

SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

MAHENDRA INSTITUTE OF TECHNOLOGY

MAHENDRA INSTITUTE OF TECHNOLOGY, SALEM-TIRUCHENGODE
HIGHWAY, MAHENDHIRAPURI, MALLASAMUDRAM, NAMAKKAL -637503
637503

www.mahendratech.org

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Mahendra Institute of Technology was established in 2007 by the Mahendra Educational Trust under the visionary leadership of renowned educationalist Shri. M.G. Bharath Kumar, the Chairman of the Trust and a well-known Philanthropist in this region. The College is situated on the Salem-to-Tiruchengode main road, about 25 km away from Salem. Mahendra Institute of Technology is approved by AICTE and affiliated to Anna University - Chennai.

The College was started with 4 under graduate programs in Engineering and Technology, with an intake of 240 students. Currently, the institute offers 8 undergraduate programmes and 3 postgraduate programmes in Engineering & Technology. At present we have 2087 students and 173 faculty members. The college has research centres in Mechanical Engineering and Electronics and Communication Engineering through which doctoral programmes are offered. Three of our programmes namely Electronics and Communication Engineering, Electrical and Electronics Engineering and Computer science Engineering have been permanently Affiliated. The Institute is recognized under the section of 2(f) and 12 B by the UGC.

The institute has taken resolute steps to conduct training programs to boost the employable skills of the students as well as nurturing an entrepreneurship culture so that transition from campus to corporate is smooth and seamless.

Vision

To become a premier institution by harnessing human potential in engineering, technology and research and develop competent engineers with a strong concern for ethical and social values.

Mission

To impart quality engineering education by leveraging on state-of-the art facilities, resources and eminent faculty members.

To create a congenial atmosphere for the holistic development of the students and to excel in higher education.

To inculcate in students strong values, sense of ethics and vision that will prepare them to lead lives of personal probity, integrity and civic responsibility.

To foster and strengthen the research expertise in engineering amongst the students and faculty for the betterment of the society.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Dedicated and committed management with good academic background
- A serene and verdant green campus with stimulating learning environment
- Soft skills training and impressive placement record from reputed organizations
- A vibrant culture of holistic development in academics, sports, music and art

Institutional Weakness

- Limited academic autonomy in framing curriculum and syllabus
- A vast majority of the students hail from Rural Background
- Very few industrial and consultancy work taken up by the college

Institutional Opportunity

- More extension outreach services
- Getting accreditation from NAAC and NBA and to become Autonomous
- Forging a strong alumni network to step up academic and placement activities
- Embarking on more green energy initiatives for sustainable development

Institutional Challenge

- Majority of the students hail from rural background and are lacking in communication.
- Securing funds from leading funding agencies
- Being located in a rural area achieving admissions to the level of sanctioned intake

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

- The Institute follows the curriculum given by Anna University.
- Being an affiliated Institute, the academic flexibility is limited.
- Action plan is drawn up for the development and deployment of these curricula followed by the institute.
- Compliance of Anna university curriculum is done to contribute different domains in curriculum and curricular gaps are identified through inputs from stakeholders.
- Content beyond syllabus are planned through a Broad Curriculum by imposing training to improve core knowledge, life skills, soft skills and behavior of the students which will meet program outcomes to satisfy the stakeholders.
- Based on Academic schedule given by Anna University, academic calendar is prepared including Co curricular and extracurricular activities.
- Before the onset of the semester, faculty members prepare a detailed lesson plan, notes of lesson, power point slides, content beyond syllabus, course assessment sheet and question bank.
- Effective curriculum delivery is done by the faculty through an effective Lesson plan, delivery modes, handouts containing planned and functional course file, lab manuals and utilizing ICT tools of experimental learning.

- Beyond the university curriculum, certification programs in core domain areas, technical and soft skills training, etc, are conducted
- Student's subject knowledge is further bolstered by hosting guest lectures, workshops and conferences.
- The institute has a robust feedback system.

Teaching-learning and Evaluation

- The institute makes efforts to cater to the students of varied backgrounds and abilities through stimulating teaching-learning environment.
- Admission is done through a transparent centralized admission process of the University.
- Institution follows the reservation policy of the State Government.
- Different categories of students are selected for merit scholarships and Freeships.
- The students admitted in to the various program comprises diverse mix of ethnic, cultural, religious and linguistic background. The diversity of learners impacts the degree of learning and teaching learning modalities are delivered out to stay as learner –centric.
- “**Outcome Based education**” is being followed. A set of Programme educational objectives (PEO's) and programme outcomes and course outcomes are defined.
- Before the onset of the semester, faculty members prepare a detailed lesson plan, content beyond syllabus, course Assessment sheet, question bank etc.,
- Effective curriculum delivery is done by the faculty through an effective Lesson plan, delivery modes, handouts containing planned and functional course file, utilizing ICT tools of experimental learning.
- The pedagogy includes theory, practical, Black Board teaching, power point presentation, on line learning tools and projects.
- Remedial classes are conducted for slow learners.
- Feedbacks are arrived from all stakeholders to ensure and identifying the correctness and any lagging in current Teaching learning pedagogy.
- Relevant corrective action is planned and implemented to improve pedagogy initiatives.

Research, Innovations and Extension

- The Institute believes in promoting a robust research culture and hence spur and motivate students and teachers to undertake research related activities.
- Mechanical engineering and Electronics engineering departments have been recognized as research centers by Anna University.
- The institution impresses upon its teachers to carry out research activities by providing facilities in terms of high speed internet connectivity, laboratory, subscription to research journals and providing research incentives and travel allowance for conferences.
- Institute actively encourage research by hosting workshops, talk by researcher of eminence and training programs.
- The outcome of these initiatives has borne fruit in as much a large number of faculty members are pursuing PhD, some have obtained the doctoral degree and some are on the verge of completing their program.
- Faculty members are actively encouraged to publish papers in refereed national and International journals and conferences.
- For their part, students are encouraged to take participation in Inter- college competitions, seminars and workshops.

- By virtue of being a Self-financing college, the institution is facing heavy constraints and it is still in the incipient stage with regard to consultancy works.
- The institute has played a very active role in undertaking extension and outreach programs through university approved student chapter of NSS incepted in the year 2010. The NSS has conducted Blood donation camp and other services to the community.
- Our college has signed slew of MOU's with reputed companies for student's training and placement.

Infrastructure and Learning Resources

- For a smooth and effective functioning of an Institution, Infrastructure holds the key to carry out functions like Teaching-Learning Process and the eventual academic progress
- The institute houses impressive facilities for carrying out teaching and learning process such as commodious, airy, well-lit class rooms, furniture and equipment. Institute boasts of good physical infrastructure spread across two multi-storied buildings with 64 class rooms, Dining hall, canteen, laboratories and a well –stacked library.
- The infrastructure available is in line with the norms laid down by AICTE and Anna University.
- The computer labs are equipped with requisite terminals and high-speed internet facility. The institution owns 64 Mbps lease line and 632 computers.
- The library is stacked with impressive collection of reference books and e-journals. Every year, recommendations are provided to the library based on the recommendations of faculty members.
- The institute has earmarked separate annual budget for the library. ILMS Software is used in the library to facilitate the effective use of library resources digital library
- A separate space in workshop has been earmarked for the students to experiment their innovative projects while participating in various competitions.
- Adequate Facilities for sports and extracurricular activities are available in the campus.

Student Support and Progression

- To ensure seamless and smooth flow of communication for the academic activities, all the relevant information and schedules are put upon the notice board and website for the students.
- The Institute is a active member of reputed organizations like SAE, ICTACT, ISTE.
- A slew of workshops, seminars, conferences, soft skills training and Guest Lecture series are conducted to provide hand-on experience to the students to realize their dream of getting a job.
- Since majority of the students are from rural area, we have a full –fledged communication lab to impart language skills to the students.
- The institute has put in place a full- fledged mentoring system. Each faculty members are assigned a specific number of students and they keep tabs on matters relating to student's academic performance, attendance details and disciplinary issues.
- An Anti-Ragging committee, a grievance redressal cell and Women empowerment cell are established to eradicate ragging and to ensure that natural justice prevails in the college.
- Remedial classes and bridge courses are conducted to ensure slow learners can progress in their academics.
- The Training & Placement cell renders career guidance services and organizes campus recruitment drives.
- Students who show keen interest to pursue higher are encouraged through Mahindra's higher education training academy.

Governance, Leadership and Management

- Our institution has embraced its Vision and Mission and objectives in alignment with the over-arching goals of higher education by way of providing robust leadership.
- The practice of decentralization and participative management pervades the whole organization so as to develop a strong leadership pipe line.
- The institute scope out its strategic planning and in the bargain interacts with the wide spectrum of stake holders.
- HR Policies and perspective plans are rigorously monitored and recalibrated.
- The institute has a well-defined and demarcated organizational structure, Objectives, action plan, tasks and schedules. An effective feedback mechanism has been put in place to get a structured feedback from all the key stakeholders.
- A truly progressive, dynamic and supportive Governing body of our institution has given a free-rein to the principal to perform all the academic related activities.
- Our Institution has a well defined Academic committee headed by Principal, Academic Coordinator, Dean etc., with participation of some External Experts to execute approved resolution of governing body and its requirements for the satisfaction of stakeholders by conducting meetings twice in a year
- IQAC is formulated as per the norms and all quality relevant activities are assessed and monitored semester wise by conducting Academic Audit by the Auditors of IQAC to ensure OBE.
- Department related expenditure towards Equipment, Consumables, semi consumables and instruments are prepared. Yearly Internal and external audits of the records are done to ensure mobilization of funds effectively.

Institutional Values and Best Practices

- The Institute provides ground for fostering innovation, creativity and quality. Developing a gateways to further advance the interests of the students, unswerving commitment to quality, set of inclusive practices and forging and sustaining stakeholders' relationships are high on our radar screen.
- We believe in the pithy adage "Cleanliness is next to godliness" and hence the institute maintains a spic and span campus.
- The institute takes pride in being a Campus located in a verdant green locale. The college is far removed form the rough and tumbles of city and is neatly tucked away in the lush green rural place.
- The institute also has taken some significant measures like Energy conservation, Waste management, rain water harvesting, tapping unconventional energy sources etc.
- The institute is also making concerted efforts to implant best practices in our Institution. Five best practices that are truly worthy of mention includes mentoring system, Professional development course, Community Outreach program, Peer Knowledge sharing Forum, Skill development through hands on training.
- The institute is making an all- out effort to align its goals and practices towards sculpting a bright future of our students.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	MAHENDRA INSTITUTE OF TECHNOLOGY
Address	MAHENDRA INSTITUTE OF TECHNOLOGY, SALEM-TIRUCHENGODE HIGHWAY, MAHENDHIRAPURI, MALLASAMUDRAM, NAMAKKAL -637503
City	NAMAKKAL
State	Tamil Nadu
Pin	637503
Website	www.mahendratech.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Associate Professor	S.PRABU	04288-355777	9994050731	04288-288500	hodece@mahendratech.org
Principal	T.ELANGO	04288-288527	9443457824	04288-288528	principal@mahendratech.org

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	12-07-2007			
University to which the college is affiliated/ or which governs the college (if it is a constituent college)				
State	University name		Document	
Tamil Nadu	Anna University		View Document	
Details of UGC recognition				
Under Section	Date		View Document	
2f of UGC	05-02-2016		View Document	
12B of UGC	13-07-2018		View Document	
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	10-04-2018	12	Yearly extension of Approval

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

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	MAHENDRA INSTITUTE OF TECHNOLOGY, SALEM-TIRUCHENGODE HIGHWAY, MAHENDHIRAPURI, MALLASAMUDRAM, NAMAkkAL -637503	Rural	12	26605

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,Automobile Engineering	48	HSC DIPLOMA BSC MATHS	English	60	45
UG	BE,Biomedical Engineering	48	HSC DIPLOMA BSC MATHS	English	60	60
UG	BE,Civil Engineering	48	HSC DIPLOMA BSC MATHS	English	60	0
UG	BE,Computer Science And Engineering	48	HSC DIPLOMA BSC MATHS	English	120	120
UG	BE,Electrical And Electronics Engineering	48	HSC DIPLOMA BSC MATHS	English	120	93
UG	BE,Electronics And Communication Engineering	48	HSC DIPLOMA BSC MATHS	English	120	105

UG	BTech,Information Technology	48	HSC DIPLOMA BSC MATHS	English	60	28
UG	BE,Mechanical Engineering	48	HSC DIPLOMA BSC MATHS	English	180	168
PG	ME,Computer Science And Engineering	24	MCA BE BTECH	English	18	12
PG	ME,Electronics And Communication Engineering	24	BE BTECH	English	24	6
PG	ME,Mechanical Engineering	24	B.E B.TECH	English	24	8
Doctoral (Ph.D)	PhD or DPhil,Electronics And Communication Engineering	36	M.E. M.TECH	English	14	0
Doctoral (Ph.D)	PhD or DPhil,Mechanical Engineering	36	M.E. M.TECH	English	14	3

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	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	11				7				156			
Recruited	10	1	0	11	5	2	0	7	81	75	0	156
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				27
Recruited	25	2	0	27
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				15
Recruited	12	3	0	15
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.	9	1	0	4	3	0	2	0	0	19
M.Phil.	0	0	0	1	0	0	17	10	0	28
PG	0	0	0	0	0	0	62	64	0	126

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	0	0	0	0

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	0	0	0	0

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
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	0	0	0	0	0
	Others	0	0	0	0	0
UG	Male	515	23	0	0	538
	Female	137	2	0	0	139
	Others	0	0	0	0	0
PG	Male	14	4	0	0	18
	Female	20	2	0	0	22
	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	210	267	54	30
	Female	96	115	18	7
	Others	0	0	0	0
ST	Male	10	6	2	0
	Female	4	4	1	0
	Others	0	0	0	0
OBC	Male	176	287	225	300
	Female	28	48	35	53
	Others	0	0	0	0
General	Male	36	33	33	38
	Female	15	16	7	10
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		575	776	375	438

3. Extended Profile

3.1 Program

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

Response : 1412

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
17	15	15	12	13

3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2087	1822	1646	1144	1132

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
507	507	507	468	429

File Description	Document
Institutional data in prescribed format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
385	381	201	235	423

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

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

2017-18	2016-17	2015-16	2014-15	2013-14
239	227	207	179	151

Number of sanctioned posts year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
239	227	207	179	151

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response : 60

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

2017-18	2016-17	2015-16	2014-15	2013-14
689.94	636.86	603.52	496.7	455.87

Number of computers

Response : 620

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:

We always seek quality education for the students. Since we are affiliated institute of Anna University Chennai, we effectively follow the curriculum prescribed by Anna University depending on our resource potentiality, institutional goals and concern towards the students.

The institution aim is to develop and organize various plans for effective implementation of the curriculum. To be fulfilled by the Academic Committee, in which first step is taken in the beginning of academic year to discuss about the curriculum gap. Accordingly teachers are instructed to prepare their Action plans.

Time tables are prepared for all the classes of the respective programs. Allocations of lectures of all the subjects are planned according to Anna University rules and regulations.

All the teachers follow teaching schedule as per the time table. Our teaching faculty update themselves by attending refresher courses, workshops, Faculty development programs, orientation programs conferences and seminars organized by various colleges & UGC,HRD centers of Universities which help them for accomplishment of their subject delivery & curriculum more effectively. Curriculum delivery by the faculty is periodically monitored by the respective HOD's and Principal.

The teachers use various teaching methodology to make learning process more effective. The subject teachers organize regularly Industrial Vist, field visits, workshops, seminars, guest lectures, hands on traning for enhancing their fundamental concepts and knowledge of the subjects. To organize study tours and field visits in concerned subjects, the college provides full support and financial assistance.

The institute provides all necessary infrastructural facilities to our teaching faculty such as Audio Visual Hall, Language lab, Educational Software, E-Journals, Reference books in library and Digital library facility which helps them in their routine teaching of curriculum.

Academic calendar is prepared as per the Anna University norms and the requirements at the department level as per the action plans formed. A regular working extract with department academic calendar for the full year (Two Semesters) is prepared and will be made available with every Staff and Students.

Towards effective curriculum delivery, Course file is prepared by faculties of various programme it includes the Syllabus, Lesson plan, Time table, Course Objectives, Course Outcomes, CO-PO mapping, Course materials, Video lecturing (URL), Tutorial sheet, Assignment and Course completion status. Lesson plan includes course outcomes, course objectives, content topics, reference books and the expected outcomes from the students by learning through the topics is prepared by the respective faculty members at the beginning of each semester. It gives an insight how the lecture class will be handled throughout the

semester. Laboratory Manual is for all practical courses with additional/ Design based experiments more than Anna University prescribed experiments

Course outcomes formulated by each faculty is correlated with program outcomes, which converges towards the attainments of PEO's and then finally correlated and converges towards department mission activities to achieve the vision/goal of the department.

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: 52

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

2017-18	2016-17	2015-16	2014-15	2013-14
14	12	8	9	9

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	View Document
Any additional information	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: 34.4

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

2017-18	2016-17	2015-16	2014-15	2013-14
11	18	16	14	10

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 out of the total number of courses across all Programs offered during last five years</p> <p>Response: 33</p>	
<p>1.2.1.1 How many new courses are introduced within the last five years</p> <p>Response: 466</p>	
File Description	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: 17</p>	
File Description	Document
Name of the programs in which CBCS is implemented	View Document
Any additional information	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: 60.61</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>	

2017-18	2016-17	2015-16	2014-15	2013-14
1277	1198	962	747	593

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:

We believe in giving healthy environment for all our students. The cross-cutting issues like Gender, Environmental sustainability, Human Rights and Professional Ethics etc., finds plenty of space when it comes to applying them positively into the curriculum. The curriculum is by the university and it does include many of these aspects in the curriculum. There are various committees which take care of the students such as:

(i) Women Empowerment Cell (Gender Equality):

It is formed by one coordinator and all the women faculty members in the institution. With the slogan of women empowerment the question arise that “are women become really strong” and “is long term struggle has ended”. Many programmes have been implemented and run by our institution such as International Women’s day, mother’s day, etc in order to bring awareness in the Girl students and society about the true rights and value of the women in the development of the nation. Women need to be progressed in the number of spheres. Women empowerment is to empower women by promoting their participation in all areas and sectors to build stronger economies, improve their quality of life and bring gender equality.

Women Grievances Committee:

It is formed only by female faculty members consisting of one coordinator and two

members and also one student representative from each department. This is our privilege to state that in our college the problems related to women students like Sexual nuisance, eve teasing are completely nil as we have a very good discipline system in the institution. This women grievances committee will have regular interactions with women students at regular intervals of times to identify any sort of issues existing. This WGC handles the issues with ease and confidentially.

(ii) Environment and Sustainability:

The following courses address Environment and Sustainability. It appreciates the ethical, cross-cultural, historical context of environmental issues and the links between human and natural systems. This enables the students to learn about the eco-system and other environmental factors. They also learn measures to protect the environment and are made aware of global warming and other related issues.

- Biodiversity
- Environment
- Green Chemistry
- Environmental Studies

(iii) Human Rights (Club Activities):

Our institution conducts many programmes on Human Rights to provide awareness among students in the form of club activities.

· Blood Donation Programmes	· International association club
· Clean India and pest control Activity	· Modern club
· Health Awareness Programmes	· Traditional club
· Tree Plantation	· Documentary club
· Macromiracles	· Outbound training
· Yoga club	· Proving food and stationary for
· Handicraft club	· Orphanage

(iv) Professional Ethics:

It describes professionally accepted standards of personal, business behavior, values and guiding principles. Codes of professional ethics are often established by professional organizations to help, guide members in performing their job functions according to sound and consistent ethical principles Professional Ethics and Moral Values

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

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

Response: 75

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

years	
Response: 75	
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
Any additional information	View Document

1.3.3 Percentage of students undertaking field projects / internships	
Response: 34.5	
1.3.3.1 Number of students undertaking field projects or internships	
Response: 720	
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

<p>1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise</p> <p>A.Any 4 of the above</p> <p>B.Any 3 of the above</p> <p>C. Any 2 of the above</p> <p>D. Any 1 of the above</p> <p>Response: A.Any 4 of the above</p>
--

File Description	Document
Any additional information	View 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
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: 11.96

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

2017-18	2016-17	2015-16	2014-15	2013-14
121	132	125	174	271

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: 60.28

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

2017-18	2016-17	2015-16	2014-15	2013-14
717	575	776	375	438

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

2017-18	2016-17	2015-16	2014-15	2013-14
1014	1014	1014	774	894

File Description

Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[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: 82.33

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

2017-18	2016-17	2015-16	2014-15	2013-14
457	424	468	355	299

File Description

Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

Students' technical knowledge and end semester results are the most important aspects for the better placement of students in the institute. Result is improved by giving better attention to the slow learners. Two Slip tests per week and three continuous internal examinations per semester are conducted to the students of all branches. The results of the first slip test for the first year and both the first slip test and the previous year university results for the other students are considered to segregate the slow learners and the advanced learners. Students getting ? 50% marks in slip tests and ? 3 arrears are consider as advanced learners, rest of them are considered as slow learners.

Programmes for Advanced Learners:

The following programmes are conducted for advanced learners.

- They are guided to refer international books for their regular study.
- They are advised to do mini projects and also to participate in the project competitions conducted by other institutions.
- Advanced learners are also involved in clearing the doubts of slow learners
- They are also trained in the following areas as per their interest for the betterment of placements, competitive examinations and higher studies.
- English communication
- Basic computer programming
- Aptitude skills

- Coaching for GATE examination and Higher studies
- Group I and II examination coaching
- Department oriented skill development for placements
- Club activities
- They are guided to refer refereed journals to know the current technologies in their specific areas and to apply their knowledge and skill to solve practical problems.
- In addition to academics, club, cultural, NSS and sports activities are conducted to foster the leadership quality, decision making ability, team spirit, socio-psychological awareness etc. which make an individual an intellectually mature being. The college puts forward efforts to realize total development of the student.

Programmes for Slow learners:

The following programmes are conducted for slow learners.

- A bridge course and a test are conducted for the students, entering to the first year and also to the second year through lateral entry.
- Review of their class attendance and continuous internal examination performance.
- Regular communication of their performance to the respective parents through post and mobile.
- Effective mentoring system for the welfare of the students; 20 students are attached to each faculty as mentor.
- Remedial Classes are conducted by the subject experts beyond working hours which is not a part of their time table.
- Video presentation classes from NPTEL are used for better understanding in important topics.
- Short form notes are given to them instead of learning the whole book.

The Institution conducts bridge courses for all the first year students in Communicative English, Mathematical Foundation and Computer Literacy course before the commencement of regular classes. This will reduce the fear and communication problems of the rural students.

The Institution conducts slip test, Continuous internal examination, Seminar, Quiz and project expo to assess the learning levels of the students.

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

2.2.2 Student - Full time teacher ratio

Response: 8.73

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls**Response:** 0.05**2.2.3.1 Number of differently abled students on rolls****Response:** 1

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

2.3 Teaching- Learning Process**2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences****Response:****Student centric methods:**

The institution supports student-centric learning through its efforts by creating a learning atmosphere which allows the students to think in different way, respond and pose questions.

Student groups are formed in the classes under each mentor which may comprise of advanced and slow learners. Through this group the students can learn from each other, the individual in the group can convey his views to the other students in their group on a particular topic and they can discuss which may be of class work or any other academic related topics. This is done in the class room itself and the faculty in the class can help to enhance their views during that time.

Group of students, particularly for the mini-project and final project work the project mates can discuss the different methods in a particular operation and they can do the easiest and cost saving methods. Apart from the effective design and exercise of the student centric learning activities, teachers motivate the students to undergo webinar, NPTEL etc.

Industrial visits are also helpful for the student centric learning. A group of students are sent for industrial visit to view and explain the different equipment/machines in the industry. At that time the students interact with them. This also improves their centric learning capability to understand the process of the industry easily and the same can be applied to their theory subjects also.

Digital library with NPTEL Video Lectures and ICT tools allow the students to pursue advanced courses of his interest in a centric manner for their preparation of GATE examination etc.

Experiential learning:

1. In the laboratory, while conducting lab experiments faculty members explaining the concepts of the experiments, working principles of the equipment and the parameters related to that experiment.
2. At the time of industrial visits and workshops the students experimentally learn the process which are related to the theory subjects.
3. While doing the mini-project and projects, the students are experimentally learn the objectives of the project, its process and the concept behind its working. This helps the students to learn experimentally what they are studying in the theory subjects.

Participative learning and problem solving methodologies:

1. Two student's seminars are arranged in each theory subjects. Students prepare for the seminar with the guidance of the faculty member and also discuss with their classmates. They are asked to watch the concern video's for the understanding of the process/ working. It makes several participative learning activities to broaden the scope of education imparted to the students.
2. Group assignments are given to the students in the regular subject topics. In that the group of students can work to solve problems with different methodologies and find the best method to solve the problems. This group actually makes the students to learn by participating and problem solving methods.
3. Problem solving methodologies are also taught in the class rooms while teaching some of the regular subjects and while doing projects.

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

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:** 239

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	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: 12.28

2.3.3.1 Number of mentors

Response: 170

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

Innovative and creativity methods have been adapted in the teaching-learning process to the students to enhance learning capabilities and also the knowledge. The academic agenda is integrated with various and multifarious activities in almost all the subjects. The innovation teaching is done by using the ICT tools in the class room teaching, conducting webinars, model making etc. Innovative technique of flip classroom is used in curriculum delivery, based on Think-Pair-Share methodology.

Each department is provided with LCD projector, computer with LAN and internet connection in the seminar hall. Faculty can use the seminar hall for teaching where they can use black board, LCD projector during the lecture delivery. One can access the database of digital library, NPTEL videos and other internet facilities which consists of course material, Recorded video lectures and animations. Faculty and Students can access the journal resources also in the seminar hall.

A database is maintained which contains quiz questions and GATE questions for all subjects. Faculty video lectures for important topics are recorded and repeated.

- Students prepare working models which can be carried in the classroom and demonstrate the working in an effective manner.
- Concept oriented activities are planned in the classroom with the participation of the students.

Entrepreneurship Development Cell (EDC) arranges talks of inspiring entrepreneurs to make the students understand the need of innovations and creativity in learning. Students are made compulsory to prepare the case studies on different types of entrepreneurs such as male, female and social entrepreneurs. This helps them to understand the attributes of entrepreneurship. Student teams undertake innovation projects during the course. This provides a platform to exercise their creative ideas through preparation of models & team work.

- NPTEL videos, e-books, web links and teachers design role-play based assignments are to enhance learning of students.
- Field trips, Industrial visits, Implant training, National and international seminars organized based on the content of the subjects of the department.
- Industry visits are arranged to provide the students with hands on experience in their field and to update them with the current technology. Through these site visits, students understand the

practicality and implementation of the concepts studied by them.

- Students undergo in-plant training in industries and present case-studies.
- Hands-on experience is integrated in almost all the practical subjects. Experimental workshops are held for students.
- Students are allotted to prepare power point presentations for class seminars. It encourages the visit to library.
- Students are also given group assignments which they complete using books from library and e-resources.
- An assessment web link is provided to the students for giving feedback on the ongoing lecture sessions. The student gives feedback on the ongoing subject wise lecture sessions. This feedback will enable the faculty to know the effectiveness of his teaching on lecture basis and helps to improve his performance.
- Alumni survey, Employer survey etc. are conducted to know about the innovative and creativity learning in the institute.

File Description	Document
Any additional information	View Document

2.4 Teacher Profile and Quality

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

Response: 100

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

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

Response: 6.11

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

2017-18	2016-17	2015-16	2014-15	2013-14
15	15	14	10	8

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

2.4.3 Teaching experience per full time teacher in number of years

Response: 6.29

2.4.3.1 Total experience of full-time teachers

Response: 1503

File Description	Document
Any additional information	View Document

2.4.4 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: 48.85

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

2017-18	2016-17	2015-16	2014-15	2013-14
54	19	6	14	5

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

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

Response: 0.17

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	0	0	0	0

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:

Mahendra Institute of Technology is adopting various reforms in Continuous Internal Examination and Evaluation. Since this institute is affiliated to Anna University Chennai, it follows the regulation of the university with reforms for the benefit of students. Two Continuous Internal Assessment Examinations (CIE) and one model exam will be conducted in every academic course of each semester. The model examination covers full syllabus of a course, hence student can revise all the topics of the syllabus.

Existing CIE for UG & PG Courses (CIE Marks):

Marks split-up for internal Assessment is given below:

Theory Course

Continuous internal assessment test I = 6.67

Continuous internal assessment test II = 6.67

Continuous internal assessment test III = 6.67

Practical course (20)

Record work = 5

Viva voce = 5

Model practical = 10

CIE Syllabus & Question Pattern:

The syllabus for the Continuous Internal Assessment pattern is that Unit I & II for the CIE – I and unit III & IV for the CIE – II. The entire syllabus is considered for Model Examination in all the programmes.

Question pattern for the CIE - I & II

Part A (2x10 = 20)

Part B (10x3 = 30)

Total = 50 Marks, Duration: 1 hour and 30 Minutes

Question pattern for Model Examination

Part A (2x10=20)

Part B (13x5=65)

Part C (1x15=15)

Total = 100 Marks, Duration: 3 hours

1. Two Slip tests per week are commonly conducted for an hour, and generally two tests of different courses per week.
2. Unit/Topic wise question banks are provided to the students for all subjects including two mark question and answers.
3. Assignments are given to the students from the previous year question papers.
4. Continuous internal examination question papers are formed based on the previous year university question papers and the question bank.
5. The groups formed between the advanced learners and slow learners are also useful for the students to perform well in the tests and examinations.
6. To enhance the learning environment, institute has developed smart class rooms, teachers conduct technical quizzes at the end of every Unit and students actively participates in the same.
7. Technical debates, group discussions and brain storming sessions are arranged by student associations through different competitions.

Outcome based education is followed for the improvement of teaching learning process. Answer scripts are corrected and returned to the students within two days after the competition of the test/examination. Corrected answer scripts and results are reviewed by the faculty and the IQAC co-ordinator. The outcome of analysis will be used to improve the teaching and learning in the particular course.

Students' feedback about the subject is also obtained from the students. From the review strength and weakness of the students are identified and remedial actions are taken for improvement.

1. Retest will be conducted for absentees in the internal assessment examinations. Students are given opportunities to improve their performance in Internal Evaluation through retest and assignments.
2. Tutorial classes are conducted for all the subjects, to clarify doubts and for re-explaining the critical topics.

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

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

Response:

- Three types of examinations are conducted for each subject in a semester. Two slip tests of one hour for 25 marks, two tests per week, two continuous internal examinations of 1 1/2 hours for 50 marks and a model examination of 3 hours for 100 marks. Hence the examinations are variety. The student can learn the short portion profoundly for the slip tests and can answer.
- The dates of the examinations are mentioned in the academic calendar, supplied to the students and displayed in the notice board on the first day of the semester.
- The academic calendar consists of dates of commencement of continuous internal examinations and also the end semester practical and theory examinations dates given by the university,.
- The important dates are also displayed in the web-portal.
- The dates mentioned in the academic calendar are followed in all the activities. Hence the students and the faculty members clearly know about the commencement of the tests well in advance.
- The format of the question papers are also displayed in the notice board and also discussed in the class room.
- The same format is followed for all the subjects in the institute. Hence the dates of the examination, syllabus of the CIE and question paper pattern are transparent to all the students.
- The question papers of the examinations are verified by the IQAC co-ordinator and the Head of the Department in order to rectify the mistakes and the ambiguity in the questions are fully rectified.

If a student is not able to attend the internal tests and model exams when he/she represents the institution in any event (on duty), owing to medical grounds or any valid reason, that student should get prior permission from the subject handling faculty, mentor and Head of the department, a retest is conducted to enable the student to earn internal assessment marks.

The faculty will prepare answer-key for the examination question paper with mark allocation and the same is displayed on the notice board. Hence the students can know the answer for the questions and it is fully transparent and he can easily check the answers while distributing the answer scripts.

The corrected examination answer scripts are distributed to the students within two days after completion of the examination. If there is any deviation in awarding marks, it will be immediately clarified and rectified by the subject handling faculty. Those answers scripts are acknowledged by the students then they are collected and retained in the department. The subject handling faculty will countersign in the paper if any changes are made in that paper.

Mark list of the students are prepared, it is displayed in the notice board and conveyed to their parents by post.

The marks are also entered in the PALPAP software and in the Anna University web-portal which can be accessed by any faculty. The student can open the portal and verify the marks to calculate the portion of the

final internal assessment mark.

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

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

Response:

Grievances redressing cell helps the students to approach for general and personal grievances. The committee comprises of the Principal, Dean, Academic co-ordinator and the Head of the Departments.

Methods of grievances:

The student can express the grievance in the following ways.

1. Interacting with their mentor
2. Feedback through internet
3. Class committee meeting
4. Suggestion box
5. Feedback by the parents.

Each faculty members acts as mentor for 15 to 20 students. The mentor and the mentee meeting is compulsorily conducted once in a week. One C/L/S (Counseling/ Library/Seminar) hour per week is allotted in the time table itself. So students are meeting their mentor and can convey their grievance to the faculty.

After completion of each examination, feedback form in the prescribed format is send to the students e-mail ID. From these feedbacks the grievances of the students are conveyed to the faculty and the head of the department.

1. Class committee meetings are conducted twice in a semester which consists of chair-person, the theory and laboratory handling faculty, and students of more than 10% of the class.
2. This meeting is purely student centric; the student can convey the grievances to the chair –person and the committee members.
3. The meeting minutes are seen by the head of the department and the principal. Hence the grievances are conveyed to the principal.
4. Suggestion boxes are available in many places of the institute. Student can drop the suggestions as letters into the box. The same can be checked frequently by the Principal office members.
5. Parents of the students are meeting the faculty and the Head of the department. At that time the grievances of the students are conveyed to the higher authorities through their parents.
6. Phone numbers of the Head of the Department is known to the students and the parents. Hence they

can convey the students' grievances to the authorities directly.

The grievances coming in any of the mode mention above are collected and are discussed in the Principal meeting. The suggestions of the members in the meeting are considered; rectification methods are discussed and desired, the same may be conveyed to the management. After this discussion, suitable actions will be taken from the next day or from the next event based on the requirement.

University level

Students apply for Xerox copies of evaluated answer scripts and apply for revaluation of end semester examination from university. The University provides the photocopy of answer scripts to students on demand after paying fee. After receiving own answer-sheet if student wants he/she can apply for reassessment of answer script. If the student is not satisfied with the second valuation, he can apply for the challenging valuation.

An aggrieved student who has the grievance(s) shall make an application to the university through the principal of the college. The principal, after verifying the facts, shall forward it to the concerned section of the university. The university redresses all such grievances within a reasonable time of application.

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

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

Response:

Academic calendar:

Academic calendar is the back bone of various teaching-learning plans, prepared by the institute before start of every semester. The institute academic calendar is prepared in-line with Anna University academic calendar which is available in the university web-portal. The institute academic calendar incorporates

- Numbers of working days,
- Unit wise syllabus completion,
- Continuous Internal Examination dates,
- CIE marks entry in the university web-portal,
- Commencement dates of University practical and theory examination and
- Dates for all curricular, co-curricular and extra-curricular activities.
- Schedule of monthly attendance display, class committee meeting, workshop & seminar dates, webinar, assessment etc.

This calendar is displayed in notice board and in the institute website at the beginning of semester and also circulated among the entire faculty as well as students. Meetings and reviews are conducted by faculty,

coordinators, HoDs and Dean to review and corrective actions if any are required.

Provision of CIE date in academic calendar:

All the entries in the academic calendar are linked with various programmes related to the Anna University academic calendar. The CIE dates are based on the university notified in the academic calendar. Any deviation in that one makes unsatisfactory of the university timings and sometime misleading. After each CIE, the marks should be feed in the university web-portal. Hence any deviation in the CIE dates may create trouble to feed the marks in the university web-portal.

To avoid it, institute adheres to the academic calendar. This way the institute adheres to the academic calendar for conduct of CIE. If the institute calendar is not followed, data entries related to the university academic progress will not met. Hence for the smooth running of the academic activities and other activities, institute adheres to the university academic calendar.

The students are also adhere the academic calendar to prepare for the same well in time. It also includes schedule of display of results of these examinations. Academic calendar notifies the date of assignments and slip tests. Student can submit assignments in time based on the academic calendar.

Final year students carry out their project presentations as per academic calendar. The academic calendar also gives the schedule of various experimental/participative activities designed by the institute as per the Project Based Learning (PBL) Model such as Lab Innovations, Industrial Visits, Value Addition Programs (VAP), technical events etc.

Apart from the technical activities, academic calendar describes tentative schedule of extracurricular activities such as sports and cultural events. The participation and performance of students in all such technical and extra-curricular activities is also a part of motivation to write competitive examinations and involvement in studies.

In order to ensure the satisfactory performance of the students in the evaluation process, parents are also involved in discussions through parent meet organized as per academic calendar. The institute takes efforts to communicate the requirements and progress of students in the evaluation process through the Teacher Guardian scheme. This helps in ensuring effective conduct of CIE and achieving desired outcomes.

File Description	Document
Any additional information	View Document
Link for 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:

- The institute is affiliated to Anna University, Chennai. The Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) are well defined and stated in the University Curriculum for the regulations 2017. POs, PSOs and COs are formed by considering Vision and Mission statement of the college and the syllabus content. COs and POs are framed by the Heads of the department with the subject handling faculty along with subject experts. Course committee meetings are conducted at regular intervals and the institute assists the faculty members to achieve these objectives by proper supporting systems. This helps to understand the course outcomes easily.
- The COs is also dictated to the students while dictating the syllabus in the class and also present in the continuous internal examination question papers. Hence the student can very well aware of the COs of the subject.
- The POs and COs are available in the course file prepared by the faculty member while mapping with POs faculty can clearly understand the course outcomes accordingly he can prepare the lesson plan etc.
- Institute takes due care for informing POs and COs to all the stake-holders. POs and COs for all programs and courses offered by the institution are displayed in the institute website for reference of all stakeholders.
- The COs is published in Academic regulations and Curriculum book, and in institute website. They are made reachable to all the stake holders of the program through, faculty members, student awareness workshops, student induction programs and faculty meetings.
- All the planning and execution are directed towards meeting these objectives faculty meetings.
- The program outcomes and program specific outcomes are achieved through a curriculum that offers a number of courses. Each course has defined course outcomes that are linked to the program outcomes and a set of performance criteria that are used to provide quantitative measurement of how well course outcomes are achieved.
- The course outcomes are thus directly and quantitatively assessed, and are tied to the program outcomes and program specific outcomes. Therefore if the course outcomes are attained, those provides direct quantitative evidence to that program outcome and are attained. The course outcomes of each course are mapped to the Program Outcomes with a level of emphasis being strongly correlated (3), moderately correlated (2) and lightly correlated (1).
- Projects are reviewed by industrial experts to oversee whether they are in tune with the learning outcomes. The importance of employability is insisted upon as one of the main learning outcomes.
- Faculty members write COs of their respective course and refer them while executing the course plan.
- Faculty members refer the syllabus to understand POs and COs thoroughly before delivering the courses to students.
- Reviews of these POs and COs are taken by the stakeholders and suggestions are discussed in meetings. Revisions are done wherever required.

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

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

Response:

Response:

Assessment gives us essential information about what the students are learning and about the extent to which meeting our teaching goals.

Attainment of Course outcomes:

Attainment of course outcomes are assessed by considering the following two categories of marks

1. Internal Assessment Marks

2. End Semester University Examination Results

The internal assessment mark for the theory is the average of the three internal assessment examinations and for laboratory average mark of records and one model practical examination. Project work is evaluated by conducting three review sessions, thesis submission and Viva-voce examination batch-wise. Grade points are given by the university in the end semester examination results and the equivalent marks are given in the table.

The course outcomes are framed by the respective faculty members and HOD with the help of an expert. Subject wise CO attainment level is calculated by adding 20% of the final internal assessment attainment level (given in the table) with and 80% of end semester examination attainment level for each subject is calculated. Thus, the average of percentage of students attaining the entire COs decides the CO attainment level.

Attainment Level	Students pass percentage	Marks level for (Internal & End semester examination*)	
1	50% to 60%	50 % and above out of maximum marks	relevance
2	61% to 70 %	50 % and above out of maximum marks	relevance
3	71% and above	50 % and above out of maximum marks	relevance

*Grade points of the end semester examination results are converted as range of marks and is given in the additional information table.

Attainment of Programme outcomes, Programme specific outcomes:

Attainment of PO and PSO are calculated by the following tools

Direct Attainment

1. Internal Mark

2. End Semester Examinations

Indirect Attainment

1. Students Exit Survey

A correlation is established between COs and POs in the scale of 1 to 3, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high). A mapping matrix for CO and PO, PSO's is prepared for every course in the program and average of COs for all PO's, PSO's are calculated for each subject of the program. Average of all PO's and PSO's for all the subjects are also calculated.

Indirect attainment is found from student exit survey about the programme and is conducted by providing the PO's and PSO's as questionnaires to the outgoing students by giving three grade points as Excellent – 3, Good – 2, Average – 1. Total weightage and maximum weightage is calculated for each PO's and PSO's. PO's and PSO's weightage is also calculated from the percent weightage. Indirect attainment is 20 % of the weightage of the each PO's and PSO's. Attainment level of 80% direct method which includes 20% internal assessment level, 80% end semester attainment level and 20% indirect method is the PO's and PSO's attainment.

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

2.6.3 Average pass percentage of Students

Response: 63.64

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

Response: 245

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

Response: 385

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: 3.5

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 (INR in Lakhs)

Response: 0.5

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)

2017-18	2016-17	2015-16	2014-15	2013-14
0.5	0	0	0	0

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

3.1.2 Percentage of teachers recognised as research guides at present

Response: 2.51

3.1.2.1 Number of teachers recognised as research guides

Response: 6

File Description	Document
Any additional information	View Document

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0

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

Response: 1

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years	
Response: 1003	
File Description	Document
Supporting document from Funding Agency	View Document
Any additional information	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:

Research and Development Centre:

Department of Electronics and Communication Engineering and Department of Mechanical Engineering are approved as Research Centre's by Anna University, Chennai (ECE Code: 4750007, Mech code: 4750017) for carryout research activities in various domains.

Mahendra Institute of Technology is committed to long term research in emerging areas of engineering and technology. Students and faculty conduct research in thrust areas of engineering.

Research and development constitutes the first stage of development of a potential new service or the production process. The outcome of research is to developing new services or products, or improving existing services or products.

Mission: The mission of the R&D Centre at Mahendra Institute of Technology is to provide an inclusive environment for the promotion and support of research and development activities.

In Campus Accommodation: Mahendra Institute of Technology Research Centre's provide in campus accommodation to our Resource persons, Researchers, Technical supporting staffs. We provide them Guest Rooms with food accommodation.

Library: We have 500 volumes of books with computer for accessing the technical details that too for research promotion activity.

Office support: Our Institute is provided with well-equipped laboratories, specialized equipment, the full range of required infrastructure, including campus-wide networking and high-speed internet access. Every department has faculty and students involved extensively in research activities. The R&D Centre gives support for Promotion of Institute -Industry interaction, Collaboration with Industries, Patents, Research Assistance to Faculty Members.

Purpose of R&D

To be a Centre of Excellence, internationally acknowledge in the field of Science and Technology. Creating entrepreneur to Make in India and harness the knowledge of science and technology for the welfare of the society through MIT. To provide a holistic enabling environment to potential researchers & entrepreneurs and graduating students so as to translate knowledge and innovation into creation of successful research and product. The institute also remains committed to long-term research as the foundation for future development.

About Research & Development Centre for the Department of ECE & MECHANICAL

Department of Electronics and communication engineering and Department of mechanical engineering, Mahendra institute of technology is an Anna university reorganized research center for the pursuing research. The center is equipped with state - of - the - art lab and machines such as vertical milling machines, horizontal machining center and other convention machines. Software such as Solid Works, Pro - E, ANSYS, and CATIA.

Research Activities:

Our research activity promotes a platform on both Cadence and Matlab tool towards their research areas of our students, staff and researches in the areas of VLSI Technology, Image Processing and Communication Systems. Our research activity is mainly focused to bridge the gap between academics and industries. The center develops, evaluates are transfer technologies in the field of mechanical engineering. It has capabilities to check the mechanical properties of the components. To stregen the research, the center has signed MoU with some research organization. The focal areas of the center are alternate flues, IC-engines, heat transfer, foundry metallurgy, composites, welding and corrosion, refrigeration & air conditions.

File Description	Document
Any additional information	View 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: 111

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

2017-18	2016-17	2015-16	2014-15	2013-14
21	33	23	14	20

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

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards	
Response: Yes	
File Description	Document
e- copies of the letters of awards	View Document
Any additional information	View Document

3.3.3 Number of Ph.D.s awarded per teacher during the last five years	
Response: 0.5	
3.3.3.1 How many Ph.Ds awarded within last five years	
Response: 3	
3.3.3.2 Number of teachers recognized as guides during the last five years	
Response: 6	
File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years**Response:** 1.13**3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
38	34	63	30	62

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

3.3.5 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:** 0.49**3.3.5.1 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**

2017-18	2016-17	2015-16	2014-15	2013-14
22	12	13	13	38

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

The institution promotes college-neighborhood network community development by conducting regular activities related to social responsibilities of the institute.

NSS Units comprising of more than all students are active in community development activities.

The following activities are doing for community development.

- NSS camp and village adaption
- AIDS Awareness programmes
- Tree Plantation
- World Water Day Celebration
- International women's day celebration
- Rural Area Development
- Swachh bharat
- International yoga day
- Women's empowerment and health awareness
- Service and maintenance of household appliances
- Created awareness about Energy saving and power factor correction
- Leadership Skills and Soft Skills Training
- National Voters Day
- Blood Donation camp
- Medical Camp
- NSS Day celebration
- Stress Management
- International Education Fair
- Eye Camp
- Organ Donation Camp
- Uzhavar vizha

Additionally many special camps are conducting with the help of NSS unit and non government organizations for the development of neighborhood network community.

The institute is aware of its role in campus cum community connections, well being of its neighborhood as well as build student's interest for service orientation and good citizenship.

To track student involvement in various social activities, our institute has established a system of faculty members as mentors for each 20 students to keep records of their participation in such activities and counseling the students in various activities.

Further, at the end of the semester, such data is compiled at HODs level and in consultation with Principal they are awarded as best students by the Chairman in Annual Day Celebration.

The stake holders (students, faculty, parents, alumni, employers) interact with the institution through associated events like alumni meet, parents meet, students feedback, employers feedback and faculty feedback. This helps the institution to obtain their perceptions about overall performance and quality of the institution. The institute plans and organizes number of extension and outreach programs in neighborhood population. The clubs like NSS, YRC and RRC of the institute is quite active in such endeavors.

During the orientation program of newly admitted students, the faculty /student coordinators of NSS and various societies, carryout presentation to student on the benefit and scope of extension activities. Information regarding proposed activities is notified through circulars, web notifications, in academic and hostel building on a regular basis. Every student encourages becoming a member of NSS/Societies for participation in extension activities. The institution sincerely practices Govt. social affirmative schemes for the development of under privileged communities.

The college NSS unit has been organizing programme in and outside the college for the benefit of nearby community. Required facilities are given to differently- able students. The institute takes the help of elder and influential people like village head, members of gram panchayat to ensure the involvement of local population in its community development activities. To win the confidence of local leaders the institute organizes various awareness programs like free healthcare camps, eye checkup camps, village cleaning drives and blood donation camps etc.

File Description	Document
Any additional information	View 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: 51

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

2017-18	2016-17	2015-16	2014-15	2013-14
20	12	7	6	6

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 65

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
14	15	12	10	14

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document
Any additional information	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: 82.32

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

2017-18	2016-17	2015-16	2014-15	2013-14
1923	1737	1321	825	812

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	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:** 109

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

2017-18	2016-17	2015-16	2014-15	2013-14
38	33	19	12	07

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

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)**Response:** 37

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 (only functional MoUs with ongoing activities to be considered)

2017-18	2016-17	2015-16	2014-15	2013-14
8	8	10	7	4

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

Mahendra Institute of Technology follows the norms laid down by AICTE and Anna University for creating and enhancing the infrastructure facilities for effective teaching and learning. The Institute has sufficient classrooms (54-Nos), seminar-halls (6-Nos), various department laboratories, library with ILMS, and 64 Mbps internet facility including Wi-Fi. The entire ambience of the college is clean and fresh. All the infrastructure facilities are provided with a vision to help students to develop their academics and career progression skills. The Institute's policy consists of ensuring optimum utilization of the space and infrastructures to achieve best outcome. Total area of our institution is 48562 sq.meters and it's built up area is 26605 sq.meters. The available physical infrastructure is optimally utilized beyond regular college hours, to conduct certificate courses, co-curricular activities/extra-curricular activities, parent's teachers meeting, Campus Recruitment training classes, campus recruitments, seminars, conferences etc.,

Laboratories/ computing facility/Drawing halls/Auditorium

The college has exclusive language laboratory attached with audio and video facilities for enhancing students to gain knowledge. Our institution has seven computer laboratories with 620 computers connected through LAN or Wi-Fi connection with more than 64Mbps internet speed to share & access knowledge resources like NPTEL, MIT resources,youtube etc.The computers has various operating systems like windows-xp, windows-7 and ubuntu. Computers have various software packages like Mat lab, Xilinx, AutoCAD, Python Turbo-C, Java, etc., which are necessary for teaching and learning. The area of each computer laboratory is 120 sq. meters. The institute has sufficient number of drawing halls with drawing tables for accessing students. Our institute boasts of huge, commodious and fully air conditioned Mahatma Gandhi Auditorium having a seating capacity of 1500 people to conduct various curricular and co-curricular events. The College ICT facility includes projectors, wireless microphones, sound systems, marker boards, public addressing system, desktop recorder and video recorder with internet facility to conduct lectures, seminars, webinars, conferences, guest lectures, and workshops.

Library

The library acts as one of the main learning source centre of the institution and provides services and facilities to meet the requirements of the institute's teaching, training, research and consultancy programmes. The entire library is fully automated by software called AutoLib. The MIT library is well stacked with more than 51909 books related to engineering and technology, industry related topics and 52 rare books are also available. The library is constantly updated with the latest Magazines, National & International journals, Reference books and other material at regular periods. The library also owns its digital set up with 64Mbps speed to access e-journals, e-books and other online resources like DELNET, Shodhganga & ShodhSindhu.We have Core reference collection of McGraw Hill, Springer and Elsevier, chronicle, cengage learning is also available for all students to upgrade their knowledge. To inspire the significance among the students with regards to current affairs and general knowledge, study materials related to GATE and competitive examinations is available in the college library. DELNET is very helpful

to access rare books from various institutions libraries. Manuscripts from various departments are available in our library for student reference.

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:

Mahendra Institute of Technology encourages and provides facility for students to participate in various extra-curricular activities in order to take care of physical well being and provide entertainment outlet. A team of faculty members and students are involved in cultural, sports and extra-curricular activities of the college.

Gym

For all-round development of the students, there is fully equipped gym - fitness zone containing all modern equipment. This area (comprising nearly 100 sq. meters) has a range of equipments like dumb bells, Steering plates, Biceps Steering plates, skipping ropes. The other equipment includes double bar, Back Hyper Extension, Fore Arm Extension, Leverage squat/calf raise machine, Bicep cart, fore Arm extension, Pull up stand, Bench press, Abs machine etc.,

Indoor games

The institution has fully competent and qualified Physical director to train the students to participate in various events conducted by the State/University levels. The indoor stadium has good lighting facilities and the gallery can accommodate about 2500 students. A wooden floor is laid for badminton, basketball and volleyball.

Outdoor games

The institute has playground measured 16,800 sq. meters to accommodate basketball court, ball badminton court, football ground, cricket ground, kho-kho court , Kabaddi court , handball court , hockey ground , volleyball ground and well laid 400 m standard track which all fall outdoor games. Our students have bagged good winning records at inter – collegiate and Zonal levels.

Cultural Activities

The institution boasts of huge, commodious and fully air conditioned Mahatma Gandhi Auditorium having a seating capacity of 1500 people. It is used for conducting seminars, workshops, conferences, cultural events/activities and co-curricular activities. The college has a committee for conducting cultural activities.

This committee along with staffs and students of the college organizes an annual cultural function named Mahendra UTSAV. The aim of Mahendra UTSAV is to provide a platform for students to showcase their talents and organizational skills. The students organize & participate in many cultural activities like group dance, skits, MIME, Debate, Street Play, face Painting, Drawing etc., during the cultural day. The college also organizes Annual day function every year where the students to participate many cultural activities with zeal and enthusiasm. To broaden the horizons of the students, they are encouraged to participate in several inter-colligate events.

Health care

Medical facility is available in the campus for the benefit of the staff and students. A separate dispensary under the supervision of a qualified physician is exists in the campus.

Yoga and Clubs

The Yoga is conducted for students regularly through Yoga club which was established in the year 2013. Yoga day is organized every year. All our faculties, students and colleagues participate in this program. Students are encouraged to perform yoga during college cultural events and they take part in competitions and bring laurels and plaudits to the institution. The Institute has various clubs so students are eagerly conducting and participate many events such as blood donation camp, organ donation camp, Clean India Pest Control activity and Food donation in differently abled Children's School.

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

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

Response: 73.33

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 44

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
any additional information	View Document
Link for additional information which is optional	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation

during the last five years.

Response: 10.95

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

2017-18	2016-17	2015-16	2014-15	2013-14
85.39715	70.18879	63.92833	54.04973	45.05670

File Description	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 library of the college is automated through AutoLib Software . **AutoLib** – is a popular and advanced integrated Library automation management software, designed and developed by a team of Library & Information Science specialists, database designers, software developers and network specialists.

- **Name of ILMS software : AutoLib Software**
- **Nature of automation (fully or partially) : Fully Automation**
- **Version : 5.1 (Java Version)**
- **Year of Automation : 2013**

It is maintained by library staff name Devaraj.Screenshots of autolib software is given in the additional link and purchase details of this software is attached as additional information.

1. Database Management - Cataloguing

This module allows to create, update/edit and maintain the following databases.

- Books, Book- Bank, Thesis, Proceedings, Standards, Conference Proceedings- Reports, Patents, etc.
- Journal- Issues, Articles, Bound Volumes
- Non-book materials/ CD, Video/Audio tapes, Microfilm, Microfiche, News paper clippings
- Members, Departments , Courses, Groups
- E-Books - Digital Content
- **Authority List** - Authors, Publishers, Suppliers, Subjects, Keywords

2. Search (Online Public Access Catalogue)

This module is designed to search all the **above databases** using important fields and print the search results in any desired format/order. This module has:

1. **Simple Search** -(for beginners)- to search the database using important fields such as Accession Number, Call Number, Author, Title, Edition, Year, Publisher, Subject, Keywords, Department, Availability, etc.
2. **Advanced Query Builder** (for experienced users) – to search the database by selecting the desired **field(s), criteria for search** (starting with, anywhere(like), truncation, word), **Boolean Operators**(AND, OR, NOT) and **sorting order** from a list of fields and printing in various formats
3. **Restricted Search** – to search letter by letter

3. Circulation Management - Transaction

This module is designed for all types of counter transactions (for all documents types) such as:

- Issue/Renewal /Return/Recall
- Reservation / Reservation Cancel
- Reminders/Overdue receipt/No-due certificate
- Overdue reports (based on many criteria)
- Statistics/Reports for all counter transactions (daily/weekly/monthly/between specific dates)

4. Report Management

This module is designed to generate and print a large number of reports such as: List of books by author, title, unique titles publisher, supplier, call number, subject, dept, accession number, date, book type and list of journals/publishers/suppliers/members, etc. It also allows to print accession register, catalogues, amount spent by type of documents/depts/subjects and bibliographic reports. All types of statistics/reports for the management can be generated for AICTE/NBA,UGC/NAAC, IMC.

5. System Administration

This module allows to:

- Create new user log-in, password and grant **rights** to access various modules
- Create group master – to set due date, allowed cards for different documents for different groups of users globally
- Set over due charge at various stages/holiday
- Maintain budget master
- Back-up, export and import of data
- Update database globally using various fields
- Generate charts

File Description	Document
Any additional information	View 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:

Rare books

The total number of books accessible in the library is more than 51909 and there are 52 rare books are available. Core reference collection of McGraw Hill, Springer, ISTE and Elsevier, chronicle, cengage learning, blooms burry publishing is also available to all students to upgrade their knowledge. To inspire the significance among the students with regards to current affairs and general knowledge, study materials related to GATE and competitive examinations is available in the college library. Library is providing resource for higher education and career guidance. Delnet is very helpful to access rare books from various institutions libraries.

Manuscripts

Manuscripts collected from various departments like lecture notes and lab manuals are available in our library for student reference. The subjects like computer graphics, computer programming, Data structures, Theory of computation, Automotive electrical and electronic system, Engineering Thermodynamics, Heat and mass transfer ,power plant engineering, Digital image processing and digital signal processing. In our institution the faculty members from various departments also published some of the books like Communication Engineering, Analog Digital Communication, Communication theory (Bharathi Publishers) by Dr.S.Prabhu and Data Structures (Charulatha publishers) by Dr.J.Stanly Jayaprakash

Other knowledge resources

- **Reference Books** such as Encyclopedias, Dictionaries, Directories, Handbooks, Geographical sources, Manuals and other related self- learning material are located in the stock areas on the Reference section. The library has subscribed for more magazines and newspapers such as the Hindu, India Today, etc., Magazines are electronics for you, the next decade, gas growth strategy, run for storm cover. Journals like the IUP journal of structural engineering, International journal of civil engineering, Indian journal of mobile communication and networking, International journal of computing information and technology. These materials are kept at the magazines section and are meant for reference only within the Library.
- E- Access to Engineering e-books and e-journals are subscribed and made available to students. College provides online access to number of refereed journals to promote research culture. Library has acknowledged Elsevier certificate for enriching years of relationship with online resources.
- **Delnet** facilitate 500+ e-Journals and 2000+ e – books are available. There are more e-journals are subscribed from Springer comprising electrical, electronics, mechanical, and computer related subjects. By using this faculty members published various journals and conference papers.
- The College is a member of INFLIBNET for ‘E-shodh-sindhu’.
- **Digital Library** facilities are also available in our institution library. We are accessing more number of e- books and e-journals through open source.

Special reports

Institute has a rich collection of Special reports in terms of PhD thesis from the other universities which is used by our students and teachers for their research work. The college is a member of INFLIBNET for sodhganga using this membership we are accessing more thesis from various college staffs. Record of old project reports of students is maintained in the departmental library and college library. There are around many project reports stocked in the college library for the sake of students and to motivate the students

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

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: A. Any 4 of the above

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

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

Response: 20.87

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

in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
25.06060	22.04670	20.21216	19.75680	17.25630

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

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

Response: Yes

File Description	Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 28.07

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

Response: 653

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

- The college upgraded the internet speed from 38 Mbps to more than 64 Mbps on 4-9-2016. All the computers of the institution are enabled with LAN connection .The total bandwidth is divided for all the computers through LAN and also through Wi-Fi hotspots. Eight Wi-Fi access points have been installed at various places.
- Initially we have totally 471 computers with configuration of Intel Core2Duo/2.40GHZ/1GB RAM/160 GB SATA HDD/ Intel Onboard E'Net. In the academic year 2016 we bought 149 systems in model of Lenovo Think Center and the enhanced configuration is

IntelCoreI5/3.30GHz/2GB/250 GB SATA HDD/Intel Onboard E'Net. All the staff members are having unique Mahindra domain user-name and password for storing their data. We are having separate team called IT Help Desk to troubleshoot all IT related issues.

- Institute frequently updates all the open source software like Scilab, GCC, maxima, etc., as per AICTE guidelines.
- College ICT facilities like LCD projector, desktop recorder, mics, audio systems, etc., are updated frequently.
- The scanners, printers, photo copier (Xerox) facility is available for students and faculty members.
- Institution is under the cover of CCTV surveillance.
- Online Exam management system is used in the exam cell as per Anna university norms.
- IT infrastructure facilitates are audited every year and internal audit report is prepared to include the amount required to updated IT facilities in the next academic year budget.

HARDWARE UPDATES			
S.No	Date of update	Description of goods UPDATED	Quantity
1	27/06/2018	Xerox Work Centre 5855 Printer	1No
2	22/11/2017	12V 100AH EXIDE 6EL TUBULAR BATTERY	30Nos
3	9/12/2017	CANON LBP 2900B LASER PRINTER	1No
4	11/6/2016	Think centre M79{10CQ-S02G00}	34 Nos
5	11/6/2016	Think centre M79{10CQ-A002IH}	115Nos
6	11/6/2016	18.5" LED COLOR MONITOR DELL	180 Nos
7	7/7/2016	NUMERIC 40 KVA UPS SYSTEM	1 No
8	6/5/2014	Oracle academy advanced computer science membership	1 No
9	14/3/2014	PROJECTOR	14Nos
10	4/10/2013	HP PROCUVE GIGABIT LX LC MINI GBIC2 MODULE	2Nos
11	4/10/2013	HP 1810G 24 PORT LAYER2 MANAGED SWITCH	4 Nos
12	4/10/2013	KRONE SC -SC COUPLER DUPLEX	4 NoS
13	4/10/2013	KRONE SC-LC SINGLE -MODE	2 Nos

SOFTWARE UPDATES			
S.No	Date of update	Name of the Software	Quantity
1	2/1/2018	O365 Proplus open faculty	50Nos

2	2/1/2018	WINEDUE3 ALNG	50 Nos
3	2/1/2018	INTUNE OPEN FCLTY	50Nos
4	2/1/2018	MS SQL SvrStd	1No
5	2/1/2018	wlinSvrSTDCore	8Nos
6	2/1/2018	Ms ExchgSvtStd	1No
7	2/1/2018	Ms VSProSub/MSDN	1No
8	21/4/2017	AutoCAD 2018	1250 Nos
9	2/8/2017	PALPAP	1No

INTERNET SPEED UPDATES

Particulars	2017-18	2016-17	2015-16	2014-15	2013-14
Total Number of Computers	620	620	471	471	471
Total Number of Students	2087	1822	1646	1144	1132
Bandwidth of leased line	More than 64 Mbps	More than 64 Mbps	38 Mbps	38 Mbps	38 Mbps
Date of up gradation of Bandwidth	-	04.09.2016	-	-	01.04.2014

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

4.3.2 Student - Computer ratio

Response: 3.37

File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	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
Any additional information	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: 1.27

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)

2017-18	2016-17	2015-16	2014-15	2013-14
6.57788	8.4422	8.40424	6.535	6.1143

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document

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

Response:

Mahendra Institute of Technology management has established systems and procedures for maintaining both physical and academic supporting facilities.

- Technicians frequently checking appropriate facilities maintained under their supervision.
- Internal maintenance complaint register is maintained in each and every academic department
- Concern department heads are evaluating the external Maintenance Requirement request submitted by technicians.
- If maintenance/service identified is internal then required maintenance/service is registered in college/department maintenance register. College maintenance department is taken care of maintaining students' bench & table, staff table & chair, laboratory work benches, chairs, stools, lights, fans, switches, water pumping motors, college bells, UPS, electricity generator and wirings. Dedicated campus cleaning team to monitor campus cleanliness such as floor cleaning, class room and staff room cleaning, gardening, RO water maintenance, plumbing, toilet cleaning process and uninterrupted water supply. Separate complaint register is maintained by college supervisor for this purpose. Well experienced IT team is maintaining Computer hardware and software, printers, photocopier, AC, WIFI, Lecture Capturing System and LAN connection. Online IT helpdesk token register is maintained for this purpose.
- If maintenance service identified is external, concern department head needs to submit the external maintenance/service requirement requisition letter to principal approval. Once the principal approved external service requirement, then concern external maintenance provider is contacted by concern heads or maintenance supervisor.
- Once External maintenance/service is completed, HOD/Supervisor needs to verify the acquired service with the help of technicians and then collect the bill from service provider, fill the cash voucher available in Administrative office and get approval from Administrative officer and principal then give it to the cashier to claim the bill amount.
- College account section is maintaining students' fees collection, attendance & salary details of teaching & non teaching staff. Component movement registers, Seminar hall utilization register and maintenance register is taken care by AO office.
- College amenity centre is taken care of stationary purchases in accordance with the request given by the various departments.
- College physical education department is taken care of sports equipment maintenance, gym maintenance, indoor and outdoor ground maintenance as per various gaming rules.
- College Buses and other vehicles are maintained by centralized transport department.
- College canteen properly maintained to ensure good quality food, waste management and cleanliness.
- College principal is taken care of maintaining sufficient human resources in order to ensure smooth

going of academic activities and other maintenance activities. Periodically principal spend a time for monitoring the academic and physical facility maintenance processes.

- College librarian maintains the issue registers to monitor the book circulation among students and staffs, using book circulation register. Books stock register is properly maintained and auditing of books is performed annually. Library has been established with OPAC (Online Public Accessing Catalogue) facility to access and maintain the books easily in the rack. Every year library advisory committee is constituted to strengthen its activity. This committee allocates department wise budget for purchase of books, Periodicals and also conducts annual stock verification.

File Description	Document
Any additional information	View 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: 84.41

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

2017-18	2016-17	2015-16	2014-15	2013-14
2002	1665	1443	940	735

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	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: 28.74

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

2017-18	2016-17	2015-16	2014-15	2013-14
1188	808	570	69	20

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

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

Response: 33.1

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

2017-18	2016-17	2015-16	2014-15	2013-14
815	523	447	298	504

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

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years**Response:** 11.42

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

2017-18	2016-17	2015-16	2014-15	2013-14
224	201	198	109	156

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**

Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee

[View Document](#)

Details of student grievances including sexual harassment and ragging cases

[View Document](#)

Any additional information

[View Document](#)**5.2 Student Progression****5.2.1 Average percentage of placement of outgoing students during the last five years****Response:** 60.69

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

2017-18	2016-17	2015-16	2014-15	2013-14
232	226	177	149	137

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

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

Response: 12.73

5.2.2.1 Number of outgoing students progressing to higher education

Response: 49

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

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years	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: 48

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

2017-18	2016-17	2015-16	2014-15	2013-14
29	10	9	0	0

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

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

Response:

Class Committee

Every class of the degree program to have a class committee consisting of faculty and students to take a review on the students' performance, academic plan execution of every subject in a semester and steps for further enhancement of academic performance of the students.

IQAC

To develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.

To promote measures for institutional functioning towards quality enhancement through internalization of

quality culture and institutionalization of best practices.

Alumni Association

To make a mutually beneficial interaction between the Alumni and the present students of Manendra Institute of technology and also among the Alumni themselves.

To create a database of graduated students & maintain a networking with the alumni to have a website for the Alumni association to be in connection with.

NSS

To find the problems and needs of the community and involve the NSS students in problem solving process.

To develop a sense of social and civic responsibility among themselves

To utilize their skills for the practical solution to individual and societal problems

To develop regular characteristics for group-living and sharing of responsibilities through various NSS activities.

Clubs:

Aptitude club

To improve and bring out the aptitude skills of the students.

To promote enthusiasm and interest in solving mathematical mind blowing problems among the students.

To provide a platform for discussing new methods of learning and enhancing such skills.

Inspiring club

To encourage, motivate and equip the students to participate in various societal, environmental and communal welfare activities by their own and schemes proposed by the government

To stimulate the students' interest to interface themselves with society for identifying and solving social and environmental issues

Make in India club

To promote making products concept among the students and inculcate scientific temper among them.

To trigger interest among the students in doing projects by their own.

Arts and Fusion Club

To enhance the art offerings in the campus and to acquire further opportunities for the students to develop their artistic skills.

To create discussion surrounding the identities of multiracial activities and to provide artistic environment in which students can develop their extracurricular talents.

Yoga club

Yoga education helps to improve self discipline and self-control, leading to immense amount of awareness, concentration and higher level of consciousness. The objectives of Yoga education are:

To enable the student to have good health.

To practice mental hygiene.

To possess emotional stability.

To integrate moral values and

To attain higher level of consciousness.

Documentary Club

To establish a Documentary Film Club that will focus on establishing film screening collectives as community outreach programs.

To establish a training program for young documentary film producers.

To establish The Film Club Website, Magazine and social network pages

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: 17.4

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

2017-18	2016-17	2015-16	2014-15	2013-14
24	23	14	13	13

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

The college has an alumni association named MITOSA that stands for Mahendra Institute of Technology Old Students Association. The association had been running unregistered till 2017. Efforts are being taken to register the association and registered in the year of 2018 with register number of 140/2018, dated:20.08.2018. The same we are submitted to Register office for registration and waiting for registration number. The alumni meet provides a good opportunity for the institution to take inputs from alumni to make the students prepare for the industry. Below are the key objectives of the alumni association.

- To improve interaction among the Alumni Members and to the Institute by way of organizing reunions, meets and conclaves
- To improve the expertise by the way of providing resource person and the experts through Alumni members.
- To provide forums for the Alumni members to exhibit their products and expertise, further, give opportunity to promote their business and professional life.
- To improve infrastructural and other facilities by the contribution from alumni.
- To arrange for campus placement, projects, implant training and field visit

The alumni association of college conducts the alumni meet annually. Meetings of the association were organized during last five years at various places. Alumni also give the inputs regarding latest tools/technologies to the current batch students in the form of lectures. This is a very good opportunity for the students & faculty members to interact with the alumni. The feedback of alumni is given due consideration to fill the gaps in subject knowledge and understanding. Various programmes on interview skills, personality development, study abroad and carrier counseling are organized based on the suggestions given by alumni. Infrastructure facilities are being regularly upgraded or expanded to meet the requirements and aspirations of students based on suggestions given by alumni in alumni meet.

Alumni of the college bring students up to date with various job opportunities and corporate requirements. The alumni of the college who have qualified and the competitive examinations, interact with students appearing for competitive examination through on-campus lectures or by online commitment to guide them. It's the goal of our college to create and maintain a life-long connection between the institute and alumni to support current batch students.

Our primitive alumni

1. S.Senthil, Assistant Engineer/TNEB, Kangayam South section

2. Hari shankaran N, Programmer Analyst, EXCELACOM TECHNOLOGY.
3. Ragav chandran N, Senior Software Engineer, FIS GLOBAL BUSINESS SOLUTIONS IND PVT LTD
4. Ashokkumar T, Constable/GD in Central Industrial Security Force.
5. Suresh M, General Service, Indian Navy.

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

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

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

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

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 9

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	3	2	2

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:

VISION

To become a premier institution by harnessing human potential in engineering, technology and research and develop competent engineers with strong concern for ethics and social values.

MISSION

- To impart quality engineering education by leveraging on state-of-the art facilities, resources and eminent faculty members.
- To create a congenial atmosphere for the holistic development of the students.
- To inculcate in students strong values, sense of ethics and vision that will prepare them to lead lives of personal probity, integrity and civic responsibility.
- To foster and strengthen the research expertise in engineering amongst the students and faculty for the betterment of the society.

The nature of governance, perspective plans and participation of the teachers in the decision making bodies.

Mahendra Institute of Technology was established in the year 2007 by **Thirumigu M. G. Bharath Kumar**, a renowned educationist. The institution was established with a goal of imparting a high standard of education to rural children and shall constantly endeavor to achieve excellence in technical education through sound pedagogical methods, enhancing facilities and human resources and producing top-notch professionals with enduring human and ethical values to satisfy the vision and mission of the institute.

- The management of the institute is assisted by Principal, Academic Coordinator and Heads of the Departments, faculty and staff members to enhance the quality of the institute.
- The institution conducts periodical meetings to review the quality policy and development of the institutions. The inputs will be collected from the various stakeholders through Institution Governing Body and feed backs collected from them including the faculty are taken as a basis by the top management to draw the quality policy for the institute.
- An Academic committee comprising Principal, academic coordinator and Department HoDs meet before the start of the new semester to prepare the academic calendar.
- Semester wise Academic Calendar is prepared by the HODs after discussions with the Principal. The academic plan includes arranging industrial visits for students, conferences/symposium, workshops, seminars, Guest Lectures, Project Expo, Placement Training and social activities.
- Regular meeting is conducted every week by Principal with the HODs as well as with the faculty to assess the needs of the programs like Lab equipments, calibration, consumables etc., and monitor the progress of the students and departments.
- HODs conduct faculty meetings regularly to collect feedbacks for smooth functioning of the

department.

- The faculty members understand the quality policy clearly and follow it in their day to day implementation. The management provides excellent infrastructure. The Principal and the faculty members in turn effectively deliver the curriculum to the students.

The perspective plan of the institution is to modernize existing infrastructure facility, Development of Research and project oriented laboratory, library resources, more number of smart class rooms, Board rooms and sports facilities.

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:

The case study for the preparation of Academic Planner

Mahendra Institute of Technology functions with an efficient decentralized administration that has an absolute transparency in the all the processes.

Decentralization in working

- Academic related powers are delegated to the academic Heads and Academic Coordinator by the Principal.
- All the departments of the Institution function under the direct supervision of Principal. Day-to-day academic activities of the departments are taken care of by the HoDs.
- Entrusting examination work is to the Controller Of Examinations.
- Under direct supervision of Principal, Administrative office, examination section, library and all the UG and PG departments are functioning.
- Time to time Principal conducts meeting with the concerned HoDs/ in charges to discuss various issues and resolutions passed for further action.
- Similarly, the outcomes of Principal meeting are passed on to individual faculty / staff for implementation.
- Senior faculty members are allotted to co-ordinate various academic activities, faculty development programmes and student enrichment courses.
- Placement activities are delegated to all department placement coordinators through training and placement cell.
- Administration work is delegated to the administrative officer.
- Co-Curricular and extra-curricular activities are delegated to the faculty in-charges of various departments.
- Club activities are delegated to the faculty coordinators.

The list of various committees to decentralize the academic and administrative activities is given below.

- Examination Cell
- Anti-Ragging Committee
- Women Empowerment Cell
- Counselling Cell
- Grievance Redressal Cell
- Library Committee
- Internal Quality Assurance Cell (IQAC)
- Discipline Committee
- Time Table Committee
- Alumni Association
- Department Associations
- Professional bodies and associations
- National Social service
- Website Management Committee

The role of various committees and functions are given in annexure.

The extract of Academic calendar for every year is prepared at the end of the previous academic year. Principal conducts meeting with HODs, Academic Coordinator, Placement Training coordinator, Senior Librarian and Physical Director to discuss the schedule of the academic events and finalized in accordance with the schedule received from affiliating Anna University.

The Academic Calendar includes various information's like,

- Re-opening date for the next academic year (Every Semester)
- Working days / Internal Test / Model exam dates
- Symposium/National Conference
- Guest Lectures
- Industrial Visits
- Internships & Implant training
- Placement Training
- FDPs / Workshops / Conferences
- IQAC Meetings
- Institution Functions –Freshers' Day, Women's Day, Teachers' Day, Sports day, Annual day, Culturals, Placement Day and Graduation Day.

The prepared academic extract for every year is approved by the Principal and sent to Managing Director for approval. After receiving the approval from Managing Director, permission is granted for the committees concerned for the smooth planning of the scheduled activities.

Every year, mostly all the events are conducted successfully as per the schedule. This academic extract helps to identify resource persons and Chief Guests for different events.

File Description	Document
Any additional information	View Document
Link for 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:

Yes. Available.

Each and every department devise their own plan to improve the quality of programs and the Institution. Once the plans are approved by the head of the institution, every department works on it's strategic plan to achieve the goal.

The Institution believes in development of excellence in all spheres of ongoing process. This is made feasible with the help of perspective/strategic plans that chalk out the necessary action to be taken to grow and develop.

The Institution provides conducive atmosphere for the students to excel in their studies and come out successfully.

The Institution has plans for the development of Strategic/perspective plan for the period from 2018-2023.

- To get NAAC accreditation
- To become an Autonomous Institution
- To Improve the Employable skills of the students along with encouraging the Co-curricular / extracurricular activities.
- To motivate faculty members to upgrade the Teaching – Learning process.
- To get funds from various funding agencies like ICMR, DRDO, DST, CSIR and AICTE to organise Conferences/Seminars/Workshops/FDP/ MODROBS etc.
- To get research centre recognition for Department of Computer Science Engineering.
- To encourage the faculty members to publish papers in reputed International/National Journals with good impact factor.
- To motivate all the Faculty members to register Ph.D.
- To get National Board of Accreditation for the eligible departments.
- To produce maximum number of university rank holders in each programme.
- To develop more number of smart class rooms and Video Theatres.
- To intensify the activities of Industry Institute Interaction cell for undertaking more industry oriented projects.
- To offer more Value added certification courses in addition to the existing courses and provide coaching for competitive exams.
- To offer more consultancy & Testing services.
- To setup industry powered /sponsored laboratories.

- To setup Technology Business Incubation centre.

One activity successfully Implemented based on the strategic plan:

Mahendra Training Centre for Competitive Exams (MTrACE), Mahendra Group of Institutions and SAI IAS Academy jointly conduct the coaching classes for competitive exams like IAS, IPS, IES, UPSC, SSC, IBPS and TNPSC – GROUP I & II Services. Inauguration of the above programme was held on 16.07.2018 at 10.00am in Mahatma Gandhi Auditorium.

Chief Guest : Shri. M. ABUL HASSAN, IAS (R)

Shri. S.S. JAWAHAR, IAS (R)

Venue : Mahatma Gandhi Auditorium

Date of Event : 16.07.2018

The main objective of the MTrACE:

- MTrACE was established with a view to establish a bench-mark institution to achieve excellence in the coaching for competitive exams.
- Providing coaching to IES, UPSC, SSC, IBPS and TNPSC – GROUP I & II Services etc.,
- It is known for the most aspirants in campus as a specialized institution in providing coaching for Competitive Exams.
- Faculty of MTrACE comprises of experienced educators, competent administrators, dedicated researchers and frequent visits of IAS officers in service.

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

Mahendra Institute of Technology is functioning with a governing body and an active administrative structure.

GOVERNING BODY

Mahendra Institute of Technology was established in the year 2007 by **Thirumigu M. G. Bharath Kumar**, a renowned educationist with an objective of imparting high standard of education to rural children. The institution is located at Mahendrapuri, Mallasamudram, Salem to Tiruchengode Highway, Namakkal - 637 503. The Chairman of the institution is ably supported by the Governing Body in introducing matters of Policy, Planning and Development of the Institution.

Functions of the Governing Body:

Subject to the existing provisions in the bye-laws of the Institution and rules laid down by the State Government / Parent University, the governing body undertakes the following activities:

1. Prescribe guidelines for student's admission in line with the reservation policy of the state government/national policy.
2. Introduction of new programs.
3. Increase / decrease in intake of the existing programs.
4. Discussion on students' academic performance and improvement.
5. Strategy for the Students' placements.
6. Use of modern tools of educational technology to achieve higher standards and greater creativity and promote healthy practices such as community service, extension activities and to implement projects for the benefit of the society at large.
7. Institution has complete administrative autonomy and has the freedom of appointing the administrative staff and teaching faculty.
8. Empowering the students with awards, stipends, scholarships, medals, prizes and so on.
9. Perform such other functions and institute committees, as may be necessary and deemed fit for the proper development, so as to fulfil the vision and mission.

HUMAN RESOURCE PLANNING

- The Principal assess in the month of April every year, the staff requirement for the subsequent academic year.
- He obtains the staff requirement lists from all the Heads of department and arrives at the number of faculty members, Lab assistants and administrative staff required with the following guidelines in mind.
- He considers appointing a Professor to be the Head of every discipline, besides the number of Associate Professors and Assistant Professors required in accordance with the teacher student ratio prescribed.
- The teacher student ratio shall be 1:20 and for this purpose the Professor shall also be included in counting the number of teachers.
- He appoints a selection committee for recruitment in each discipline, composed of the Principal, HOD, and the Department's Advisors/Experts from the neighbouring institutions.

The functions of various bodies, Service rules procedures, recruitment and promotional policies as well as grievance redressal mechanism are given as additional information.

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
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:

Institution established various Committees/bodies/Cells and their functions are properly defined, considering the overall development of the institution. For effective implementation, the institution has following committees are in place:

- Governing Body
- Anti Ragging Committee
- Academic committee
- Women Empowerment cell

- Grievance Redressal Committee
- Entrepreneurship development cell
- Internal Quality Assurance Cell
- Placement and Training cell
- Library committee
- Cultural committee

MINUTES OF MEETING OF THE GOVERNING BODY HELD ON 18.06.2017

S.NO	ITEM	DECISION OF GOVERNING BODY	ACTION TAKEN
1	Academic Calendar prepared and placed for approval	The academic calendar was approved by the Governing body	The college follows the prepared Academic approved by the Governing body
2	Proposed course structure for UG programmes based on outcome based teaching learning process	The proposed course structure for UG programmes have been reviewed and approved by the Governing body	The teaching methods internal assessment pattern have been reframed according to the approved course structure
3	Request for a budget of Rs. 7.5 Lakhs for conducting Academic events	The Governing body has approved the budget of Rs. 7.5 Lakhs for conducting FDPs	The Institution has started to conduct FDPs with the approved budget
4	Proposal of academic events(workshops, seminars, guest lectures, conferences, students symposia) department wise	Upon review, Governing body approved the proposed Academic events department wise.	The academic events conducted strictly on the basis of approval
5.	Appointment with Doctoral degree made in various departments of our college. And assuring quality education through external certification such as ISO/NAAC/NBA.	The Governing body approved the appointment with Doctoral degree made in various departments of our college.	Some more appointments with Doctoral degree have been made in various departments of the college
6.	Review of performance-Appraisal summary report towards planning of any Incentives/Rewards/Increments	The Performance appraisal summary report is reviewed and approved by the Governing body	Based on the performance appraisal summary report staff members are offered Incentives/Increments
7.	Action plans for improvement after Result analysis	The result analysis was reviewed and staff members with weak performance are to be counseled by the HoD and then by the Principal for the improvement.	The staff members with weak performance are counseled by the HoD and then by the Principal for the improvement.

			Principal for improvement
8.	Applying for any Additional Intake/reduction Programmes.	If any proposal submitted by the Principal may be reviewed and decision will be taken as and when it is necessary.	The proposal for cl MBA, MCA and Programmes during 2 submitted by the Pri Governing body.
9.	New Events, Value added/Life skills certificates courses plan	Approval was accorded to start value added and Life skills certificate courses.	The approved value a Life skills certificate have been started.
10.	Library-books/Journals purchase regarding	Approved to enhance the Library facilities such as purchase of books, etc as per the requirement of the new syllabus of the Anna University.	The books and Journ purchased as p requirement of the I and Anna University.

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:

Welfare Schemes for Teaching Staff

- The Institution ensures good quality of teaching by means of conducting quality improvement programs, workshops, faculty training programmes & facilitating teaching learning opportunities for staff.
- Free Medical emergency transportation
- Concessional transport facilities
- Waiver of fees for teachers' children in Mahendra Schools.
- Medical leave and Maternity leave.

- Supporting for education of the children of the teachers in the group institutions.
- Sanction of one week leave for marriage.
- Sponsorship for attending conference, workshops and FDPs.
- Incentive for publication of papers / research articles.
- Reward for producing University Ranks.
- Cash awards for academic excellence / 100% pass.
- Subsidised canteen fares for teachers.
- Group Insurance.
- Motivation for organizing guest lectures, attending orientation, refresher programmes & short term courses.
- Causal leave/ earned leave / Compensatory leave to all eligible staff.
- Winter and summer vacation leave to all teaching staff.
- Faculty members opting to stay in hostel are given accommodation with fee concession.
- Motivation to register for Ph.D & for taking necessary steps to apply research proposals, getting financial grants, funds & patent etc.
- Encouragement to enrol as members of various professional bodies and societies with financial support.
- Research facilities to the faculty to present their research work at conferences (national & international) and share their technical expertise as resource persons.
- All facilities such as use of laboratories, use of computers, e-library is provided to faculty to pursue research.
- In-House faculty development programmes are conducted to enhance professional teaching & communication skills.
- All adequate facilities are provided to the faculty to make best use of all the resources like internet, e-learning resources, library facilities, national & international journals.
- A central research facility is also available for facilitating experimentation & high end computing.

Welfare Schemes for Non-Teaching Staff

- Employees Provident Fund (EPF) scheme right from the year of joining.
- Free Medical emergency transportation
- Concessional transport facilities.
- Waiver of fees for teachers' children in Mahendra Matric Higher Secondary School.
- Medical leave and Maternity leave.
- Sanction of one week leave for marriage.
- Special Study Leave (SSL) to pursue higher education.
- Subsidised canteen fares for non teaching staff.
- Group Insurance.
- Winter and summer vacation leave.

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:** 16.17

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

2017-18	2016-17	2015-16	2014-15	2013-14
95	29	24	11	16

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	View Document
Any additional information	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:** 20.2

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

2017-18	2016-17	2015-16	2014-15	2013-14
28	22	22	15	14

File Description	Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

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

years

Response: 67.99

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

2017-18	2016-17	2015-16	2014-15	2013-14
239	124	90	146	91

File Description	Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

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

Response:

The institution has the practice of evaluating the performance of the faculty members by Faculty Performance Appraisal System (FPAS).

Faculty Performance Appraisal System (FPAS) for Teaching Staff

The performance appraisal system has the following components:

- Teaching performance
- Pass percentage produced in the University Examinations
- Feedback from students and HoD / Principal
- Research Publications in journals
- Conference Presentations / Publications
- Workshop/Seminar Participation in Mahendra Group Institutions
- Workshop/Seminar Participation in other Institutions
- Workshop/Seminar organized
- Guest Lecture delivered in the Institution (Other Dept.)
- Guest Lecture delivered in Mahendra Group Institutions
- Guest Lecture delivered in other Institutions
- Interaction with professors in NIT/IIT/Anna University/Reputed Institution
- Participation in FDPs /SDP organized in other Institutions
- Motivation given to Students for Academic / Co-Curricular / Extra Curricular Activities
- Preparation of Learning materials on important topics
- Proposals submitted for grants from funding agencies

- Visits to Industries for collaboration
- Arranging Industrial Visits / internships to students

A sample of the appraisal form is given in the additional information.

Major decisions based on performance appraisal reports by the management

- The faculty appraisal forms are reviewed by the respective Heads of the Departments and the Principal.
- The Principal conveys the performance of the faculty to the management based on the findings, measures are taken.
- The faculty members are given promotion regularly based on their marks secured in their appraisal form.
- If the performance of the faculty is below par, they are counselled by the HoD/the Principal to show better performance in the subsequent semester.

Performance appraisal system for non-teaching staff

- Experience and Work Discipline
- Feedback from HOD and Principal
- Participation in Community services
- Active participation in team work
- Skill up gradation through Orientation Programs, Refresher Course, Short Term Courses and
- Faculty Development Programs
- Higher Studies
- Outstanding Achievements in their studies

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:

Yes, the Institution has a system for Internal and external audit.

The Governing Body of the Institution consisting of university and AICTE nominees, management representatives, industry and academic members to preview financial year budget proposals including Income & Expenditure (both recurring and non-recurring) details. The proposals are made on different heads such as laboratory equipment, library expenses, salary payments, building infrastructure and other maintenance expenses.

Internal Audit and External Audit

An effective mechanism is followed by the institution for auditing all the accounts. The institution has appointed a full time Chartered Accountant as Finance Officer who verifies and checks bills and vouchers, passes the bills, manages the fund after the discussion with the management. The institution has both internal and external audit mechanisms.

External auditor is appointed by the parent trustee, who executes the statutory audit. The last audit was prepared in the month of May 2018. No major irregularities are found in the audit. External Audit Committee verifies the income and expenditure details of the Institution as per the balance sheet. Then all the statements are forwarded to External Auditor.

There is a statutory financial audit by the External Audit Agency, who is a qualified Chartered Accountant, recognized by ICAI. External Statutory Audit is conducted without the institution's interference.

Procedure for Preparation of Budget:

- Institute makes budget periodically, all department's HOD make their budget plan by following the guidelines provided by the principal.
- HODs create budget plan on the basis of the requirements for departmental labs, need of equipments, and required funds for various activities like guest lecture, workshops, seminars, industrial visit and for reference books.
- Principal collects the data and have a discussion with the Executive Director in the presence of HODs, and then it is forwarded to the Management for approval.
- At the time of overall organizational budget, the Management concentrates on Salaries & allowance, and administrative expenses like stationeries, software, building maintenance, electricity, water, telephones, mails, Institution transport and fuel expenses.
- Budget is planned under the careful supervision and considerations of need of all the departments and finalized by the finance committee.
- Priorities are made on basis of the needs to fulfil various committees' financial requirements to upgrade the development of the organization.

The figures of the audited statements and budgets are compared during the governing body meetings necessary analysis is done. If the budget exceeds the expectations then explanation is called from the Principal. If the explanation is satisfactory then the audit is accepted.

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) (INR in Lakhs)

Response: 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

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

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

Response:

Fund Mobilization:

Admission fee

Admissions of students are made through Anna University Counseling (TNEA) under Government Quota (65%) and Management seats are admitted through Consortium of Self Financing Professional Colleges in Tamil Nadu (35%) with the collection of fees as prescribed by the Tamil Nadu Government higher education regulations.

Grants from Government Organizations and Non Government Organizations

Grants through proposals are sought from various Government Organizations such as AICTE, ISTE, UGC, DST, IMCR, IET, etc. and other Non Government Organizations such as industries, IT sector etc., and the amount received are judiciously utilized to meet the recurring and non recurring cost of institutions.

Trust Contributions

Mahendra Institute of Technology is functioning under the Mahendra Educational Trust which contribute fund to develop construction of buildings, Procurement of equipments, furniture's and consumables such as books, chemicals and glassware's. Scholarship is also provided for the meritorious, poor and needy students by the trust.

Availing Loan

Term and hire purchase loans from banks with reduced rate of interest are availed in order to maintain the Debt Equity Ratios, DSCR and liquidity.

Optimal Utilization

Construction of Buildings and Infrastructure facilities

Grants received from Government bodies like AICTE, DST and UGC are effectively utilized to conduct seminars, workshops, FDP, etc., In addition, institution management contributes budget to upgrade

construction works and loans are also judicially availed at reduced rate.

The Institution purchases new transport vehicles (buses/vans) according to student strength, through hire purchase loans from banks which are repaid with reduced rates of interest from the reasonable transport charges collected from the students.

Recurring Expenses

Fees collected from students are utilized for the salary to Teaching faculty and non teaching staff, academic activities and loan due payment.

Research and project activities

In order to cover the research excellence among academicians, many research projects are encouraged for students and faculty to enhance the recent socio-economic strategies. Similarly our institution shives hard to receive grants from Government Organizations and Non Government Organizations for Research and Development through proposals.

Co-curricular activities:

The institution conducts the above said events regularly for students and faculty development activities matching with the latest technology, innovations, research, changes and needs for the society. These events are conducted from the funds received from the Professional bodies & funding agencies and with support of management contributions.

Green Atmosphere and Waste management

Enough care is taken to maintain cleanliness in the campus, which coexists with godliness and fund is judiciously utilized. The institution utilizes the policy of bio waste management effectively as it provides revenue.

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:

To enhance the quality improvements in the academic process and also as a pre-accreditation exercise Internal Quality Assurance Cell (IQAC) was formed in our institution on 12.06.2017. The IQAC cell is coordinated by a team of faculty members from all the departments.

The objective of the cell is to develop a system for conscious, consistent and catalytic improvement in the overall performance of the institution at all levels with the involvement of all stakeholders towards quality enhancement through internalization of quality culture and institutionalization of best practices.

IQAC MEMBERS

Chair Person	Dr. T. Elango Principal
Representing Management	Dr. R. Samson Ravindran Executive Director, Mahendra Educational Institutions
Academic Expert	Dr. G. Palanichetty Academic Co-Ordinator Dr. Amos Robert Jayachandran Professor Department of Mechanical Engineering
Members from Administration	COE Mr. B. Ramesh Finance Officer Mr. S. Bharathi Administrative Officer
Members of Faculty	Dr. M. Prabhu Prof & Head-Department of Biomedical Engineering Dr. P. Dhanapal Prof & Head-Department of Mechanical Engineering Dr. J. Stanly Jaya Prakash Prof & Head-Department of CSE Prof. T. Somasundaram

	Prof & Head-Department of EEE Dr. S. Prabu	
	Prof & Head-Department of ECE Dr. N. R. Aravamudhan	
	Prof & Head-Department of MBA Dr. K. Rajkumar	
	Prof & Head-Department of Automobile Engineering Prof. E. Balaji	
Director IQAC	Prof & Head-Department of Civil Engineering Dr. C. T. Sivakumar	
	Executive Officer	
IQAC Coordinator	Dr. M. Prabhu	
	Prof & Head-Department of Biomedical Engineering	
Nominee from Local Society	Dr.S.Umashankar Mallasamudaram	
Nominee from Industry	Dr.A.Narendra Kumar Manager, Hexavarsity Mr.P.Thirunavukarasu Sr.Manager , WIPRO Technologies, Chennai	
Alumni Member	Mr. R. Sachidhanantham , TCS, Chennai	
Student Member	Mr. R. Kishore kumar , Final year ECE	

Strategies

IQAC shall evolve mechanisms and procedures for

- Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks
- The relevance and quality of academic and research programmes
- Equitable access to and affordability of academic programmes for various sections of society
- Optimization and integration of modern methods of teaching and learning
- The credibility of evaluation procedures
- Ensuring the adequacy, maintenance and functioning of the support structure and services
- Research sharing and networking with other institutions in India and abroad.

S. No.	Assessment Criteria	Frequency	Conduct Mechanism & Action Plan	Implement Effectiveness
1.	Course file and lab manual	Once in a Semester	Verification of Course files as per	Verific

	monitoring		Format	IQAC
			Verification of lab manuals with additional experiments.(open ended, advanced etc)	
			Submission of report to the IQAC in the prescribed format.	
2	Project monitoring	As per Academic Schedule	Verification of All Project Titles and Batch of Students. Verification of all External Projects and their company, progress report Monitoring Student- Guide Contact hours. Submission of report to the Academic Coordinator in the prescribed format. 5. Encourage and help students to convert their project into quality technical articles Compile and catalogue student's research articles. Submission of report to the IQAC in the prescribed format.	Verific IQAC

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:

The main objective of IQAC is to ensure quality assurance of academics and administrative works. It functions for the growth of faculty and students and provides guidelines periodically.

Following innovative processes adopted by the institution in Teaching and Learning:

1. Promoting the usage of ICT.

2. Implementing Outcome based education
3. Mapping course outcomes / instructional objectives and program outcomes.
4. Guest lectures on advanced topics by Eminent Academicians and Industry experts.
5. Conducting National seminars and workshops for students
6. Practice of emerging technologies through Mini projects and Term Papers.

Besides regular classroom learning, added innovative teaching methods like

- Field trips
- Industrial visits
- Internships and Hospital Trainings are undertaken.

IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

- IQAC organizes regular academic audits to ensure effective implementation of teaching learning process and maintenance of course files.
- Monitoring of course files, lecture Schedules, course plans by random sampling.
- Verification of Internal test analysis, question papers.
- Arrangement of special classes for weak students during evening hours.
- Identifying the new processes/delivery method and recommending the same for improving the quality.
- Analysing the deviations from the benchmarks and reporting.
- Action Taken on Feedback from the stakeholders (students, Teachers, alumni, Employers and parents).

The sample course file and lesson plan are given as in additional Information

TWO EXAMPLES:

Students assessment Record monitoring

- Verification of Faculty Log book for the following:
 - Attendance Entry,
 - Class and Series Test Marks,
 - Syllabus Coverage,
 - Identification of slow learners and above average performers.
 - HOD Authentication.
- Verification of Assessment & Tutorial Sheets.
- Checking Course plan and delivery

Exams monitoring

- Assessment of Question Paper Format and Syllabus Coverage for Internal Exams and Model Exams.

- Verification of Invigilator Availability in the Examination Hall
- Collecting Absenteeism Report and record actions taken
- Monitoring the Schedule and Timings.
- Submission of report to the Academic Coordinator in the prescribed format.
- Documenting invigilators list, schedule and timetable
- Consolidated marks statements
- List of failures along with the actions taken.

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

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

Response: 1.4

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

2017-18	2016-17	2015-16	2014-15	2013-14
7	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

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
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:

Quality enhancement initiatives in administrative domain:

- **12(B) Status:** The Institution obtained the 12(B) status on 13.07.2018 to receive central assistance from UGC.
- **2 (f) Status:** The Institution obtained the 2(f) status on 05.02.2016 from UGC.
- **Permanent Affiliation:** The departments of EEE, ECE and CSE have obtained the Permanent Affiliation from the Anna University, Chennai.
- **Research Centres:** Department of Electronics and Communication Engineering and Mechanical Engineering are recognized as approved Research Centres by Anna University, Chennai from the year 2016-2017.
- **Wi-Fi:** Campus wide LAN Internet capacity increased to 64 Mbps to enable access to various online resources.

Quality enhancement initiatives in academic domain:

- Deputing Faculty members as Mentors for students counselling.
- Implementation of Outcome based approach.
- Implementation of On-line feedback on each course.
- Preparation and release of guidelines regarding all Academic activities before the commencement of Semester.
- Meeting of faculty coordinators for various academic tasks to discuss the plan of action for their respective responsibilities.
- Activity calendar of the Institute based on the individual plans submitted by Departments/various forums.
- Progressively increasing number of proposals submitted to various funding agencies.
- Conduct of soft skills development and training programmes through various guest lectures and workshops. As a result, students have become effective communicators, self-confident and self-reliant as has been reflected in enhanced campus placements since 2012-2013.

- The Institution has improved the participation of students in co-curricular and Extra curricular activities.
- More number of students placed in various companies.
- Collaboration with reputed hospitals and industries for PG / Ph.D projects for clinical investigation & facility sharing.
- Involvement of more faculty in research activities.
- In achieving excellence in teaching learning process, faculty self appraisal target has been introduced.
- Promoting Research Culture. Totally 22 faculty members registered Ph.D in Anna University, Chennai.
- Department of Electrical and Electronics Engineering got a fund of Rs.50,000/- from Science and Engineering Research Board, Department of Science and Technology to organize National Seminar on “INDUSTRY 4.0 using IIOT” on 10 & 11th July 2018.
- Department of Biomedical Engineering got a fund of Rs.30,000/- from Institution of Engineers (India) to organize National Conference on “Advances in Materials Sciences: Biomaterials” on 27 & 28th February 2018.
- Department of Electronics and communication Engineering got a fund of Rs.10,000/- from Institution of Engineers (India) to organize seminar on “Wearable Technology” on 26th September 2017.
- Received Rs.20,000/- from National Science & Technology Entrepreneurship Development Board (NSTEDB), DST, to organize Entrepreneurship Awareness Camp for the year 2017-18.
- Alumni Association of Mahendra Institute of technology was registered on 20.08.18 under Tamil Nadu Societies Registration Act 1975.
- Eminent Professors, academicians and renowned industry personnel visit the institution to enlighten the faculty and students.
- The number of publications in peer reviewed journals with good Impact Factor is increased.

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: 25

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

2017-18	2016-17	2015-16	2014-15	2013-14
08	07	04	03	03

File Description

Document

Report of the event

[View Document](#)

List of gender equity promotion programs organized by the institution

[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

- In our college the Security System consists of more than 20 personnel to safe guard the campus and hostels inmates.
- Safety and security of the students are ensured by these personnel.
- Special attention is given to the girl students those who are staying in the Hostel.
- During night time entire campus is covered with sufficient lighting arrangements.
- Campus duties are allotted for HoDs and Senior Faculties to monitor the campus.
- Round the clock in all the days medical support for all hostel inmates is given by a physician available in our campus.
- Separate Transport facilities is provided in case, if emergency conditions arises.
- CCTV cameras are installed at various points for monitoring purposes.
- Electricity Power backup is available in the campus.
- Fire extinguishers are available in our campus to extinguish or control fires under emergency conditions.

- Grievance Redressal Committee and Women's Empowerment cell is available and provides a convenient platform for our students to represent any issues that may arise.

2. Counselling

- Every faculty is allotted 15-20 students for effective mentoring system.
- The mentoring system is established to improve the rapport between the Faculty and Students. The main objective is to keep track of the progress of the students and counsel them accordingly for academic and personal developments.
- Ample opportunities are provided for both boy and girl students for exhibiting their inbuilt talents.
- Parents are timely informed whenever the need arises such as lack of attendance, poor academic performance and psycho-social problems.
- The college endeavours to look after the total personality development of students through classes, co-curricular and extra - curricular activities and counselling.
- The Faculty offer guidance to the Students Carrier Development Programme in addition to classroom teaching. The Training and Placement cell and Entrepreneurship development are also part of this Endeavour.
- Annually we are conducting a massive celebration for Women's day, in which we invite Inspiring Women Personalities to share their experience and to offer advices to our students.
- Our counseling system provides support to the girl students and envisage them to realise and resolve their problems.
- Care is taken to empower the students in academics by imparting educational awareness training programmes
- To strengthen them towards leadership and self- motivation and to make them confident and competent individuals in all walks of their career.

3.Common Rooms

- Waiting halls for women are provided inside the college campus.
- For convenience of students rest rooms are available in every floor.
- Extensive facilities for indoor and outdoor games with modern indoor stadium, spacious volleyball court, cricket ground and sports kits are available inside the campus.
- Separate Multi gym for boys and girls are provided.
- Well-furnished separate hostels for Boys and Girls are available.
- Hygienically prepared vegetarian and non-vegetarian food is offered in the Canteen on all working days. The Canteen is run on self-help basis and separate dining facility is available for Boys and Girls.
- The college has a store that functions on all working days to enable the students to procure all stationery items, for their needs.

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: 21.75

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

Response: 63510

7.1.3.2 Total annual power requirement (in KWH)

Response: 292008

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

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 40.1

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

Response: 20179.75

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 50326.2

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

7.1.5 Waste Management steps including:

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

Response:

Solid waste management

Solid waste collected from canteen, kitchen and vegetable wastes are segregated in a dust bin. The collected wastes are transported and emptied in a pit and covered by soil and left as such for three months. After three months this solid waste is used as a manure to strengthen the greeneries grown in our premises. Arrangements for collecting food waste from canteen.

Liquid waste management

To protect the environment from the hazardous waste water, the sewage treatment system is in practice. The liquid waste is collected safely and conveyed to treatment plant safely to ensure that the environment is free from health related hazards. The treatment plant has a treatment capacity of about 1 lakh litre/day. The treatment plant from Wock-Oliver India Ltd... is installed. The waste water from our hostels, canteen and various place of college is collected and treated in the treatment plant. The treated waste water is naturally and safely discharged to irrigate the garden and lawn.

E-waste management

- In our Institution almost all computers, printers and electronic devices are in working conditions and no scraps are generated.
- The toners in the printers are refilled rather than throwing it out after it gets over.
- Therefore no e-wastes are generated usually. If they are generated in future, it is planned to sell them to a e-waste recycle company

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

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rain water harvesting structures and utilization in the campus

Water is an integral part of land/soil productivity. Its misuse can cause both degradation and erosion of soils. Management of water resource in our institution is considered to necessary for well being of students as well as to maintain the greeneries in and around the campus.

There is a gap between the seasonal availability of water and its equitable supply throughout the year. Accordingly the storage of water and passage through soils is very important. Water harvesting technologies of our institution have established the economic and practical feasibility for inclusion in integrated watershed management plans in our campus. Our campus has revealed that these are desirable for protection of land, panting of trees, restoration of degraded land, and potential of reuse of water. This would also help in increased production based productivity for generation of employment of opportunities.

Namakkal region comes under drought prone zones. The rainfall characteristics in Namakkal region are uneven and not uniform. 55–65 % of total area of Namakkal district is drought prone.

Rain water is an important source of ground water. To enhance the quantity of ground water we have rain water harvesting system in practice.

The modus operandi of rain water harvesting structure is simple Rain water is collected and stored in an artificial lake abutting college compound wall. The artificial lake is 10 m wide and 4 m in depth. The lake covers 400 m length of the ground. For safety concern, embankment is formed about 2.5 m width.

Rain water from building roof is fully collected in pipe and routed to the artificial lake. Excess runoff water from ground and garden is also discharged to the artificial pond. The water can be collected up to a volume of 16,000 m³. This helps to recharge the ground water table. By implementing this rain water harvesting system, the scarcity of water is mitigated to a greater extend in hot summer season.

This has increased the water recharge of four wells in the campus and sufficient water is made available during the summer. Our institution is fully covered with green trees and plantations. The institution adopts sprinkler procedure in large lawns and water is very judiciously used for plantation purposes. Water is partially used for gardening and the remaining water is used for ground water level improvement and for improving the water level in the wells.

Benefits to our institution

1. Rainwater Harvesting helps in recharging the soil.
2. Rainwater Harvesting enhances the groundwater quality by dilution.
3. Rainwater Harvesting increases the moisture content of the soil.
4. Rainwater Harvesting minimizes the run off water and also reduces the soil erosion.

Methods of artificial recharge of water in our institution:

1. Water spreading
2. Recharge through pits, trenches, wells, shafts
3. Rooftop collection of rainwater
4. Roadtop collection of rainwater
5. Induced recharge from surface water bodies.

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

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:

Students, Staff using Bicycles and Public Transport

Cycling is an ideal way to travel around a college town or campus; however, students wish to take impractical journey by bicycle. Consequently it is essential to improve links between bicycles and public transportation.

The institution is located in a outlying rural area. The availability of this resource guarantees that all students have access to information that will help to improve their ability to travel safely and efficiently around campus.

It encourages Staff members and Students to use college bus and bicycle to some amount of area without any difficulty.

We are committed to the cause of creating a pollution free environment about the Air pollution to increase the use of public transport.

The Institution provides transport facilities for the students as well as faculty members.

College buses are available in almost all local surroundings covering 70 km in and around the Institution.

Majority of the students are utilize college bus and hence usage of individual bike and car transport is avoided.

Pedestrian friendly roads

For the wellbeing of students, paved road along with raised footpath is provided in the entire campus. The foot path is laid apart from the road to ensure safety.

Our campus should balance open space with building density to avoid a sprawling scale. subsequently students and employees have maintains strict time for routines (e.g., as little as 10 minutes between classes), expanding the campus too large will discourage walking and force students to drive around campus.

Plastic free campus

Usage of plastic and polythene bag inside the campus is strictly prohibited to a maximum extent.

The hazardous of using plastic is educated to the students.

Paperless office

To protect the falling of the trees, usage of paper is limited by using E-mails, SMS and Whatsapp.

The campus is looking pleasant with full of trees, plants and lawns are grown throughout the campus. Water and manure are provided in regular intervals.

Green landscaping with trees and plants

We plant trees primarily for their beauty and to provide shade but they do create many other benefits. Trees can soothe and relax us and help us connect to nature and our surroundings.

The color green - is a calming, cool color that helps your eyes quickly recover from strain. By planting and caring for trees, you help improve your surrounding, reduce pollution, lower energy costs, improve the appearance of your community and increase the value of your property.

- Trees can reduce air temperature by blocking sunlight. Further cooling occurs when water evaporates from the leaf surface. The conversion of water to air vapor -a chemical process -removes heat energy from the air.
- Trees can shade hard surface areas such as driveways, patios, building and sidewalks thus minimizing landscape heat load - a build up of heat during the day that is radiated at night resulting in warmer temperatures. Ideally, 50 percent of the total paved surface should be shaded.

File Description	Document
Any additional information	View Document
Link for 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: 0.78

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)

2017-18	2016-17	2015-16	2014-15	2013-14
5.92	5.3	4.23	3.8	3.38

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	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
Any additional information	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: 24

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

2017-18	2016-17	2015-16	2014-15	2013-14
09	04	03	05	03

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	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: 20

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

2017-18	2016-17	2015-16	2014-15	2013-14
07	05	03	03	02

File Description	Document
Report of the event	View Document
Any additional information	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
Any additional information	View 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
Any additional information	View 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
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics	
Response: Yes	
File Description	Document
Any additional information	View 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
Any additional information	View 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	
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Response: 20

7.1.17.1 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 year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
06	05	03	03	03

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

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

Response:

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

National festivals and birth / death anniversaries are conducted management with enthusiasm. Our students are on a make towards clean and better India. They are join together with improve society of nation and people cultures like religion problem. Total Indian great personalities life history's showing the young minds through the programmers conducted on these days. Ever since our school days, we are told that on great Indian Personalities then national festivals, we should remember all those who sacrificed their lives or a part of their lives to freedom our country from the white heart of the British. But what I strongly feel is, we should also remember them on the days they were born and the day they left after serving the country. Sadly, many of us remember birth dates of film stars and cricketers but go blank when asked about the birth and death anniversaries of India's freedom fighters and revolutionaries. Remembering them is the least we can do for their super-great service to the nation. The main reason we celebrate festivals is because the majority of them are more or less religiously centered and thus we come to honor our religions. But festivals also give a sense of enjoyment, relaxation and offer the time needed to bond with family members whom we never really see. All over the world people enjoy taking part in celebrations. Celebrations enable student to have a good time and demonstrate what is important to them and their culture. This Celebrations will help student to have a good understanding about the culture, characteristics and purpose of celebration so our management is concerned with great personalities anniversaries celebrated in front of student and teachers to make service mind. So here is the list of the birth and death/festivals anniversaries of these great souls.

1. Institute Celebrates Science day celebration 28th FEB 2017.
2. Institute Celebrates Diwali 17th OCT 2017.

3. Institute Celebrates Mahavir jayanti 08th APR 2017.
4. Institute Celebrates National youth day 12th JAN 2017.
5. Institute Celebrates Mgandhi birth anniversary 02nd OCT 2016.
6. Institute Celebrates Christmas day 25th DEC 2017.
7. Institute Celebrates Childrens day 14th NOV 2017.
8. Institute Celebrates National technology day 11th MAR 2017
9. Institute Celebrates National education day 11th NOV 2017.

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:

Transparency in financial functions:

Absolute transparency in the financial, academic, administrative and auxiliary functions is maintained by the institution. Budget allocation of every year is done by the department heads and after the approval of the Principal, the fund is distributed to all the departments. The accounts section of the college maintain all the account statements and also the related balance sheets. Students pay their fees through both the electronic and manual fee payment modes. Yearly audit is performed by eminent auditors at the stipulated period of time. The fee collected from the student is entered in the palpap. In short, all the fund transaction are entered in the palpap.

The college conducts external and internal academic audits to maintain transparency in academic transactions. The college follows the centralized admission policy laid out by the Anna University. IQAC is serving as a bridge between the top Management, Staff and co-ordinates of all the academic and administrative committees comprised in the institute. The coordinators are guided by the Principal in consultation with IQAC. The internal and external audit of the financial operations is done with the help of prominent chartered accountants.

All the academic and administrative matters are assisted by the teaching and the non-teaching staff under the able guidance of the Principal. Regular meetings are conducted by the Principal along with the HoDs in regard with college matters relating to finance, academics and developments. In these meetings future plans are formulated and progress is reviewed and evaluated. Number of committees are formed in order to help the further academic activities. Two representatives of the teaching faculty are on the Governing Council. The decisions taken in the corresponding meetings are circulated to all the faculties through electronic mails.

Appointments are done as per the requirements strategies and subjects are allocated to the staff members mostly according to their choice by the heads of the department at the beginning of each semester. Two internal assessment tests and one model examination are conducted to evaluate the students' learning status. The scripts are evaluated at the stipulated time and the marks are uploaded on the student

information system, i.e., in palpable. Students performance record sheets are sent to the parents after each test. At the end of each semester students appraise their teachers by giving the feedback for the purpose of developing the teaching skills of the teachers.

All the functions and co-curricular programmes are organized by various committee members including students and faculty members. Academic calendar is designed by the administrative committee with the help of all HODs and Principal.

The institution works for the welfare of the society by conducting numerous programmes undertaken by the different clubs which includes students and staff of the institution as the members.

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:

7.2.1.1 TITLE: MAHENDRA OUTREACH ENRICHMENT AND SOCIAL RESPONSIBILITIES

7.2.1.2 OBJECTIVES: The various activities assist students to develop their social responsibilities and to become good citizens for the welfare of the society.

7.2.1.3 THE CONTEXT: Mahendra Institute energetically participates 26 clubs includes International club, Scenario club, Inspiring club, Talent exhibiting club and traditional club which carry out several activities for the betterment of students as well as faculty members.

7.2.1.4 THE PRACTICE: The College provides seed balls for club members to intermingle with local peoples to expand the greenery in and around the locality. They create awareness among the people to grow trees and remove the unwanted Karuvelam (*Prosopis juliflora*) trees which is ecological threat.

SOFT SKILL TRAINING: Our Institution offers TESOL (Teaching English to Speakers of other Languages), BEC (Business English Certificate), GMAT (Graduate Management Admission Test), CAT (Common Admission Test), GRE (Graduate Record Examination), MAT (Management Aptitude Test), SAT (Scholastic Assessment Test), Training in variety of topics related to Personal Enhancement, Public speaking, Interpersonal skills, Soft skills, placement skills for the betterment of the students.

7.2.1.5 EVIDENCE OF SUCCESS: The students clearly understand the ground reality of the problems in the society. Entrepreneur and other professionals from MIT are the best living examples for the evidence of this success.

7.2.1.6 PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED: Club activities delayed due to deficient fund as well unsatisfactory support from the society, while Management provides all necessary

support to the club for its operational.

7.2.2.1 TITLE: MENTOR SYSTEM FOR THE STUDENTS:

Under graduate engineering programme students frequently require guidance and counselling from their faculties to refresh their intellect. Each faculty play the roll of mentor for a group of 10 to 20 students.

7.2.2.2 OBJECTIVES OF THE PRACTICE: Mentors for first year students are from the department of Science & humanities and II, III and IV year students have their mentors from the respective departments. Department faculty members take care of the students till their graduation from the college.

7.2.2.3 THE CONTEXT: mentors can call the Parents of poor attendee/performance students for corrective and preventive actions which are implemented for further improvement. Each mentor maintains the whole student database, which is examined by the HOD.

7.2.2.4 THE PRACTICE: The mentor will go through the following activities.

- A mentor shall always do more for the benefit of the students.
- Meet a group of students periodically.
- Constantly monitors, encourages and motivates the students in all academic activities.
- Advise the students regarding the choice of their electives, projects to be done, and training etc.
- Mentors always keep in touch with parents/guardians and responds to situations like academic irregularities, negative behavioral changes and interpersonal relations, detrimental activities of the students, if found anytime.
- Advise students for their career development/professional enhancement.
- Keep contact with the students even after their graduation.
- Intimate HoD and suggest for administrative action whenever required.
- Maintains detailed progressive record of the student.

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:

VISION

To become a premier institution by harnessing human potential in engineering, technology and research and develop competent engineers with a strong concern for ethical and social values.

Competency and skill development

We firmly believe that the best learning takes place through extensive interactions with the industry. We have signed MoUs (Memorandum of Understanding) with various organizations in the Engineering and Technology sectors through which summer internships and 6 months project internships opportunities are offered to the students.

In order that our students become competent engineers the training and placement cell of our institute plays a vital role by being a platform for Corporate and Young graduates to interact for mutual benefit. Services are provided throughout the year to prepare students and help those secure placements. The number of students placed through campus placement programmes is on the rise every year.

Center of Excellence for Industry Innovation & Practice (CEIIP) is the unique strength of our institute through which the students are given hands on training in the industries directly.

Objective:

To exploit the opportunity provided through the Indo – German bilateral partnership in the area of skill development by providing hands-on training in select areas of engineering to our students

Resource Person:

These Hands-on training was conducted by the Senior Expert Hans-Joachim Schrodt, a German who has more than 30 years of professional experience as a Teacher. Recently he helped an Indian company in setting-up a whole training institute including building, curricula development, equipment specifications, teacher training, testing, examinations, following the German Dual System.

Theory and Practice

Prof. Hans-Joachim Schrodt has interacted with our teachers about Germany's dual system of education and given lectures on the basics of the following focused areas of engineering such as Mechanics, Machining, Metrology, CNC and Robotics, Pneumatic/ Hydraulic Machineries, Automatics and Welding Equipments and took our students to the Industries at Coimbatore for practical training.

Outcomes:

- Hands-on training links theory and practice
- Hands-on training expose students to challenges and obstacles they might encounter on the job
- Hands-on training helps to retain concepts and ideas to take up interviews better
- In-plant training creates the opportunity for the student to explore their practical knowledge and skill.
- Students will approach any problem in industrial perspective once they are directly exposed to industrial training.
- It creates an opportunity for the students to become an entrepreneur.

Evidence of Success

Following the exposure given to our teachers and students by Prof. Hans-Joachim Schrodtt, we have approached Axis Global institute for industrial training (AGIIT) and Coimbatore industrial infrastructure association (COINDIA) for direct training at their industries. Two batches of our Mechanical Engineering students have been trained by these industries so far. The training helped few students from these batches to get their employments. We took an element of the German's dual system of education and are pleased to support our "Skill India" and "Make in India" initiatives.

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

5. CONCLUSION

Additional Information :

MIT Alumni are doing extremely well and carved out a niche for themselves occupying good positions in leading companies within and outside of India. MIT alumni cell is very much functional and the Alumnus interactions with the institution continue unabated. Alumnus also invited to our Institute to give a pep talk.

Our students have participated in Inter-collegiate contraption contest and won the top honors in the face of stiff completion in the contest held by the likes of VIT, SASTRA, IIT-Madras and Anna University, Chennai

In line with the vision and mission of the college to nurture competent professionals with a deep concern for serving the society, our students are religiously involved in community services through slew of clubs functioning in the college. Their contributions have come in for unqualified appreciation and praise by voluntary organizations.

Entertainment like music and dance provides them an avenue to let their hair down and outlet for relaxation induced by the curriculum. The college is acutely aware of this need and provides the opportunity to our students to showcase their talents in Dance and music in front of the teeming crowds.

Concluding Remarks :

Mahindra Institute of Technology is making rapid strides with the help of a very committed management, competent faculty members and staff and our mainstay- the students. It is our relentless and continuous endeavor to try and align the core objectives, values and practices towards building an Institution par excellence, creating pathways for our students to have a bright future and forging a positive harmonious and constructive ties with the key stake holders and realize the Vision and Mission in the foreseeable future.

Writing the SAR in line with the format laid down by NAAC has given us the rarefied opportunity to collect , sieve and compile huge amount of data and understand the various aspects and facets that goes in to imparting a Quality education to the engineering students. The report has been prepared to the best of our knowledge and understanding and we fervently hope that the report matches the expectations of NAAC committee visiting our Institution for accreditation purpose.

We will not allow our progress and achievements bogged down by a sense of complacency. It will only provide us more impetus and indefatigable energy to set new benchmark for the future and make our college *numero Uno* in Tamil Nadu.