central Library of the institution is spread over 460 sq.mtr with two domains: **conventional library** with sufficient number of printed titles, volumes, journals and magazines, second modern part of library is **digital library** which provides e- resources like e-books, NPTEL video etc. Central library has annual membership of Automotive Research Association of India (ARAI), Jaykar Library of Savitribai Phule Pune University and British Council Library. Availability of Quick Response (QR) Codes helps in shortening the time for accessing University syllabus, question papers, etc. Apart from this, each department has its own departmental library.

Student Cooperative Store:

A dedicated student cooperative store is available in the institution that caters the need of stationery and photocopy facility.

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

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

Response:

The institution has playground area of **6.7 acres** for sports. Students are encouraged to participate in various sports, games and cultural activities at University, State and National level competitions. These activities nurture leadership, team building, planning, cooperativeness and competitiveness among students which plays a vital role in overall development of students.

Marathwada Mitra Mandal's Trust, Pune started MM Karandak sports competitions for existing institutions. In these event competitions such as Table Tennis, Chess, Carom and Football have been

hosted by our institution.

Indoor Games and Outdoor Games:

The institution has a playground to play various sports like Cricket, Volleyball, Football, Kabaddi, Kho-kho etc. A separate indoor game area of 150 sq.mtr is provided for playing Chess, Table tennis, Carom, Badminton, etc. Annual sports week is conducted in the institution and the winners of these competitions are appreciated by giving certificates and trophies.

Gymnasium:

The institution has a well equipped gymnasium area of 100 sq.mtr. Equipments such as Peck Deck Machine, Chest press machine, Incline/Decline Bench, Gymnasium Bike, Dumbbells, Plate, Barbells, Weight Lifting Bars, Single Bar, Double Bar, Dip Stand, Dumbbell Plate Stand etc. are available in the Gymnasium. Students utilize these facilities to keep themselves physically fit.

Yoga Centre:

A yoga Center is available for the students where they can perform yoga activities. Institution staff Mr.B.B.Khavale and Prof.H.D.Kopurwar conducts yoga activities in the institution. Every year National Yoga Day is celebrated on 21st June.

Cultural Activities:

The institution has an open amphitheatre with area 600 sq.mtr with good landscaping and ample seating capacity. Annual social gathering “ANUBHUTI” is celebrated every year. The theme is set for cultural activities based on social issues like Unity in Diversity, Save Water, Save Girl Child, Environment Awareness, Digital Awareness, etc. These programs provide platform to explore their talents in Singing, Dancing, Drama, Fashion Show, etc. The musical instruments drum set and musical key-board are available in the institution.

Students are encouraged to celebrate various activities like Republic Day, Independence Day, Constitution day, Shivaji Maharaj Jayanti, Ganesh Festival, etc., to foster national integration and to participate in cultural events like Purushottam Karandak, Firodiya Karandak to develop personality, leadership qualities and team spirit.

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 17

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 16.14

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
1.01798	74.50000	50.0000	65.0000	150.0000

File Description	Document
Any additional information	View Document
Details of budget allocation, excluding salary during the last five years	View Document

4.2 Library as a Learning Resource

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

Response:

The institution has Integrated Library Management System software “System for Library Information Management” (SLIM - 21, version 2.9.12) which is fully automated with barcode technology. It helps library to give fastest service to the user. SLIM software is used to track the record of books issued or available in the library. The software is upgraded to the version 3.5.0 in September 2017. The modules of software as follows

- Acquisition: To create database of newly arrived books.
- Circulation: To issue/return/renew books to students & staff.
- Cataloging: To generate accession register and reports.
- Serial: To maintain and keep record of the serial (Printed Journals & Magazines). Also we can track the subscription period and renewal dates of the serial.
- Online Public Access Catalogue (OPAC) tool: To explore library resources. Various search options available in OPAC are as follows
 - 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,

Author, Publication, Keywords, Classification number.

- Accession Search: Quick search of books can be done by using accession numbers. History of users and library resources: It is the main concern for tracking the library resources.

In the setting module, there is a provision for setting library rules, generating barcodes, listing of books (authors wise, publisher wise, and supplier wise), holiday scheduling, etc. There is a provision for immediate confirmation of library transactions through an email alert facility. This is one of the important features of the **Integrated Library Management System (ILMS)** which helps to generate various reports. Slim generates reports date wise, user wise, department wise.

ERP is the complete enterprise solution for higher education institutions to automate the Academic and Administrative processes. This comprehensive suite streamlines complete student life cycle from Enquiry to Graduation as well as administrative processes such as Inventory, Hostel, Library, Human Resources etc. ERP reduces manual intervention as far as possible, making execution of processes smooth and leading to increased efficiency and greater control on the system.

ERP has following features for library:

- Create and manage book/periodicals/journal/CD-DVD and other media records.
- Search library resources by students/faculties.
- Online book reservation by students/faculties.
- Enquiries, Tenders, Offer Comparison, Purchase orders and Purchase bills.
- Integrate Barcode.

File Description	Document
Link for Additional Information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

In addition to the textbooks and reference books of engineering syllabus, the Central library has a collection of handbooks and project reports. The list of such handbooks is as given below.

Sr.	Name of Handbook	Name of Publisher	Author
1	Handbook of Energy Audit And Environment Management	TERI Press	Abbi Y P
2	Handbook of Energy Efficiency	Clanrye Int. Publication	Kurian Tim
3	Handbook of Mathematical Methods in Imaging	Springer Publication Pvt. Ltd	Scherzer Otmar

4	Handbook of Energy Audits	CRC Press	Thumann Albert
5	Handbook of Electrical Engineering	Khanna Publishers	Bhatla S L
6	Handbook of Biomedical Instrumentation	Tata McGraw Hill	Khandpur R S
7	Handbook of Biometrics	Springer Publication Pvt. Ltd.	Jain Anil K
8	Handbook of Biotechnology	RBSA Publishers	Kumar P K Shivaraj
9	Handbook of Information Technology	Vitasta Publishing Pvt. Ltd.	Bhunia C T
10	Handbook of Nanotechnology	Prentice-Hall India	Lakhtakia Akhlesh
11	Handbook of Brain Theory and Neural Networks	Jaico Publication House	Michael Arbib
12	Handbook of Environmental Health and Safety	Jaico Publication House	Koren Herman
13	Handbook of Electrical and Electronic Insulating Materials	Jaico Publication House	Shugg W Tillar
14	Handbook of Electrical and Design Criteria	McGraw-Hill	Christoffer V F
15	Handbook of Hydrology	McGraw-Hill	Maidment David R
16	Project Reports	MMIT	BE Students

Information like educational videos including National Programme on Technology Enhanced Learning (NPTEL) lectures, course materials on Google Apps, research papers, e-books and study material are maintained as knowledge resource. Institution has special collection of competitive examinations like GATE, MPSC, UPSC, GRE, TOEFL, Marathi books, dictionaries, directories, datasheets and biographies of well-known personalities. Massive collections of e-resources are available through National Digital Library of India.

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Any additional information	View Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc.	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 14.32

4.2.4.1 Annual expenditure for purchase of books and journals year wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
3.90345	17.44196	31.47380	2.14876	16.61299

File Description	Document
Audited statements of accounts	View Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Details of remote access to e-resources of the library	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 12.11

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 108

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 frequently updates its IT facilities including Wi-Fi

Response:

Institution always considers the suggestion and recommendation given by all stakeholders for the necessary up gradation in IT facilities. Institution frequently updates the IT facilities including Wi-Fi like hardware, software and networking. Updated IT facilities are given as below.

Details of IT Facilities:

SN	IT Facilities	Prior	Existing	Updated on
1	Unibox	Nil	01	24/01/2018
2	Barcode Scanner for Library	1	2	15/01/2018
3	Wi-Fi Access Point	4	30	12/01/2018
4	Lease Line	32 Mbps	51 Mbps	04/01/2018
5	CCTV	1	74	23/06/2017
6	Network Updation	1 SonicWall NSA 4500	2 SonicWall NSA 4600	30/09/2016
7	IBM Server	1	2	23/03/2016
8	Internet switches	32	43	22/09/2016
9	Graphics Card	Nil	20	03/1/2016
10	Firewall	1	2	30/09/2016
11	Pc's Connected to LAN	407	431	21/01/2014
12	Printers	50	58	23/12/2013
13	Network Updation	Class C Networking	Class B Networking	02/06/2013
14	LCD Projector	16	24	28/01/2013

Details of computing facilities:

Sr. No.	Item	Quantity
1	Desktop Computers	431
2	Servers	02
3	Laptops and notebooks	17
4	Laser Printer (B&W)	40
5	Dot Matrix Printer	12
6	Color Printers	02
7	Plotter	01
8	All in one Printer	03
9	LCD Projectors	17
10	Scanners	05
11	Finger Print Scanner	01
12	Barcode Scanner	02
13	Digital Copier	02
14	Digital fast copier (for exam)	01

Details of Softwares:

SN	IT Software	Prior	Existing	Updated on
01	CATIA V6 PLM Discover Pack (20 Seats)	20 Seats	Renewed 20 Seats	05/12/2017
02	CATIA V5 PLM Discover Pack(20 Seats)	20 Seats	Renewed 20 Seats	05/12/2017
03	ERP	Nil	Package	09/07/2017

Apart from above institution has Microsoft Campus Agreement through which all software products Windows Operating System, Microsoft Office, Visual Studio, Microsoft Server, SQL server and Dot Net Framework are updated on yearly basis.

Details of Perpetual Licenses Software:

Sr.	IT Software	Details
01	ANSYS 13.0	25 seats
02	MATLAB	30 seats
03	Master CAM	20 seats
04	Automation Studio	01
05	Auto CAD	40 seats
06	Quick Heal Antivirus	100 licenses
07	Tally ERP 9	Multiuser

Internet connectivity and Wi-Fi: The institution has leased internet bandwidth of 51 Mbps. Campus is equipped with **Wi-Fi** facility with 30 Wi-Fi access point.

Computer center: The institution has a separate computer center with 50 computers which is not only used by students but also used for conducting online University and competitive examinations (Bank and GATE).

ICT Tools: The institution has implemented different information and communication technology tools like SLIM-21 for library, Google Apps for sharing teaching material, MyExamo for online examination practice, MOODLE for online student's feedback, ERP for education management and planning, bulk SMS service for communication with student, parent and faculties.

Open source:

Institution has open source software like Ubuntu 14.04 LTS, Net beans IDE 6.8, Eclipse, Python 3.6, Flex, Bison, Open JDK 7, Mysql, Firefox 57.5, Fedora, ACEN Net 5.1(LV) Language Lab Software.

Sr.	IT Software	Details
01	Multisim education software	10 users
02	U cos – II	20 users
03	Embedded Linux	01

File Description	Document
Link for Additional Information	View Document

4.3.2 Student - Computer ratio	
Response: 1.9	
File Description	Document
Student - Computer ratio	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)	
<5 MBPS	
5-20 MBPS	
20-35 MBPS	
35-50 MBPS	
Response: >=50 MBPS	
File Description	Document
Details of available bandwidth of internet connection in the Institution	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)	
Response: Yes	
File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years	
Response: 10.4	

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)

2016-17	2015-16	2014-15	2013-14	2012-13
40.92225	37.25947	40.07525	49.56599	33.69410

File Description	Document
Any additional information	View Document
Audited statements of accounts.	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	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 institution has functional committee of 'Maintenance, Housekeeping and Write-off' under Dean Administration for maintaining lab and support facilities. The responsibilities of maintenance are assigned to all the members of the designated committee. Physical verification of dead stock is done every year to check availability and loss of equipments. The process of dead stock verification is carried out by Stock Verification Committee.

Laboratories

Preventive maintenance of laboratory equipments, electrical & plumbing facilities, etc. is carried out to avoid premature failure of a facility or equipment, item, etc. Apart from this, routine maintenance like cleaning, lubrication etc. is carried out to ensure proper functioning of laboratory equipments. It is ensured that all the laboratory equipments are functioning as per the standards before commencement of each semester.

In case the facility or lab equipment is damaged or not working properly, the responsible staff conveys the same to the Maintenance Committee through the Head and accordingly Maintenance Committee initiates the action to resolve the problem. If the situation demands, breakdown maintenance work is outsourced. Equipments which are beyond repair or have lost functional significance are write-off according to the policy.

Calibration of instruments is carried out as per standards and guidelines provided on it. Experimental setups and equipments are tested by faculty and lab assistant periodically.

Computers

Computer maintenance, Electrical repairs and other maintenance work are carried out in-house by lab assistants and in case if it is required, then maintenance work is outsourced.

Library

The process of stock verification is mandatory for library. Copies of old periodicals are bound together on yearly basis. Few identified old books are re-bound after inspection. Library integrated management software is upgraded through AMC.

Sports ground and facilities

Sports ground maintenance include Leveling, Grass cutting, Line marking, Pitch renovation, Watering, Rolling, etc.

Other maintenance

Repair and maintenance of the central facilities like DG set, transformer, RO plant, heavy duty digital copier, elevator, bore well pumps, CCTV, fire fighting system and water coolers, etc are carried out periodically.

The garden of the institution is maintained by gardeners of external agencies on contract basis. The pH value and total hardness of drinking water is carried out periodically by authorized external agencies.

Housekeeping staff carry out routine cleaning activities like sweeping, sanitizing inside the campus regularly.

File Description	Document
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 the last five years

Response: 70.48

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
668	741	755	768	637

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Any additional information	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 besides government schemes during the last five years

Response: 1.46

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
17	18	21	13	5

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and meditation
8. Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

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

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 72.46

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

2016-17	2015-16	2014-15	2013-14	2012-13
499	885	759	879	682

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

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 37.26

5.1.5.1 Number of students attending VET year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
421	385	436	131	477

File Description	Document
Details of the students benefited by VET	View Document
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

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

5.2 Student Progression

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

Response: 52.63

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

2016-17	2015-16	2014-15	2013-14	2012-13
71	150	129	177	132

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

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

Response: 14.52

5.2.2.1 Number of outgoing students progressing to higher education

Response: 45

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

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

Response: 21.6

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOFEL/Civil Services/State government examinations) year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2	4	9	26	10

5.2.3.2 Number of students who have appeared for the exams year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
35	42	49	52	41

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

5.3 Student Participation and Activities

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

Response: 67

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

2016-17	2015-16	2014-15	2013-14	2012-13
19	21	19	5	3

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at 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 is formed in the institution every year for the participation of students in academic

and administrative bodies/committees to develop the leadership qualities and teamwork. This council provides opportunity to the student community to express their opinion about the institution and recommends the suggestions as per their expectations. This council ensures participation of maximum students in all curricular and extracurricular activities organized by the institution and SPPU.

The academic topper students of each class are a member of this council. A committee is constituted in the institution which comprises the Principal, HoDs, Deans and senior faculty members to select the General Secretary, Sports Secretary and Cultural Secretary. Applications are invited from the interested students and scrutinized on the basis of academic performance, capabilities and followed by personal interviews. The role of these secretaries is to organize different activities related to academics, sports, cultural activities such as Annual Social Gathering "ANUBHUTI" and annual tech fest "SAMVITTI".

The institutional committees have student representative that ensures participation of students in all activities. This helps in maintaining transparency in the overall working of the institution.

Library Committee: The student members put up their demands about learning material and express the problems faced by students, if any and utilization of library resources.

Public Relation Office: To strengthen industry-institute interaction and to develop public relations.

Internet Task: To take care of institutional website and effective usability of bandwidth.

Internal Complaints Committee: To provide moral support to the students to raise their grievance, if any. This brings transparency in the process.

Academic Monitoring Committee: It consists of class representatives of all branches along-with faculty members to monitor and ensure discipline in academics. Alumni are invited to give their valuable suggestions that are incorporated for supporting the curriculum.

Anti-Ragging Committee: The student members of the anti ragging committee help the fresher to improve their confidence through counseling.

Hostel Committee: The student members of the hostel committee ensure and communicate the security and amenities.

Mess and Canteen Committee: The student members of Mess and Canteen Committee monitor quality, hygiene and variety of food.

Sports and Gymkhana Committee: The student members of the Sports and Gymkhana Committee organize indoor and outdoor sports and ensure maximum participation.

Technical Events: To plan and organize technical events.

Extra-curricular activities: To plan and organize extra-curricular activities.

Publication, Magazine, Brochure, News Letter: For publication of Magazine, Brochure, News Letter.

Student Welfare and Discipline Committee: The student members of the Student Welfare and Discipline

Committee encourage students about their rights and responsibilities.

Alumni Committee: The student members of the Alumni Committee organize Alumni meet every year and helps to interact regular students with the institute alumina by means of inspirational speech, guest lectures, gifts, etc.

NSS: To organize various social activities under NSS.

Student Associations:

MESA (Mechanical Engineering Student Association)

ICON (Ingenious Computer Oriented Network)

EESA (Electronics Engineering Student Association)

Internal Quality Assurance Committee consists of alumnae to plan, guide and monitor quality assurance and quality enhancement in all the academic activities.

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

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 49.6

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
50	49	51	50	48

File Description	Document
Number of sports and cultural activities / competitions organised per year	View Document
Report of the event	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 non financial means during the last five years

Response:

The first alumni meet was organized on 23rd March, 2013. Alumni Association of Marathwada Mitra Mandal's Institute of Technology" (AAMMIT) was registered with Assistant Registrar of Society, Pune Region, Pune (Registration number: Maharashtra/189/2017/Pune) as per the Maharashtra Government rules. Every year alumni meet provides a platform for the alumni to share their current experiences and to recall charming old memories. Alumni can assess alumni activities through college website.

The Objectives of AAMMIT are

- To implement suggestions for the overall improvements
- To increase liaison with industries
- Development of institution through financial/gifts and non financial means

The details of Alumni meet organized at the institution are as follows:-

Sr. No.	Date of the Alumni Meet	No. of Alumni Participated
1	25th March 2017	123
2	19th March 2016	223
3	21st March 2015	113
4	25th March 2014	75
5	23rd March 2013	80

Non-financial Contribution of Alumni Association:

The non financial means through which alumni contributes the institution are as mentioned below

- Establishing Memorandum of Understanding between the institution and alumni entrepreneurs
- Suggestion and Support to Training and Placement Cell
- To enhance teaching learning process through Expert/Guest Lectures
- Interaction with students in the areas of career awareness and career planning
- Participation in IQAC Cell to set the targets for the academic processes
- Getting feedback from the alumni for improving the quality of education
- Support in conduction of industrial visits at their organization
- Giving inputs for syllabus revision as an advisory committee member.
- Guidance to students for project work, latest technology, BAJA, ATV, GO-KART and Robocon.
- Job oriented training program under Value Added Courses.

Financial Contribution of Alumni Association:

Alumni also contributes for the development of the institution providing financial aid, donations in the form of pump accessories, engines, vehicles, project models, sensors, laptop, books, website development, etc. which in turn are utilized for the student development, lab development and infrastructure development. Alumni expressed their willingness to contribute in the best possible ways for the overall development of the institution.

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

5.4.2 Alumni contribution during the last five years

<1 Lakh

1 Lakh - 3 Lakhs

3 Lakhs - 4 Lakhs

4 Lakhs - 5 Lakhs

Response: 4 Lakhs - 5 Lakhs

File Description	Document
Alumni association audited statements	View Document
Any additional information	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years**Response:** 5**5.4.3.1 Number of Alumni Association /Chapters meetings held year wise during the last five years**

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	1	1	1

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document
Any additional information	View Document
Report of the event	View Document

NVAAC

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 Marathwada Mitra Mandal Trust, Pune is established in 1967 through an initiative of personalities from Marathwada region with motto “**Welfare of Masses**”.

The Institution is established in 2008. Vision and Mission of the Institution are as follows:

Vision: Techno-Social Excellence

Mission: Mission of the institution is to

- Enhance technology transfer
- Implement entrepreneurship
- Promote global competency
- Integrate innovative pedagogy
- Create excellent human resource

The Core Values of the institution are teamwork, value based ethics, societal trust, pleasant environment, industrial approach, committed faculty, standard report writing, adaptive research, and lifelong learning which together drives the Institution towards the achievement of vision and mission.

Institution focuses on development in educational, industrial, and social changes so as to fulfil the corresponding needs by providing well established infrastructure and qualified staff which leads students towards technical and social excellence.

The perspective plan of the institution has been designed keeping in mind the previous experiences, stakeholder suggestions and changing scenario in the field of engineering.

These include major objectives such as accreditation by National and International bodies, permanent affiliation to Savitribai Phule Pune University, establishing centre of excellence and collaborations with foreign university for higher studies.

The institution has initiated the process for setting up incubation center to promote entrepreneurship skills among the students. Institution also gives the guidance to students for preparation of civil services examination.

The Deans (R&D, Academics, Administration and Student Affairs) in consultation with Head of

Departments and the Principal, frame the policies for effective implementation and monitoring of administration and academics. Faculty member plays a vital role in institutional achievements. The faculties are involved in various decision making bodies of the institution. The Internal Quality Assurance Cell (IQAC) of the institution plays an instrumental role in monitoring the quality pertaining to aspects of teaching-learning, research, planning and administration.

The Institution uses e-governing methods and ICT tools for teaching-learning, planning, administrative and student support activities.

The board of trustees includes eminent industrialists, medical practitioners and academicians. Management always motivates and supports the development of infrastructure, teaching learning processes and research activities. Campus Coordination Committee (CCC) of trustee's visits institution in each semester to discuss and resolve different issues related with academics and institution development.

Campus Coordination Committee		
Sr. No.	Name of Committee Member	Designation
1	Mr. Prin. D. S. Bhandari	Chairman
2	Mr. S. S. Garge	Member
3	Mr. J. M. Pawar	Member

Faculties and students are supported for augmenting their skills by attending Faculty Development Programs, Workshops, Conferences and Publishing papers in journals, industry sponsored projects, participation in national level technical competitions like Robocon, BAJA, Hackathon etc. Student-centric social activities play an important role in building the awareness among students about societal responsibility. The Institution carries its social responsibilities through various measures such as providing concession in fees to economically weak students, earn and learn scheme and NSS unit. It helps to effective technology transfer for techno-social excellence.

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

6.1.2 The institution practices decentralization and participative management

Response:

Decentralization and operational transparency are the features of the institute. Participative management gives boost to the institute's operation. The practice of decentralization starts with management that has constituted a Campus Coordination Committee (CCC) consisting of three members for taking the decisions related with institution.

Decentralization:

Decentralized governance system is adapted at the institution in the following manner:

- The Principal is the Head of the institution and is empowered with sufficient authority and power delegated from the management for smooth functioning of day-to-day activities.
- The Principal delegates necessary administrative and academic authorities to the Head of Department. At department levels, various committees are functional for smooth functioning and every staff has been given portfolios at department level.
- Four Deans are taking care of four domains (Administration, R&D, Student Affairs, and Academics). The responsibility of Deans is to frame and review policies related to academic and administrative processes to ensure quality. Functional committees are working under the four Deans to ensure effective decentralization.

Participative Management:

- Governing Body (GB) approves quality policies and provides necessary support for institutional improvement.
- The Principal, with the head of departments and faculties ensures the implementation of quality policies.
- The institution has a policy of participative management as a form of democratic governance. This is achieved by involvement of faculty, staff and students.

A. Strategic Level:

- Governing Body (GB) approves policies in cognizance of IQAC, LMC and ensures its alignment with Vision and Mission of the institution and trust.
- The Principal, in association with Deans and Heads of departments, implements the quality policy decided by the GB.

B. Functional/Operational Level:

- Heads of the Departments and faculties, plan academic and other activities to be conducted in the respective departments and also participate in the decision making and implementation at department levels.
- Various administrative duties are assigned to the office staff and supervised by the Administrative Officer.

The staff members and students represent themselves in various functional committees such as Cultural and Sports committee, Anti-ragging committee, Canteen committee, Women's Grievance Redressal Cell Committee, Placement, Entrepreneurship and student activities, industry initiatives, Library council, IQAC, Grievance Redressal Committee, etc. as part of participative management.

A Case Study of Internal Complaints Committee / Women's Grievance Cell:

As part of decentralizing and participative management practice in the institution, **Women's Grievance Cell** mechanism is as stated below:

1. The Principal appoints a Lady Chairperson and a Secretary from the members of the cell.
2. The cell consists of 5-7 staff members (including girl representative, teaching and non-teaching

staff).

3. The cell also performs the role as “Internal Complaint Committee” related to grievances of girl students and ladies staff.
4. The meetings of the cell are conducted minimum twice a year or the Chairperson of the cell can call a special meeting upon a written request.
5. On receipt of the complaint, it is decided by the cell about further processing based on primary enquiry.
6. After completion of enquiry, report is submitted to the Principal for further necessary action.

File Description	Document
Any additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

The perspective/strategic plan is made by institution to fulfill requirements of industry and society by providing quality education with well established infrastructure which leads students’ progression towards technical and social excellence. It emphasizes E-Governance in administration, improvement in Quality of Education, industry –academics collaboration, nurturing research culture. As per the strategic plan which is inline with vision of our institution, national Technical Symposium “SAMVITTI” was organized in year 2016-17.

Deployment Activity Example: National Level Technical Symposium “SAMVITTI 2017”

The objectives of the Symposium:

- To bring the students of various streams from different institutes on a common platform where they were encouraged to share knowledge and innovative ideas.
- To give practical exposure to students for planning & organizing events besides academics.
- To exhibit the talents and skills of the aspiring Engineers in both Technical and Non-technical aspects.

Preparation for the Symposium:

The event preparation started with formation of organizing committee with students and faculty. Events for the symposium were decided. Budget preparation, campaning, registration, venue planning etc.were done by students. This challenged their managerial skills, team work, leadership attributes.

Execution of the Symposium:

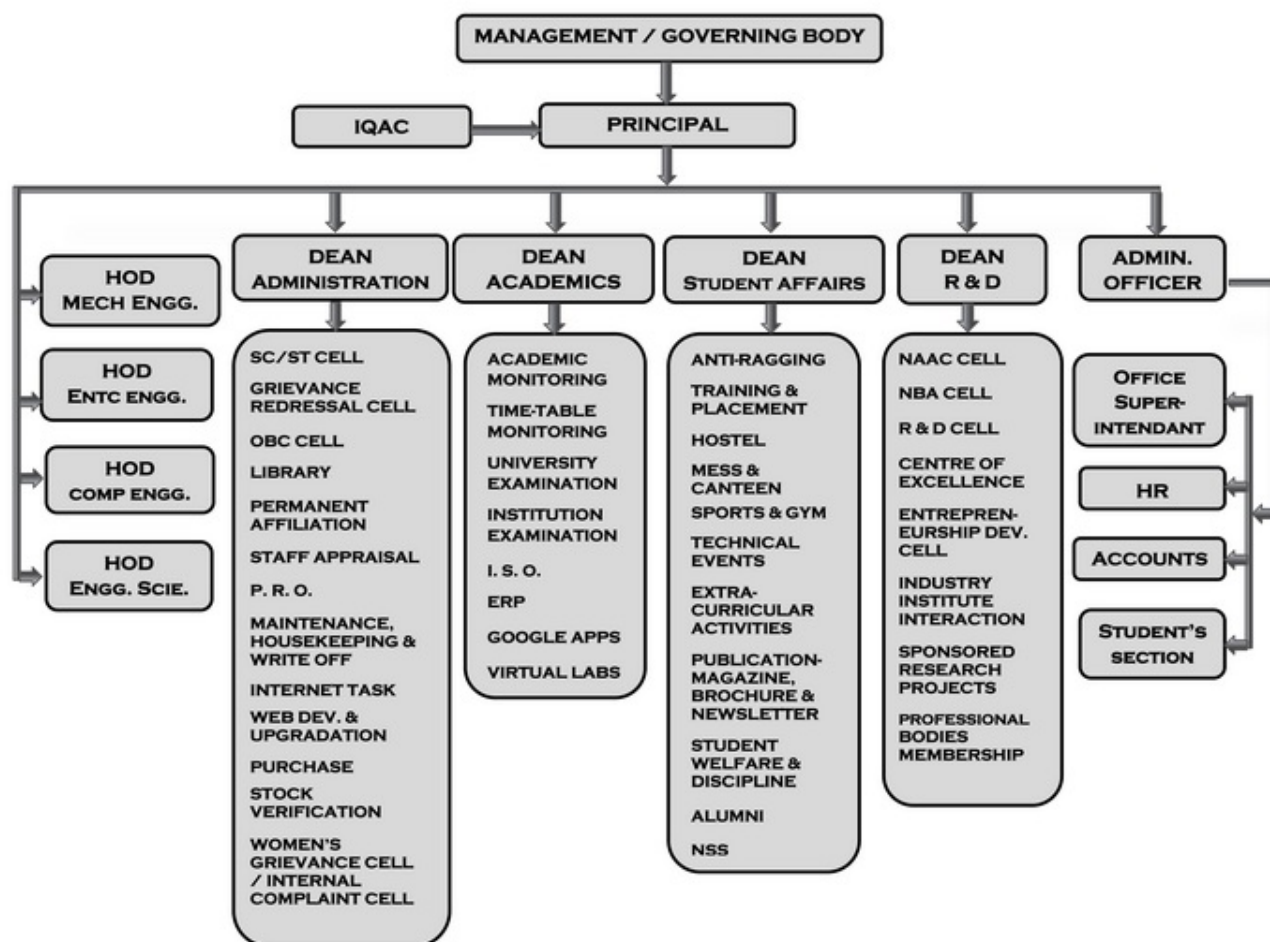
Various departments’ activities were successfully carried out in enthusiasm and full participation.

Mechanical Engineering Department organized events like Lathe war and CAD holix, which focused on testing students' skills of using lathe machine and computer-aided drawings respectively. Computer Engineering Department conducted a project competition as well as a programming contest. Electronics & Telecommunication Engineering Department organized Make-in-Electronics competition which included PCB design and also conducted quiz competition for students. Engineering Science Department conducted a poster making competition for the first year students wherein a scope was given to numerous technological aspects of recent trends. The students from all over the university participated in this event. The entry fee for each event was kept nominal, to motivate maximum number of students to participate in each event. The winners were awarded with cash prizes and certificate as an encouragement. The event generated cash of Rs. 9420/- which was deposited in office for student-welfare activities.

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

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:



I. Organizational Structure

Organizational structure of the institution is headed by the Management. The Governing Body is constituted as per the guidelines of competent authorities.

As per the guidelines given by the management, academic and administrative departments are led by the Principal, Deans and HODs. Internal Quality Assurance Cell (IQAC) chaired by the Principal works to monitor the quality of education in the institution. Various functional committees consisting of staff members and students are categorized under administration, academic, student affairs and R&D which are headed by Deans. These four categories take care of curricular, co-curricular and extracurricular aspects.

HR section, student section and account section are headed by the Administrative Officer.

The institutional Training and Placement Cell works under Corporate Relation Division setup by the management. Hostel administration is monitored by the Hostel Rector.

II. Recruitment policy

1. The requirement of teaching staff considering Student Teacher Ratio / Cadre ratio is calculated as per the norms laid down by AICTE/UGC/SPPU.

2. The recruitment process through university and local selection committee is as per the norms of SPPU.
3. In case of immediate requirement, faculty recruitment is done on purely temporary ad-hoc basis for one academic year.
4. The recruitment of technical/non-teaching staff is as per the requirement and recruitment policy guidelines

III. Service Rules for Teaching and Non-teaching Staff as Applicable

The services of employees are governed by the Maharashtra Universities Act, 1994, Statutes, code of conduct, ordinances, rules and regulations laid down by the Savitribai Phule Pune University, State Government, Marathwada Mitra Mandal from time to time.

Service rules consist of the following clauses:-

1. Probation period
2. Pay-Scale and allowances
3. Appointment subjectivity as per the availability of workload
4. Service books are maintained for all the staff
5. Adhering code of conduct for any other full-time, part-time job or otherwise
6. Service transfer within organization as per the requirement
7. Discontinuation of services in case of non reporting for stipulated time, breach of code of conduct after proper notice period

IV: Promotional Policies

Internal promotions are subject to following aspects:

A. Teaching Staff

1. Availability of posts and internal eligible faculties
2. Previous performance appraisal
3. Technical compatibilities of faculties for higher posts
4. Interactions with HOD, Principal and Management
5. Obtaining necessary approval from University

B. Non-Teaching Staff

Same steps as for teaching staff except the change: approval from the University is not required

V. Grievance Redressal Mechanism

1. To deal with grievances, the institution has composed grievance committees such as – Anti-ragging, Women's Grievance, SC-ST, OBC Cell, Hostel and Mess/Canteen, Grievance Redressal Cell, etc.
2. Staff and students are made aware of functioning of the committees.
3. Grievances, if any, are directed towards the respective committee head.
4. A meeting of respective committee members is called to discuss the grievance and solutions.
5. A report is submitted to the Principal and further necessary actions are initiated.

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

6.2.3 Implementation of e-governance in areas of operation: 1.Planning and Development 2. Administration 3. Finance and Accounts 4. Student Admission and Support 5.Examination

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Any additional information	View Document
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The institution has different committees working under the Dean of Academics, Dean of Administration, Dean of Student Affairs and Dean of Research & Development to prepare policies and conduction of different activities for effective and continuous progress of institution. The functions of different committees working under Deans of the Institution are shown in the following table.

SN	Name of the Committees	Functions
1	Dean, Academics	<ul style="list-style-type: none"> • To look after regular conduction of teaching activities, preparation of timetables of department and institution, conduction of unit tests, oral and practical tests • To prepare profile of staff, teaching plan, lesson plan, notes attendance and leave record documents under ERP. • To put the notes, question papers on Google apps, responsible to conducts examination in the institution.
2	Dean, Administration	<ul style="list-style-type: none"> • To address the students grievances • fulfillment of reservation of SC/ST in all matters • To monitor the maintenance, housekeeping and write-off activities • Responsible for overall functioning of library • To address the grievances of women in the institution • To look after purchase and stock verification of the institution • To monitor policy of staff appraisal and its conduction • To upgrade the web and internet facilities of the institution.
3	Dean, Student Affairs	<ul style="list-style-type: none"> • To monitor anti-ragging in the institution • To conduct student welfare activities and maintain discipline • To plan training & placement and extracurricular activities • To look after the hostel, mess, canteen, sports and gym facilities • To organize alumni meet every year • To conduct NSS activities under the guidance of SPPU • To publish magazines, brochures and

		newsletters of the institution
4	Dean, Research and Development	<ul style="list-style-type: none"> • To frame the policies for Research & Development activities • To monitor the work of accreditation by NAAC, NBA etc • To conduct the entrepreneurship development activities • To foster the industry institute interaction • To explore the institution for making center of excellence. • To promote the sponsored research project by funding agency • To take the membership of professional bodies

Example: A functional committee of maintenance, housekeeping and write off under the Dean, Administration takes care of maintenance of items, cleanliness in the campus and any write-off items across the institution.

The committee member collects the details of items to be scrapped which are beyond repair and not in use from all the departments. Meeting was held on 24/6/2017 to observe and verify the items which can be write off.

It has been observed that items like revolving chairs (20 numbers), revolving base of chairs (14 numbers), plastic chairs (42 numbers), other chairs (12 numbers), chips of metals, broken tools and work pieces of workshop (300 Kg) and plastic tank (1) are found beyond repair.

The committee recommends scrapping of items which cannot be reused and repaired. The said recommendation is accepted by the Principal to sell the scraped items.

The income from selling these scraped items was Rs. 17051 /- and this amount is deposited in the account of Institution.

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

6.3 Faculty Empowerment Strategies

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

Response:

The following measures are taken by the Institution towards the welfare of teaching and non-teaching staff:

Financial assistance in academic development of faculty:

The Institution provides financial support for publications (IEEE, Springer, ASME & Elsevier etc.), Conferences, FDPs and workshops. The institution encourages faculties to visit the recognized Universities across the country. Institution provides membership fees to the faculty advisor of student chapter.

Special leave for wedding of staff:

Special leave for wedding is considered.

Official leave for doing Research:

The Institution provides leave to faculty engaged in research or pursuing higher studies.

Group Insurance Policy:

The Institution provided a group insurance policy for all teaching and Non-teaching staff covered by United India Insurance Company Ltd. And Policy No. is 1609004216P117908133.

Bus facility:

The faculty can avail the bus facility.

Staff quarters facility:

Accommodation for staff is available in the campus.

Advance Salary:

Advance salary is provided in case of emergency need by any applicant faculty.

Fixed leaves as per norms:

The Institution provides vacation leave in summer and winter apart from casual leaves. Casual leaves per annum are 15 days. The summer vacation and winter vacation leaves are given for 40 & 30 days respectively for eligible teaching and non-teaching staff.

Medical leaves and facility:

Ten days of medical leaves per year are given to eligible staff and the same can be extended if required. Institution has appointed doctor to avail the medical facility in the campus.

Maternity leaves:

Six months maternity leaves are applicable to eligible staff.

Loan facility:

Marathwada Mitra Mandal Employees Co-operative Society provides loan up-to Rs. 5,50,000/- to eligible staff members with minimum documentation. The Society also provides funds without interest for

education of employee's children, marriage and medical emergency. The Society also provides financial support up to Rs. 27,000/- as a loan without interest for purchasing a laptop, a personal computer etc.

Appreciations:

The Institution appreciates faculties on acquiring higher qualifications and special achievements.

Employee Provident Fund (EPF):

EPF scheme is available in the Institution as per rules and regulations.

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: 48.11

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

2016-17	2015-16	2014-15	2013-14	2012-13
26	28	45	48	28

File Description	Document
Any additional information	View Document
Details of teachers provided with financial support to attend conferences,workshops etc. during the last five years	View Document

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

Response: 4.4

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
7	6	6	2	1

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document

6.3.4 Average percentage of teachers attending professional development programmes viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programme during the last five years

Response: 52.98

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
32	31	45	57	28

File Description	Document
Details of teachers attending professional development programs during the last five years	View Document
IQAC report summary	View Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The Institution follows a mechanism for appraisal of teaching and non-teaching staff based on the following parameters and weightage given in the following table.

Parameter	Weightage
Students Feedback	30 %
Result of Subjects	30 %
HOD/Principal Appraisal	40 %

The process of appraisal of teaching and nonteaching staff is discussed as follows.

- The staff appraisal committee of MMIT collects the feedback of all the students at the end of every semester of each academic year.
- On line feedback is collected for all courses in each semester without disclosing the student's identity.
- Students of respective class participate in giving feedback of subject teachers and respective non-teaching staff.
- Students give feedback on specific points scale.
- The feedback consists of a questionnaire of key indicator points i.e. punctuality, content delivery, students' interactions etc.
- A final feedback report is communicated to the respective teaching and non-teaching staff by the HOD for corrective actions.
- The university examination result of a particular subject taught by faculty is another point taken into account for faculty appraisal.
- Year wise and subject wise difficulty level of subjects are considered for the appraisal.
- Self appraisal forms filled by each faculty are reviewed by HODs and the Principal. A detailed appraisal is carried out in presence of HOD and Principal by verification of facts, figure and documentation.
- Involvement of staff in - teaching, learning and evaluation related activities, co-curricular, extension and professional development activities, research and development activities, fetching research project, filing patent etc. are considered while appraisal by HOD/Principal.
- The final grade of appraisal is calculated from the results of three parameters viz., student's feedback, university examination result of respective subject and HOD / Principal's appraisal.
- The grade is communicated to the individual faculty for further improvements and corrective actions.
- The outcome of the performance appraisal is that the faculty becomes aware about their weaknesses and tries to improve themselves to score better grade in next year.

File Description	Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The prime objective of institutional financial audit is to review the income and expenditures.

Audit involves performing procedures for accountability in financial transactions.

As a part of smooth administration of activities, the institution prepares its budget every year as per the recurring and non-recurring expenses requirements of all departments as well as functional committees and is submitted to the management for approval. The sanctioned budget from the management is then allocated to the departments under the categories such as consumables, lab equipment purchase, industrial visits, research and development activities etc. A pre-defined institutional procedure is followed by all the departments for various purchases and expenses.

To ensure that, the allocated budget is properly utilized and to minimize any discrepancy, the Institution conducts internal as well as external audit at regular intervals.

Internal Audit mechanism is ongoing continuous process to check and verify all vouchers of transactions with reference to sanctioned budget. All recurring and non-recurring expenses are reflected in the internal audit report. Necessary comparative statements, Purchase Orders, Tax Invoice / Bills are verified. Auditor prepares its internal audit report mentioning the discrepancy observed during the audit (if any). The report, along with audit observations, is submitted by auditor for further explanation and corrective actions.

The recent internal audit of the Institution is carried out on 08.12.2017 for the period of 1st April - 30th November 2017 (financial year 2017-18) by "Mundhe Shaha & Company".

External auditor conducts audit to determine the quality of financial operations performed during the financial year. As a part of an audit, the auditor reviews financial transactions and expenditure record.

External audit is carried out on yearly basis. The recent external audit is conducted on 24.08.2017 (financial year 2016-17) by "Krishna Rawas & Associates".

Internal and external audit ensures accountability and minimizes the discrepancies. Minor errors of the financial transactions when pointed out by audit team are immediately corrected / rectified and precautionary steps are taken to avoid recurrence of such errors in future.

File Description	Document
Any 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)

Response: 20.41

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

2016-17	2015-16	2014-15	2013-14	2012-13
5.55306	4.73254	6.19388	3.68299	0.25

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Annual statements of accounts	View Document

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

Response:

Major source of income of the institution is student fees. The institution has a mechanism to monitor effective use of funds. The deficit has been managed by Marathwada Mitra Mandal Trust. The top management has well defined procedure to monitor effective and efficient utilization of available resources for infrastructure development and teaching-learning process.

The following procedure is adopted for the utilization of resources.

Planning: The Head of the department calls a departmental meeting to finalize an annual budget. The laboratory in-charges propose laboratory-wise requirements along with supporting documents as received from the subject teachers. The expenses required for the departmental activities such as organizing co-curricular and extracurricular activities are also included in the annual budget.

Budget Formulation: An annual budget of the department is prepared and forwarded by all the HODs to the Principal for consents. The budget of all the departments are reviewed by the Principal. The Principal directs the administrative officer to prepare a consolidated budget of the institution. The final consolidated budget is forwarded to the Management Committee for a final approval.

Allocation: The Campus Coordination Committee (CCC) reviews the proposed budget, received from the Head of the Institution and then allocates the budget as per the necessity of the proposed expenses. If there is no incongruity, then the budget is sanctioned and funds are released. Provision is also made for emergency expenditure.

Expenses: The sanctioned funds are utilized for the development of laboratories, procurement of books, national /international journals, staff salary, development and maintenance activities, etc. In case of any additional funds required for unplanned activities such as attending seminars / workshops / conferences / technical competitions, then the concerned faculty has to prepare a note stating the details of the importance with supporting documents. In exceptional cases, the concerned faculty may require to give a presentation before the management authorities for sanctioning the funds as per the requirement. The concerned faculty is instructed to produce a detailed report of fund utilization. Thereafter, the note is forwarded to the Principal through HOD for consideration and consent. Looking to the importance of the requirement, the Principal forwards the note to the Management for its final sanction. Once the sanctioned

is received from the Management, the Principal directs the HOD for utilization of requested sanctioned funds.

Audit: The Accounts Section of the Administrative office verifies the expenses against the sanctioned amount carried out under various institutional / departmental activities from the supporting documents and gives their remarks for the final settlement. Internal and external audits are carried out twice and once in every financial year respectively by the Chartered Accountant to ensure proper utilization of the funds as per the allocation by management committee.

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

Response:

Through the establishment of IQAC, the institution is ensuring its commitment towards continual improvement of teaching-learning process. The focus is on overall development of students through skill development, training programmes, co-curricular and extra-curricular activities and certification program.

IQAC has contributed significantly for institutionalizing the quality assurance strategies and processes by taking initiatives in the aspects - Formation of Dean, Implementation of ERP, Alumni Meet, organizing Conferences, Energy Audit, Academic and Administrative Audit.

The two best practices institutionalized as a result of IQAC initiatives are elaborated below:

Example 1: - Promotion of Research Culture

For promoting research culture, IQAC encourages faculties and students to organize and participate in conferences, sponsored projects, national workshops, etc.

The IQAC has suggested organization of two national level conferences for quality sustenance and quality indicators as listed below:

The institution has organized first National Conference on “Product Modeling, Simulation and Manufacturing (NCPSM’16)”, which was conducted by Mechanical Engineering Department on 9th -10th September 2016. Total number of 69 faculties and 136 students participated in the conference and 63 papers were presented and published in Inpressco International Journal of Current Engineering and Technology, USA.

The institution has organized Second National Conference on “Recent Trends in Computing Techniques (NCRCT’17)”, which was conducted by Computer Engineering Department on 29th -30th March 2017. Total number of 72 faculties and 294 students participated in conference and 87 papers were presented and published in **I**nternational **J**ournal of **I**nterdisciplinary **I**nnovative **R**esearch and **D**evelopment Journal.

During the Academic Year 2016-17, IQAC has taken initiative to publish 150 research papers of faculty and students in reputed journals.

Example 2: - Academic and Administrative Audit

IQAC reviews the teaching and learning processes, research activities, administrative procedure and activities through academic and administrative audits. Audits are done by IQAC at each department and the report is submitted to the Principal. The Academic and Administrative audits are conducted once in a year.

The purpose of the Academic and Administrative Audit implementation is to evaluate the performance of the departments and to appreciate achievements. Suggestions are given for further improvement of the quality of teaching, research, administration, curricular and extracurricular activities. The IQAC carry out interactions with HODs, teaching and non-teaching faculties, students, alumni and parents. After validating the data, it gives valuable suggestions on the following points:

1. Participation of faculties in curriculum development
2. Department-wise Student Teacher Ratio
3. Department-wise Purchase Budget and expenditure details
4. Number of teaching posts sanctioned, filled and vacant
5. Faculty profile
6. Thrust areas of research as identified by the department:
7. Research projects
8. Publications in journals and conference
9. Teacher’s participation in conference, seminar, workshop, FPD, etc
10. Students progression and placement record
11. Diversity of students and faculty
12. Year wise results of students for each department
13. Strength, Weakness, Opportunities and Challenges analysis of each department

File Description	Document
Any additional information	View 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

Response:

To make students totally involved in teaching learning process, supplementary students centered learning strategies have been initiated in addition to traditional lecture methods. This helps the students to develop the composite skills such as collection and organization of data, PPT presentation, use of ICT tools for their seminar and project reports, etc. NPTEL and DELNET facility has been set up in the library to promote self learning.

Example 1: Teaching Learning Reforms through Participatory Learning, Innovations, Co-curricular Activities.

The following are the reviews for teaching-learning process, structures & methodologies of learning operations carried out in Institution. These reviews focus on the following quality initiatives:

To determine the learning objectives, the faculty should identify the course objectives before start of the course. Faculty designs teaching and learning methods considering various methodologies mentioned in the course plan such as lecture with interaction, quiz, demonstration through models, case based study and group discussion etc. The assessments of teaching and learning processes are being implemented to know the performance of students consistently as per course plan. The assessments of course are conducted and the results are used effectively to ending performance to ascertain the value added in teaching-learning process. These initiatives indicate the faculty to adopt best practice and can be benchmarked with other departments and institutions.

The faculty prepares the course plan with objective using tools like Power Point Presentations / models / demos / home assignments / seminar / debate on each unit by referring e-books, tutorials, Virtual Labs, NPTEL and Research papers.

Institution is in the process of adopting smart class room technology. This technology stimulates learners to build knowledge and transform their learning into a product. The smart class room has turned from being a technology of communication and information to a curriculum creation and delivery system for teachers and learners. The concept of smart classroom is not only made education interesting but also enhances student's performance.

Example 2: Research, Co-curricular Activities and Students Development Programs

The students are involved in studying case studies, Industrial visits, Internships, MoU with Industries, Workshops, Competitions, etc. The Institution organized Conferences, Seminars, Orientation Programmes, Guest Lectures, Skill Development Programmes to widen the learning capabilities of faculties and students. The faculties with students participated in the conferences, competitions and published research

papers in peer reviewed journals.

IQAC conduct academic and administrative audit regularly to review teaching learning activities. The departmental coordinator and functional committee members submit the audit report to the respective HoDs and Deans for review. The Deans submits the remarks to IQAC for improvement in areas of deficiencies.

Also, the student's feedback is taken for academic, co-curricular activities, ICT infrastructure and facilities to improve the overall quality.

File Description	Document
Any additional information	View Document

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 4.4

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
22	0	0	0	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document
IQAC link	View Document

6.5.4 Quality assurance initiatives of the institution include:

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements**
- 2.Academic Administrative Audit (AAA) and initiation of follow up action**
- 3.Participation in NIRF**
- 4.ISO Certification**
- 5.NBA or any other quality audit**

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document
Annual reports of institution	View Document

6.5.5 Incremental improvements made during the preceding five years (*in case of first cycle*) Post accreditation quality initiatives (*second and subsequent cycles*)

Response:

Institution is taking continuous efforts for imparting quality education. The incremental improvement made by institute during the preceding five years are given below,

Academic Year 2012-13

- Adopted Multiple Choice Questions (MCQ) based teaching methodology in the first year engineering as per the change in syllabus of SPPU.
- Tie-up with online examination portal “IntellTest” for practicing MCQs and to update till better performance.
- Assigned Guardian Faculty Member (GFM) for every 15/20 students to monitor their academic progress and counsel them to resolve their problems.
- ICT enabled teaching-learning process is implemented for better learning and teaching methods.
- Online Moodle based student feedback system was introduced to support teaching-learning process and to evaluate faculty performance.

Academic Year 2013-14

- Adopted MCQ based teaching methodology in the second year engineering course as per the change in the syllabus of SPPU.
- Various clubs are formed such as SAE Collegiate-Club, Robocon-Club to cater diverse interests of students in co-curricular activities and to nurture their interests for the overall development.
- Participated in National ROBOCON Contest-2014 and secured the best ROOKIE award by qualifying into quarter finals in the first attempt.
- Established Grievance Redressal Mechanism to resolve the grievances of students, parents and staff

of the institution.

Academic Year 2014-15

- The technical event “SAMVITTI” is initiated at the institution level to explore technical capabilities of students.

Academic Year 2015-16

- The NSS unit is established on 2nd February, 2016 at the institution in coordination with SPPU to develop a sense of social and civic responsibilities among the students.
- Internal Quality Assurance Cell (IQAC) is established at the institution level to develop a system for improving the academic and administrative performance and to suggest measures towards quality enhancement in functioning of the institution.
- The Vision and Mission of the institution are reframed and approved by the management.

Academic Year 2016-17

- The institution organized two national conferences namely NCPSM-16 and NCRTCT-17 to foster the research culture among students and faculty.
- The institution has nominated four Deans. The various functional committees are formed under Deans with specific responsibilities and authorities.
- The Institution has taken memberships of professional bodies like Confederation of Indian Industry (CII) and Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA) for enhancing the industry institute interaction.
- The institution purchased a bulk-SMS pack to communicate timely and quickly with parents and students.
- The institution started transport facility for students from different corners of Pune city to overcome the non availability of public transport.
- The Vision and Mission of each department were framed in tune with the institution.
- The Institution decided to set up an Incubation Centre under Entrepreneurship Development Cell.

File Description	Document
Any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 16

7.1.1.1 Number of gender equity promotion programs organized by the institution year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
6	4	2	2	2

File Description

Document

List of gender equity promotion programs organized by the institution

[View Document](#)

Report of the event

[View Document](#)

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

Response:

1. SAFETY AND SECURITY:

The institution provides all possible types of safety and security to students irrespective of gender. It also provides safety by maintaining a record of all entries and exits of visitors regularly at the entrance. The institution campus including main gate, corridors, parking, examination sections, main entrance, canteen and library are monitored by CCTV cameras. Anti ragging Committee is constituted with members which are from education, medical, journalism, social, business sector and student's representatives as per the guidelines of competent authorities. Anti ragging squad is vigilant and conducts regular inspection. The Anti ragging squad has 11 members which includes teaching and non-teaching staff. Institution has Women Grievance Cell / Internal Complaint Committee which conducts the awareness programs for ladies staff and girls students on International women's day every year.

The institution has separate boys and girls hostel with capacity of 192 and 96 respectively. Separate male/female rectors and security guards are deployed to boys/girls hostel respectively. Students need special permission and intimation to rector for late reporting after 9 pm in the hostel. Additional safety

precautions are taken by monitoring through CCTV camera installed in the hostel premises.

The institution invites Traffic Police, Pune for conducting awareness on road safety and traffic management. The Commissioner of Police has assigned one police (POLICE KAKA) who works mediator between Police and the Institution. Students can also directly interact with Police Kaka.

The institution has appointed a professional doctor to take care of the health of students. A separate consulting room is provided with basic medical facilities. First aid box is available in all laboratories and common places in the institution. The institution has a tie-up with "ORCHID Hospital", Dhanori with ambulance facility for emergency medication. Bus transport facility is available for commutation. Institution has given the provision for INSURANCE POLICY for students. Fire extinguisher is installed in the institution at prominent locations. Also, fire fighting system is installed in the institution as per the required norms.

2. COUNSELING:

The Institution has appointed a qualified and professional counselor for counseling to the students on issues like personal, social or psychological, emotional problems and difficulties. It helps them to deal with stressful or emotional feelings and to inculcate the positivity in students.

The Guardian Faculty Members provide personal, academic, carrier, financial, gender equality and psychological counseling to the students. As per the guidelines of SPPU, Vidyarthini Aarogya Upakram is being conducted in the Institution for counseling. The Women's Grievance Redressal Cell organizes a workshop on 'Nutrition' for girl students to create awareness about health every year.

3. COMMON ROOM:

Separate girl's common room and boy's common room facilities are available in the institution.

File Description	Document
Any additional information	View Document

7.1.3 Alternate Energy initiatives such as:

1. Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 18.55

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 45000

7.1.3.2 Total annual power requirement (in KWH)

Response: 242590

File Description	Document
Any additional information	View Document
Details of power requirement of the Institution met by renewable energy sources	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 100

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 97128

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 97128

File Description	Document
Any additional information	View Document
Details of lighting power requirements met through LED bulbs	View Document

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

The institution manages all the waste generated in the campus as follows:

1. Solid waste management:

A biogas plant of capacity 5000 liters, 3 layer tank with awning balloon (for gas collection) is installed in the Institution. The energy generated from the biogas plant is utilized in institution mess. Biogas plant produces various gases by the breakdown of organic materials. Approximately 35-50 kg/day waste materials viz. leftover food from canteen & mess, green vegetables residues and fruit peels are collected from the institution and utilized for producing biogas using the plant. It takes 24 hours to convert waste into biogas.

2. Liquid waste management:

Sewage Treatment Plant (STP) of capacity 40,000 liters is functional in the Institution. The waste water collected from the premises, toilet, wash-basin, water cooler, kitchen basin etc is recycled, filtered and then

reused to irrigate the gardens and trees. The approximate area of garden is around one acre. The trees are watered to have a pleasant greenery look. Medicinal plants absorb harmful gases and emit oxygen. Chemical wastes from chemistry lab are first diluted to minimize its toxicity and then it is recycled.

3. E-waste management:

The institution disposes unused and non-reparable electronics equipment in association with NGO 'Swachh', Kothrud, Pune. E-waste bins are made available in the premises at various locations. Articles on e-waste management are displayed on institutional website as well as notice board. Non-reparable electronic items like computer components, mouse, cables, CDs, chargers, earphones, batteries, etc. are collected periodically and disposed off by the NGO-Swachh. Some non-reparable items are utilized in practical based learning for students.

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rain water harvesting structures:

The institution has installed a rain water harvesting system in the campus. The rain water from roof of building B (Entrance), building C (Admin) and natural south side slopes near B-building flows into bore wells. The institution has 3 bore wells in the natural ditch of size 200m X 10m X 10m. The rain water percolates in these bore wells which increases the ground water level. Drip irrigation is also implemented for gardening and conserving the water.

Rain water harvesting utilization:

The rain water harvesting system provides approximate 11,76,000 litres of water for domestic and drinking purpose.

7.1.7 Green Practices

- **Students, staff using**
 - a) **Bicycles**
 - b) **Public Transport**
 - c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

The Institution is located in pollution free area which is surrounded by greenery and small hills.

a) Bicycles:

The institution motivates staff and students to use bicycles. Bicycles are used for short distance travelling by staff and students. A provision of bicycles stand is made in the institution.

b) Public Transport:

Students prefer Municipal Transport facility (Pune Mahanagar Parivahan Mahamandal Ltd - PMPML) for commutation. Also, the institution has hired three buses from Shree Kshetrapaleshwar Tourists for staff and students.

c) Pedestrian Friendly Roads:

Institution has a pleasant walking environment with sidewalks with attractive landscaping. Students and staff use pedestrian friendly streets to walk.

d) Plastic Free Campus:

Institution has initiated efforts towards plastic-free campus by displaying posters in the campus. NSS unit of institution organizes awareness programme on plastic free environment.

e) Paperless Office:

The institution has taken the initiatives for paperless office by implementing ERP, Google Apps, Myexamo, etc. General notices of the institution are communicated to staff, students, stake-holders via e-mail and social media. Institution motivates and permits students to submit their reports in the form of soft copies. Students deposit fees through online payment mode.

f) Green Landscaping with Trees And Plants:

Approximately one acre area of the campus is utilized for garden and trees. Total 790 trees are planted in and around the campus. All flowerbeds are covered by Duranta and Kamini. The planted trees are of indigenous species. The advantage of planting local variety of trees is that their survival rate is high and most of them including trees like Neem, Peepal and Banyan have good air purifying abilities. Neelgiri tree and Tulsi plants in the campus is for medicinal purpose. Green landscaping helps to reduce nitrates leaching from the soil into water supply and also reduces surface water runoff. Daily gardening maintenance activities are outsourced to Ram Nursery, Pune.

File Description	Document
Any additional information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 1.11

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year wise during the last five years(INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
8.05	4.17	3.14	2.83	2.86

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Green audit report	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
link to photos and videos of facilities for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 15

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
5	3	3	2	2

File Description**Document**

Number of Specific initiatives to address locational advantages and disadvantages

[View Document](#)**7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)****Response: 7**

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	1	2	1	0

File Description**Document**

Details of initiatives taken to engage with local community during the last five years

[View Document](#)

Report of the event

[View Document](#)**7.1.12****Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal / Officials and support staff****Response: Yes****File Description****Document**

URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics

[View Document](#)

7.1.13 Display of core values in the institution and on its website	
Response: Yes	
File Description	Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations	
Response: Yes	
File Description	Document
Any additional information	View Document
Details of activities organized to increase consciousness about national identities and symbols	View Document

7.1.15 The institution offers a course on Human Values and professional ethics	
Response: Yes	
File Description	Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions	
Response: Yes	
File Description	Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years	
Response: 24	

File Description	Document
List of activities conducted for promotion of universal values	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

The institution celebrates national festivals and anniversaries of great Indian personalities to create awareness of national integration, patriotism and social responsibilities amongst students and staff.

Republic Day in India is celebrated every year with great pride on 26th of January to honor the Constitution of India as it came into force on the same day in the year 1950. **Independence Day** is also celebrated every year on 15th August in the institution to mark the independence of India. Chief Guest, especially defense personnel is invited for flag-hoisting. On this occasion, chief guest shares his experiences to motivate students and staff for their duties towards the nation and rights given to them by our constitution. Patriotic cultural programme is performed by the students.

The Institution also celebrates:

- “National Youth Day” on occasion of birth anniversary of Swami Vivekananda on 12th January.
- “Shiv-Jayanti” Mahotsav in the memory of the great king Shri. Chatrapati Shivaji Maharaj on 19th February.
- “Teachers Day” on the occasion of the birth anniversary of Dr. Sarvapalli Radhakrishnan on 5th September
- “Engineer’s day” on the occasion of the birth anniversary of Sir Mokshagundam Visvesvaraya on 15th September.
- “Gandhi Jayanti” on the occasion of the birth anniversary of Mahatma Gandhi on 2nd October. The institution runs a social awareness program by conducting activity under “Swatch Bharat Mission.”
- “Reading Motivation Day” on the occasion of birth anniversary of former President Late Dr. A.P.J. Abdul Kalam, a 'Missile Man' of India on 15th October.

File Description	Document
Any additional information	View Document

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Financial Transparency:

The Institution is self-financed and the fee is decided as per the guidelines of Fee Regulatory Authority (FRA), Government of Maharashtra. We have transparent fees collection mechanism to deposit fees in the institution account. Students deposit the fees in the institution account through demand draft or online payment mode. In every academic year, budget is prepared as per the requirement of departments. Purchasing is done through a proper channel by inviting minimum three quotations, negotiation is done and then final work order/purchase order is placed.

The institution conducts statutory audit from internal and external auditor at the end of the financial year. A report of external auditor along with audited balance sheet, income and expenditure accounts are available for reference as per government rules.

Transparency in Academics:

The Institution has Academic Monitoring Committee under Dean Academics. Each department reviews the syllabus coverage every month and accordingly corrective measures are taken. The review of availability of teaching material, assignments and videos on Google Apps is taken regularly. Feedback of academic activities from students is collected and necessary actions are initiated, if required. Annual academic reports are maintained and presented in annual social gathering.

Transparency in Administration:

For de-centralization, different functional committees are formed under Dean Administration to look after the responsibilities like library, staff appraisal, purchase, stock verification etc. The reports of all the committee are prepared and submitted for necessary improvements.

Auxiliary Function Transparency:

Student council is formed by inviting applications and conducting interviews for smooth conduction of events like sports, annual social gathering etc. The functional committees of mess, canteen and stationary store instruct to display the rate cards.

File Description	Document
Any additional information	View Document

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice 1:

1. Title of the Practice: Professional Skill Enhancement of Students

2. Objectives of the Practice:

To enhance technical skill-development

To train students by Faculties and expert-professionals from industry

4. The Practice:

Efforts taken for students for national level contests

- Organization of national level workshops, conferences and training programs
- Eminent speakers, academic professionals are invited from Industry and educational fields
- Add-on courses are conducted
- Students are active members of professional body SAE India

The Process:

- Students are shortlisted and are registered for Robocon Club.
- Training sessions are conducted by faculties and robotics experts
- Robots are designed in-house

5. Evidence of Success:

Performance in the National Robocon:

Sr.	Year	Rank/Outof
1	2016-17	39/95
2	2015-16	30/105
3	2014-15	11/100
4	2013-14	Best Rookie award

6. Problems Encountered and Resources Required

Mismatch of schedule of the resource persons

7. Notes

Institution supports other technical activities such as SAE BAJA, Go-Kart, HACKATHON etc and spent amount Rs. 8.7 lac.

Achievements:

Sr.	Competition	Place	Rank / Achievement
1	SAE Virtual BAJA-2016	Bangalore	128th
2	SAE BAJA 2017	Indore	138th
3	Auto India Racing Championship	Pune	Best Acceleration & Dronacharya Award
4	National Kart Racing Championship	Kolhapur	88th
5	Indian Kart Racing Championship 2015	Bhopal	26th
6	National Kart Racing Championship	Pune	26th
7	Mega ATV Championship-2017	Ahmednagar	32th
8	Nirman Go-Kart 2016	Pune	4th rank 1st Endurance award, Best social media award
9	National Elite Karting 2015	Bhopal	12th
10	Trinity Karting 2016	Pune	Best Captain award
11	National Elite Karting 2015	Bhopal	16th

Best Practice 2:

1. Title of the Practice: Promoting Social Activities

2. Objectives of the Practice:

Develop a sense of social and civic responsibility in students

3. The Context:

Students are motivated to utilize the knowledge in understanding and finding practical solutions of community problems.

4. The Practice:

NSS unit adopted Dhamari village and every year seven day residential special camp is organized. Students contribute to the village development in consultation with the local authorities. Apart from NSS, various social activities are conducted.

5. Evidence of Success:

Activities conducted under NSS

- Swaccha Bharat Abhiyan
- Water Conservation and Management
- Digital India awareness
- Tree plantation
- Water Logging and Seepage
- Street Play on Women Empowerment & Cashless Transaction
- Anti Superstition Program
- Free Medical Checkup Camp

Activities conducted apart from NSS

- Organizing Blood Donation camp as a tribute to Late Shri. Shankarraoji Chavan, Founder President & Late Shri. Vilashraoji Deshmukh, Former Chairperson of the Trust.
- Health awareness program for girl students
- Help to Orphanage
- Survey of School Drop Children
- Seminars and workshops on Road Safety, Sexual Harassment of Women, Global Warming, Computer awareness for housekeeping staff, Campus Cleaning, Helmet awareness
- Campaigning like Care River Clean River, Save Girl Child, Save Tree, Save Water-Save Life, Beti Bachao-Beti Padhao.

6. Problems Encountered and Resources required

- Limitation to spare more time due to rigorous academic schedule

- Financial support required from SPPU and institution

7. Notes (Optional)

Outcomes of social initiatives are inculcating social welfare in students and grow as social and civic responsible citizen.

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

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Institution is established in the year 2008 by the trust 'Marathwada Mitra Mandal' to provide engineering education with the motto "*Yethe Bahutanche Hita*" (Welfare of Masses). The watchwords of the trust are Mass education, co-education and dedication towards overall development of the students.

The institution has the vision "Techno-Social Excellence" where along with the necessary academic and technical knowledge in different disciplines, emphasis is given at nurturing graduates with a reasonable sense of social responsibility.

Most of the admitted students are from economically weak background and a significant number of open category students are from farmer's family (around 60%). Amongst these, few students are not eligible for Government free ship and scholarship. Every year, because of weak financial conditions, several deserving students are on the verge of quitting their education. The trust and the Institution take the responsibility of continuing education of such needy students through financial assistance and provide them an opportunity to become a successful engineer.

Since establishment, institution has supported 37 students and spent around Rs. 21,42,541/- till date. The details are as below:

Sr. No.	Academic Year	Total number of benefited students	Total Financial Assistance Provided (in Rs.)
1	2017-18	11*	Rs. 4,66, 171/-

2	2016-17	14*	Rs. 3,99,005/-
3	2015-16	18*	Rs. 3,95,913/-
4	2014-15	21*	Rs. 5,41,754/-
5	2013-14	12*	Rs. 1,81,158/-
6	2012-13	5	Rs. 1,78,540/-

*Some students got the fee concession for more than one academic year.

The institution started “Earn and Learn Scheme” to provide an opportunity for students who need financial support to their education by offering part-time job in Library. Depending on the requirement of the students, either they are provided with expenses for hostel or mess. Under this scheme, students are assigned work in the College Library after college hours so that their regular studies are not affected. Till now 7 students are benefited under this scheme.

Apart from Financial Assistance in tuition fees and hostel fees to needy students, the institution supports students financially for publishing their research papers in National/International Journals/Conference Proceedings. The details are as follows.

Sr.	Academic Year	Total Financial Assistance Provided (in Rs.)
1	2016-17	2,100
2	2015-16	51,115
3	2014-15	90,109
4	2013-14	48,335

The above provisions help to uplift the students and to improve the overall living standard of student and their families. As of now, 19 students graduated. 12 of them got job in companies like BOSCH India, Bangalore, Atlas Consultancy Ltd., Amazon, Tata Communications etc. The careers of these students are recognized globally.

Enhancing technical excellence of students keeping sense of social responsibility is the distinctiveness of institution to fulfill the vision, priority and thrust of the institution.

5. CONCLUSION

Additional Information :

- Student Group Insurance Policy from National Insurance Company
- The Institution has provided a group insurance policy for all teaching and non-teaching staff.
- National Anthem is played in the institution every day in the morning as a part of national integrity
- The institution has a Bus Facility for students from various locations of Pune
- Student counselor is appointed in the institution to groom the students
- Students' Cooperative store is available on the campus to provide stationery
- Well furnished and self-contained rooms are available in the hostels

Concluding Remarks :

Marathwada Mitra Mandal's Institute of Technology (MMIT) is one of the growing institutions in Pune. It is spread over an area of 13.99 acres with beautiful landscaping, a playground of 6.7 acre and ample greenery are few of its unique features. MMIT offers three undergraduate programs in Computer, Mechanical and Electronics & Telecommunication Engineering having 240 annual intakes. All programs are approved by AICTE, recognized by DTE and affiliated to Savitribai Phule Pune University. Training and Placement Cell works under the Corporate Relations Division (CRD) of the organization. The institution has signed 14 MoUs with industries/organizations and membership of various professional bodies such as CII, SAE, MCCIA, ISTE, ICT, etc. The institution central library has taken membership of ARAI, British Library and Jaykar Library of SPPU, Pune. The institution has participated in different national and International level events like BHAU I2I, ROBOCON, BAJA, AICTE Smart India Hackathon etc. Students from Mechanical Engineering Department have secured the First Rank as 'Best Innovative Project' at BHAU Institute of Innovation, Entrepreneurship and Leadership at COEP Pune. Students from Computer Engineering Department were shortlisted for a Grand Finale for Smart India Hackathon at Nagpur. Our team of students bagged the "Best Rookie Award" by ABU-ROBOCON in National Robocon Contest. The institution has NSS unit for social awareness. Institution doing social work by providing financial assistance to needy students to continue their education and enhancing technical excellence. MMIT aims and strives to be an Engineering Institution where students are nurtured for their techno-social excellence.