



# Yearly Status Report - 2018-2019

Part A			
Data of the Institution	1		
1. Name of the Institution	MAHENDRA INSTITUTE OF TECHNOLOGY		
Name of the head of the Institution	T.ELANGO		
Designation	Principal		
Does the Institution function from own campus	Yes		
Phone no/Alternate Phone no.	04288-288527		
Mobile no.	9443457824		
Registered Email	principal@mahendratech.org		
Alternate Email	atelango@gmail.com		
Address	Mahendra Institute of Technology, Salem-Thiruchengode Highway, Mahendhirapuri, Mallasamudram, Namakkal DT, Tamilnadu, India. Pincode:		

	637503		
City/Town	NAMAKKAL		
State/UT	Tamil Nadu		
Pincode	637503		
2. Institutional Status			
Affiliated / Constituent	Affiliated		
Type of Institution	Co-education		
Location	Rural		
Financial Status	Self financed		
Name of the IQAC co- ordinator/Director	Dr. M. Prabhu		
Phone no/Alternate Phone no.	04288288527		
Mobile no.	9787206481		
Registered Email	hodbiomed@mahendratech.org		
Alternate Email	prabhubpt16@gmail.com		
3. Website Address			
Web-link of the AQAR: (Previous Academic Year)	http://mahendratech.org/ssr/naac_ssr_2018.pdf		
4. Whether Academic Calendar prepared	Yes		

during the year	
if yes, whether it is uploaded in the institutional website: Weblink:	http://mahendratech.org/academic/academic_calendar_2018_2019_even_sem.pdf

## 5. Accrediation Details

Cycle Grade	CGPA	Year of Accrediation	Validity		
			Period From	Period To	
1	A	3.04	2019	28-Mar-2019	27-Mar-2024

# 6. Date of **Establishment of IQAC**

12-Jun-2017

# 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture			
Item /Title of the quality initiative by IQAC		Number of participants/beneficiaries	
Motivational Programme on Success Mantra for Women	08- Feb- 2019	185	
One day Career Guidance program on Job opportunities and entrepreneurship development skill	22- Jan- 2019	115	
One day Seminar on Methodologies for generating revenue through research with patents & IPR	28- Jan- 2019	55	

Organized Skin Bank Awareness Programme and Dental Camp in association with Ganga Hospital Coimbatore and JKK Nataraja Hospital and Research Institute	24- Jul- 2018 1	165
One day Seminar on Intellectual Property Rights (IPR)	25- Jul- 2018 1	64
National Level Seminar on Industry 4.0 using IIOT Sponsored by SERB, DST, New Delhi	10- Jul- 2018 2	176
Orientation Programme on How to prepare course file using outcome Based Education (OBE)	20- Jun- 2018 1	95

# 8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Department of Electrical and Electronics Engineering	National Workshop	SERB, DST, New Delhi	2018 2	50000
Entrepreneurship Development Cell, Mahendra Institute of Technology	Entrepreneurship Awareness Camp (EAC)	Entrepreneurship Development Institute of India	2018	20000

## **View File**

# 9. Whether composition of IQAC as

Yes

per latest NAAC guidelines:	
Upload latest notification of formation of IQAC	View File
10. Number of IQAC meetings held during the year :	2
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

# 12. Significant contributions made by IQAC during the current year(maximum five bullets)

Encouraged, Motivated and organized Faculty Development programme on Intellectual Property Rights (IPR). Participated in National Institutional Ranking Framework (NIRF) for the academic year 20182019. Academic and Administrative Audit (AAA) has been done. Encouraged faculty and students to pursue ONLINE NPTEL courses. Established MHRD IIC Cell. Outcome Based Education (OBE) system was effectively implemented. 154 Faculty members were attended Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programme during the year. 220 students were place in 27 industries

# 13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes				
Submitting Proposals to funding agencies	Department of Electrical and Electronics Engineering received 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.				
Promoting Research Culture	Totally 22 faculty members registered Ph.D in Anna University, Chennai.				
Establish MHRD IIC Cell	Established and Four Star Rating awarded by MHRD for our IIC Cell.				
Enhancing the technical and professional development skills of faculty.	Faculty development programs were organised on the themes, Outcome based Education, Innovative teaching pedagogy in collaboration with ICT Academy. Most of the faculty attended the FDP organised by other organisations and our own institution.				
Applying for Autonomous status	Submitted Application to Anna University, Chennai and UGC New Delhi in the month of April 2019. Anna University inspection was completed on May 8, 2019 and forwarded the application to UGC. UGC Inspection was scheduled in the month of July 2019.				
Applying for NAAC Accreditation	Accredited with "A" grade with a CGPA of 3.04 on March 28, 2019.				
Books and Research Publications	Thirty five books and Thirty Research articles were published in various UGC refereed journals				
Extension and outreach programmes	24 Extension and Outreach programmes were organized during the year 2018-2019.				
Gender Equity Promotion Programme	Five Gender Equity Promotion Programmes were organized during the year 2018-2019.				

### View File

14. Whether AQAR was
placed before
statutory body?

Yes

Name of Statutory Body	Meeting Date
Governing Council	13-Jun-2019

# 15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning

Yes

Date of Visit

18-Mar-2019

# 16. Whether institutional data submitted to AISHE:

Yes

Year of Submission

2019

Date of Submission

12-Jan-2019

# 17. Does the Institution have Management Information System?

Yes

If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)

The Institution has a management information system for effective academic process and administration. Student Admission and Support: For admission and support, students register in the online registration portal and the details of certificates/any proof related to admissions used for admission process is powered by Mahendra Next Wealth IT India Pvt Ltd. Planning and Development: Inspro plus ERP PALPAP software tool serves as a centralized hub for maintaining all the data. Data related to

teaching and learning process such as Faculty Time Table, Master Time Table, Schedule of Examinations, Details of Campus Placement drives, details of internship, in plant training, paper presentation/publications, project work, prizes won, during the course of study are maintained. Accounts and Finance: Inspro plus ERP software tool developed by PALPAP is used for maintenance of accounts and finance in the institution. Students, with this module can pay tuition fees, Exam fees, Hostel fee and any other suitable payment. Administration: Inspro plus ERP software tool developed by PALPAP is used for maintaining Student Details, monitoring attendance, On Duty details, participation in extracurricular and co curricular activities and Implementations of scholarships and freeships and other academic and administrative activities. Examination: Inspro plus ERP software tool developed by PALPAP to maintain attendance, on duty, details of electives chosen by the students, Assessment Entry marks and end Semester Marks and analysis of internal examination performance and end semester results.

### Part B

## **CRITERION I - CURRICULAR ASPECTS**

## 1.1 - Curriculum Planning and Implementation

1.1.1 - Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

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 Visit, field visits, workshops, seminars, quest lectures, hands on training 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 member 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 which are included over and above the Anna University prescribed experiments. Course outcomes formulated by each faculty is correlated with program outcomes, which converges towards the attainments of PEO's and finally correlated and converges towards the mission of the department to achieve the vision/goal of the department.

# 1.1.2 - Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses		Duration	Focus on employability/entrepreneurship	Skill Development
SERB Sponsored Seminar on Industry 4.0 using IoT	Nil	10/07/2018	2	Employability	Internet of Things
MATLAB for Renewable Energy	Nil	21/01/2019	4	Employability	Design of Renewable Energy System
Hands on Trainning on Solar Panel Installation and Energy Auditing	Nil	11/02/2019	4	Entrepreneurship	Solar Panel Installation and Energy management
Practical Aspects of Low	Nil	06/03/2019	2	Entrepreneurship	Skill

Voltage Switchgear					Enhancement in Power System Protection
Knack (Soft Skill Training)	Nil	08/01/2019	30	Employability	Soft Skills and Technical skills
Electronics product Design	Nil	27/08/2018	5	Employability	Design the PCB Circuits
Mobile phone servicing and Training	Nil	20/08/2018	4	Employability	Service the Mobile Phones
Machine Learning	Nil	07/02/2019	4	Employability	Learn and design Models through learning Algorithms
Hands on Training on Arduino Based System Design	Nil	24/09/2018	4	Employability	Design of Electrical System
Hands on Training on Critical care Equipments with Biovision Technology	Nil	06/09/2018	2	Employability	Learn practically from skilled professionals
Micro controller Embedded Programming for Medical Instruments and Robots	Nil	29/01/2019	2	Employability	Learn to control the product and devices automatically.
Network security	Nil	06/12/2018	4	Employability	Learn to protect confidential data
Arduino	Nil	03/07/2018	4	Employability	Learn and design digital device
Harita Techserv, CATIA Training	Nil	01/08/2018	15	Employability	CAD Modeling(Design)
Coindia Training Centre Coimbatore	Nil	03/09/2018	6	Employability	CNC Programming Operation
Axis Global Institute of	Nil	30/07/2018	5	Employability	Industrial

Industrial Training, Coimbatore.					Automation Robotics
Take Ten (Soft Skill Training)	Nil	18/07/2018	30	Employability	Soft Skills and Technical skills
Know How (Soft Skill Training)	Nil	18/07/2018	30	Employability	Soft Skills and Technical skills
Knack (Soft Skill Training)	Nil	18/07/2018	30	Employability	Soft Skills and Technical skills
Take Ten (Soft Skill Training)	Nil	08/01/2019	30	Employability	Soft Skills and Technical skills
Know How (Soft Skill Training)	Nil	08/01/2019	30	Employability	Soft Skills and Technical skills

# 1.2 - Academic Flexibility

1.2.1 - New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nill	NIL	Nill

No file uploaded.

1.2.2 - Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Automobile Engineering	02/07/2018
BE	Biomedical Engineering	02/07/2018
BE	Civil Engineering	02/07/2018
BE	Computer Science and Engineering	02/07/2018
BE	Electrical and Electronics Engineering	02/07/2018
BE	Electronics and Communication Engineering	02/07/2018

BE	Mechanical Engineering	02/07/2018
BTech	Information Technology	02/07/2018
ME	Energy Engineering	02/07/2018
ME	Computer Science and Engineering	02/07/2018
ME	VLSI Design	02/07/2018

# 1.2.3 - Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	1187	Nil

## 1.3 - Curriculum Enrichment

# 1.3.1 - Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Professional Development Course(C, C, JAVA)	19/12/2018	30
NASSCOM-NACTECH (Aptitude, logical Reasoning, Verbal Ability)	18/12/2018	38
Hands on Training on Solar Panel Installation and Energy Auditing	11/02/2019	65

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# 1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Biomedical Engineering	139
BE	Automobile Engineering	35
BE	Civil Engineering	53
BE	Computer Science and Engineering	164
BE	Electrical and Electronics Engineering	30
BE	Electronics and Communication	51

	Engineering		
BE	Mechanical Engineering	136	

## 1.4 - Feedback System

1.4.1 - Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni Parents	Yes
Parents	Yes

1.4.2 - How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

#### Feedback Obtained

The intention of this Policy is to bestow a framework for obtaining, summarizing and documenting information on student and stakeholder conception of the quality and effectiveness of the Institute's curriculum for use of program evaluation for Accreditation and other Academic quality assurance processes and activities. The Institution desire and the benefits are to reach all the stakeholders in an effective manner. Feedback is obtained from the Students, Teachers, Employers, Alumni and Parents through online in a (Google form) well structured Questionnaire. Feedback from Teachers, Employers, Alumni and Parents are collected one time in an academic year and twice from the student. Finding, from the students feedback indicates that the potential of the faculty is highly fulfilling the requirements of the stands of Education. From Alumni Feedback, we can observe that the program Educational Outcome (PEO) shall be modified as and where needed. Feedback from employers is obtained to upgrade the employability skills of the students based on the industry needs to get employment. Feedback from parents, indicates that the academic environment, standard of education and overall progress of the institution are highly appreciated. Feedback from the Teachers point of view, indicates that individual growth is essential for the growth of the institution. The feedback collected is analyzed statistically and data is compiled at Department level or at Institutional level. This feedback is analyzed to develop the roadmap for the academic year ahead, help the individuals and organization as a whole to improve the performance and effectiveness of the Institution. Recommendations received from the heads are discussed in HODs meeting and it is given for deliberation to the departments, college council and the Governing Body and forwarded to the management for approval/sanctions for corrective action to enhance the quality of education at the institute.

## **CRITERION II - TEACHING- LEARNING AND EVALUATION**

#### 2.1 - Student Enrolment and Profile

### 2.1.1 - Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
ME	VLSI Design	24	7	6
BE	Computer Science and Engineering	120	125	119
ME	Energy Engineering	24	12	10
ME	Computer Science and Engineering	18	5	4
BE	Mechanical Engineering	180	118	110
BTech	Information Technology	60	65	60
BE Electronics and Communication Engineering		120	104	96
BE	Automobile Engineering	60	55	46
BE	Biomedical Engineering	60	59	54
BE	Computer Science and Engineering	120	125	119

### **View File**

# 2.2 - Catering to Student Diversity

## 2.2.1 - Student - Full time teacher ratio (current year data)

Year		Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018	2439	66	156	12	6

# 2.3 - Teaching - Learning Process

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

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
168	168	22	46	10	31

View File of ICT Tools and resources

#### View File of E-resources and techniques used

2.3.2 - Students mentoring system available in the institution? Give details. (maximum 500 words)

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. 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. 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. 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. 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. 

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. 

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 selfmotivation and to make them confident and competent individuals.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
2505	168	1:15

## 2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
168	138	30	30	19

2.4.2 - Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2018	Dr. M. PRABHU	Associate Professor	3
2019	Dr. T. ELANGO	Principal	Best ISTE chapter Chairman award for Engineering College for the year 2018 in 21st ISTE TN section - Annual Engineering Faculty Convention on 29.03.2019
2018	2018 Dr. T. ELANGO Principal		Innovation and sustainability Award for Institution by The Institution of Engineers(INDIA), Salem Local Centre, Salem

### **View File**

### 2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester- end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BE	102, 121, 103, 104,	I	10/12/2018	18/01/2019

		105, 106, 114 and 205	sem./I year		
MI	E	405, 407 and 419	I sem./I year	15/12/2018	18/01/2019

## 2.5.2 - Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

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 (20 Marks) Part B (30 Marks) Total 50 Marks, Duration: 1 hour and 30 Minutes Question pattern for Model Examination Part A (20 Marks) Part B (65 marks) Part C (15 Marks) Total 100 Marks, Duration: 3 hours 1. Two Slip tests per week are commonly conducted for an hour, and generaly 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 completion of the test/examination. Corrected answer scripts and results are reviewed by the faculty and

the IQAC coordinator. 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.

### 2.5.3 - Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

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 misquiding. After each CIE, the marks should be feed in the university webportal. 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.

## 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 in website of the institution (to provide the weblink)

http://mahendratech.org/cell.php

## 2.6.2 - Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	_	Pass Percentage
102	BE	Automobile Engineering	39	12	31
121	BE	Biomedical Engineering	51	29	57
103	BE	Civil Engineering	53	10	19
104	BE	Computer Science and Engineering	92	15	16
105	BE	Electrical and Electronics Engineering	102	20	20
106	BE	Electronics and Communication Engineering	85	14	16
114	BE	Mechanical Engineering	134	40	30
405	ME	Computer Science and Engineering	4	4	100

403	ME	Communication Systems	9	9	100
407	ME	Energy Engineering	5	5	100

## 2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

http://mahendratech.org/academic/SSS.pdf

## **CRITERION III - RESEARCH, INNOVATIONS AND EXTENSION**

#### 3.1 - Resource Mobilization for Research

3.1.1 - Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Students Research Projects (Other than compulsory by the University)	180	Tamil Nadu State Council for Science and Technology	0.08	0.08
Industry sponsored Projects	365	Texas Instruments - IICDC, Edge Gate	0.09	0.09

#### View File

## 3.2 - Innovation Ecosystem

3.2.1 - Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Workshops on Embedded System	Electronics and Communication Engineering	20/07/2018
Guest Lecture on Opto Electronic Devices	Electronics and Communication Engineering	06/08/2018

		1
Seminar on Emerging Trends on Electronic Industry	Electronics and Communication Engineering	07/08/2018
Workshop on Mobile phone services and Training	Electronics and Communication Engineering	20/08/2018
Workshop on Electronics Product Design	Electronics and Communication Engineering	27/08/2018
Guest Lecture on Design of Digital Filters	Electronics and Communication Engineering	28/09/2018
Career Guidance Program	Electronics and Communication Engineering	22/01/2019
Seminar -Methodologies for generating revenue through research with patent IPR	Electronics and Communication Engineering	28/01/2019
Workshops on Machine Learning	Electronics and Communication Engineering	07/02/2019
Hands on Training on Micro controller Embedded Programming for Medical Instruments and Robotics	Biomedical Engineering	29/01/2019
Hands on Training on Critical Care Equipments with Biovision Technology	Biomedical Engineering	06/09/2018
FDP on "How to Prepare Course File Using Outcome Based Education (OBE)	Biomedical Engineering	20/06/2018
Guest Lecture on Basic Concepts of OOPS and Programming In Java	Computer science and Engineering	01/08/2018
Seminar on GIT, GITHUB and Collaboration Tools	Computer science and Engineering	20/08/2018
Web Designing Using PHP with MYSQL	Computer science and Engineering	30/08/2018

Introduction to Mobile Application Development	Computer science and Engineering	28/09/2018
One Day Seminar on "Data Science Using R"	Computer science and Engineering	11/01/2019
Success Mantra for Women	Computer science and Engineering	08/02/2019
One Day Seminar on Vibration, Diagnosis and its Control Hybrid Composite Manufacturing	Mechanical Engineering	21/08/2018
One Day Seminar on Thermodynamics - An Engineering Approach	Mechanical Engineering	06/09/2018
One Day Workshop on Co-ordinate Measuring Machine Technology Reverse Engineering	Mechanical Engineering	25/09/2018
Guest Lecture on Heat and Mass Transfer	Mechanical Engineering	26/09/2018
One Day Seminar on Advances in Welding Technology	Mechanical Engineering	03/10/2018
12 Days FDP on Automobile Engineering	Mechanical Engineering	16/11/2018
SERB Sponserd Two Days Seminar on Industry 4.0 using IIOT	Electrical and Electronics Engineering	10/08/2018
Two days Workshop on Hands on training on Solar panel installation and Energy Auditing	Electrical and Electronics Engineering	07/02/2019
Guest Lecture on Electrical Machines - 1	Electrical and Electronics Engineering	23/03/2019

# 3.2.2 - Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Best ISTE Chapter Chaiman Award	Dr. T. Elango	Indian Society for Technical Education	29/03/2019	Engineering
Innovation and sustainability Award for Institution	Dr. T. Elango	The Institutuion of Engineers	15/09/2018	Engineering
Best Young Engineer Award	Dr. M. Prabhu	The Institutuion of Engineers	15/09/2018	Engineering

## View File

## 3.2.3 - No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start-up	Date of Commencement
NIL	NIL	NIL	Nill	Nill	Nill

#### View File

### 3.3 - Research Publications and Awards

3.3.1 - Incentive to the teachers who receive recognition/awards

State	National	International	
2	4	4	

# 3.3.2 - Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
Mechanical Engineering	1
Computer sience and Engineering	1

## 3.3.3 - Research Publications in the Journals notified on UGC website during the year

Туре	Department	Number of Publication	Average Impact Factor (if any)
International	Biomedical Engineering	2	4.8
International	Electronics Communication Engineering	13	2.9
International	Computer sience and Engineering	2	2.8
International	Mechanical Engineering	11	8.5
International	Electrical and Electronics Engineeering	1	5.8
International	Information Technology	1	0.41

#### View File

3.3.4 - Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
------------	-----------------------

Information Technology	1
Automobile Engineering	1
Electrical and Electronics Engineeering	1
Mechanical Engineering	2
Biomedical Engineering	5
Computer sience and Engineering	4
Electronics Communication Engineering	21

3.3.5 - Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/Web of Science or PubMed/Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication		Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
No Data Entered/Not Applicable !!!						

#### View File

3.3.6 - h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h- index		Institutional affiliation as mentioned in the publication
No Data Entered/Not Applicable III						

#### View File

3.3.7 - Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	1	121	1	10
Presented papers	15	10	1	1
Resource persons	Nill	2	2	2

## View File

#### 3.4 - Extension Activities

3.4.1 - Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities			
	No Data Entered/Not Applicable !!!					

#### View File

3.4.2 - Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited		
No Data Entered/Not Applicable !!!					

#### View File

3.4.3 - Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites			
No Data Entered/Not Applicable !!!							

#### View File

## 3.5 - Collaborations

3.5.1 - Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Journal Publications Bioaccumulation of Transition Metal Oxide Nanoparticles and Their Influence on Early Growth Stages of Vigna unguiculata Seeds	Dr.M. Prabhu	NA	180
Journal Publications Performance and Emission Analysis of VCR	Dr.K.	NA	180

Single Cylinder Four Stroke DI Diesel Engine Using Punnagam Oil	Rajkumar		
Journal Publications Fuzzy Rule Selection Using Hybrid Artificial Bee Colony with 2-Opt Algorithm for MANET	Dr.R. Logesh Babu	NA	180
Journal Publications An Intelligent Wheelchair Controlled by Smartphones	Dr.S.Prabu	NA	180

3.5.2 - Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant			
No Data Entered/Not Applicable !!!								

#### View File

3.5.3 - MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation Date of MoU signed		Purpose/Activities	Number of students/teachers participated under MoUs
Bio Vision Medical Systems, Chennai	06/09/2018	Workshop, Hands on Training, Internship, Projects and Placement	165

#### View File

# **CRITERION IV - INFRASTRUCTURE AND LEARNING RESOURCES**

- 4.1 Physical Facilities
- 4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development	1
80	90	

4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities

**Existing or Newly** 

	Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Class rooms	Existing
Campus Area	Existing
Laboratories	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Existing
Seminar halls with ICT facilities	Existing
Video Centre	Existing
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Classrooms with Wi-Fi OR LAN	Existing

# 4.2 - Library as a Learning Resource

# 4.2.1 - Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
LMS -AutoLib	Fully	5.1	2018
LMS -Bloom Technologies	Fully	6.3	2019

# 4.2.2 - Library Services

	Existing		Newly Added		Total	
35004	9424216	6504	1549791	41508	10974007	
9753	2625826	440	104845	10193	2730671	
1946	Nill	260	Nill	2206	Nill	
1044	1541456	142	387600	1186	1929056	
3350	1653692	675	601290	4025	2254982	
2236	Nill	Nill	Nill	2236	Nill	
1	49250	1	25000	2	74250	
	35004 9753 1946 1044 3350	35004 9424216 9753 2625826 1946 Nill 1044 1541456 3350 1653692 2236 Nill	35004 9424216 6504 9753 2625826 440 1946 Nill 260 1044 1541456 142 3350 1653692 675 2236 Nill Nill	35004 9424216 6504 1549791 9753 2625826 440 104845 1946 Nill 260 Nill 1044 1541456 142 387600 3350 1653692 675 601290 2236 Nill Nill Nill	35004     9424216     6504     1549791     41508       9753     2625826     440     104845     10193       1946     Nill     260     Nill     2206       1044     1541456     142     387600     1186       3350     1653692     675     601290     4025       2236     Nill     Nill     Nill     2236	

Others(specify) 1106 Nill 60 Nill 1166 Nill

### View File

4.2.3 - E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
G. L. KARTHIK	BM8502- Biomedical Instrumentation	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	12/09/2018
M. NARASIMHARAJAN	ME8491 - Engineering Metallurgy	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	12/09/2018
U. NILABAR NISHA	CS8251 - Programming in C	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	12/09/2018
V. PRIYA	CS8392-Object oriented programming	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	07/09/2018
K. MADHUMATHI	EE8301- Electrical Machines	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	07/09/2018
S. LATHA	CS8075-Data Warehousing and Data Mining	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	07/09/2018
G. SENTHIL	IE6605- Production Planning and Control	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	07/09/2018
J CHANDRASEKAR	ME8096-Gas Dynamics and Jet Propulsion	Institutional (Learning Management System), which is only accessible by UG and PG students and teachers of Mahendra Educational Institutions.	07/09/2018

#### 4.3 - IT Infrastructure

## 4.3.1 - Technology Upgradation (overall)

Туре	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/GBPS)	Others
Existing	620	8	1	0	0	1	8	64	0
Added	0	0	0	0	0	0	0	0	0
Total	620	8	1	0	0	1	8	64	0

4.3.2 - Bandwidth available of internet connection in the Institution (Leased line)

64 MBPS/ GBPS

## 4.3.3 - Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
C Functions	https://www.youtube.com/watch?v=qxfYYhmjpL4
Mathematical modeling of SDOF System	https://www.youtube.com/watch?v=f98NBw91Cd0
Data Mining	https://www.youtube.com/watch?v=McD9_YOf-UU
The Yoga Meditation Event	https://www.youtube.com/watch?v=ufnj5eNpsn4
Prims algorithm	https://www.youtube.com/watch?v=7CYFGT7e_xc
An introduction to Bio Signals	https://www.youtube.com/watch?v=R6x7nRA3RtU

## 4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on Expenditure incurred on academic facilities maintenance of academic facilities		Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites	
40	45	62	68	

4.4.2 - Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

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 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 wiring. 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 the principal for 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.

http://mahendratech.org/academic/Maintenance%20Procedures.pdf

## **CRITERION V - STUDENT SUPPORT AND PROGRESSION**

## 5.1 - Student Support

5.1.1 - Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Mahendra Educational Trust freeships	1268	2663530
Financial Support from Other Sources			
a) National	BC/MBC/PMSS/ First Graduate Scholarship	1080	60825000
b) International	Nil	Nill	Nill

#### View File

5.1.2 - Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Bridge Courses	05/09/2018	516	Heads of the Department

## View File

5.1.3 - Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed	
2018	Competitive	51	Nill	Nill	Nill	

	Examination (MTrace/SAI IAS ACADEMY)				
2019	Carrear Counselling	Nill	417	Nill	220

5.1.4 - Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal		
Nill	Nill	Nill		

# 5.2 - Student Progression

5.2.1 - Details of campus placement during the year

On campus			Off campus			
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed	
No Data Entered/Not Applicable !!!						

### **View File**

5.2.2 - Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2019	1	BE	Mechanical Engineering	Mahendra Engineering College	MBA
2019	1	BE	Biomedical Engineering	College of Engineering, Anna University, Guindy	M.E Biomedical Engineering
2019	1	BE	Electronics and Communication Engineering	University of Modena and Reggio Emila, Italy	Master's in Electronics Engineering

2019	1	BE	Electronics and Communication Engineering	Mahendra Engineering College	M.E Communication System
2019	1	BE	Electronics and Communication Engineering	Kings College, London	Master's in Artificial Intelligence

5.2.3 - Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
Any Other	5

#### View File

5.2.4 - Sports and cultural activities / competitions organised at the institution level during the year

	Activity	Level	Number of Participants	
No Data Entered/Not Applicable !!!				

#### View File

## 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)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student		
	No Data Entered/Not Applicable !!!							

#### View File

5.3.2 - Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

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 Mahendra 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

## 5.4 - Alumni Engagement

5.4.1 - Whether the institution has registered Alumni Association?

Yes

MAHENDRA INSTITUTE OF TECHNOLOGY OLD STUDENT ASSOCIATION (MITOSA) 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 is 140/2018. 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

#### 5.4.2 - No. of enrolled Alumni:

422

# 5.4.3 - Alumni contribution during the year (in Rupees):

110000

### 5.4.4 - Meetings/activities organized by Alumni Association:

The meeting of the Alumni with Principal and HODs was held on 09.09.2018 in Seminar hall-I, Mahendra institute of technology at 10.00 A.M. AGENDA: • To interact with the Alumni • A grate networking is created between members and alumni • To focus on the fund raising for association activities • To plan and design association services for the students • To conceptualize and plan a global scale Alumni Meet • Database updating of the alumni association.

## CRITERION VI - GOVERNANCE, LEADERSHIP AND MANAGEMENT

## 6.1 - Institutional Vision and Leadership

6.1.1 - Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Mahendra Institute of Technology functions with an efficient decentralized administration
that has an absolute transparency in the all the processes. Decentralization in working $\Box$
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.
$\square$ Entrusting examination work is to the Controller Of Examinations. $\square$ Under direct
supervision of Principal, Administrative office, examination section, library and all the UG
and PG departments are functioning. $\square$ Time to time Principal conducts meeting with the
concerned HoDs/ in charges to discuss various issues and resolutions passed for further
action. $\square$ Similarly, the outcomes of Principal meeting are passed on to individual faculty /
staff for implementation. $\square$ Senior faculty members are allotted to co-ordinate various
academic activities, faculty development programmes and student enrichment courses. $\Box$
Placement activities are delegated to all department placement coordinators through training
and placement cell. $\square$ Administration work is delegated to the administrative officer. $\square$ Co-
Curricular and extra-curricular activities are delegated to the faculty in-charges of
various departments. $\square$ 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.

### 6.1.2 - Does the institution have a Management Information System (MIS)?

Yes

# 6.2 - Strategy Development and Deployment

### 6.2.1 - Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details			
Admission of Students	Mahendra Institute of Technology follows the Tamil Nadu Engineering Admission (TNEA) process. As per the Government of Tamilnadu norms, 65 of the admission is done directly by the Affiliating University under Merit Category 1 and the remaining 35 is offered to institutions as Category 2. Admission is purely based on merit cum reservation basis. Category 1: Through single window admission process as prescribed by the Government of Tamilnadu. Category 2: Through Consortium of Self Financing Professional, Arts Science Colleges in Tamilnadu.			
Industry Interaction / Collaboration  MoUs have been signed with the leading industries to take up inplant training at the end of every semester during the vacation period • internship for eligible students in the pre-final and final year • Training in the cutting edge technologies by the experts from the Industry either in the campus or the Industry • Placement assistance • Inviting the experts from industries for guest lectures, seminars, workshops and conferences				
Research and Development  The Institute believes in promoting a robust research culture and he and motivate students and teachers to undertake research related activated as recognized as research centers by Anna University. The institution upon its teachers to carry out research activities by providing factive terms of high speed internet connectivity, laboratory, subscript research journals and providing research incentives and travel alloconferences. Institute actively encourage research by hosting workshed.				

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. 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 Human Resource in accordance with the teacher student ratio prescribed. The teacher student Management 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 followed 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, Teaching and cultural, religious and linguistic background. The diversity of learners Learning 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., Curriculum The Institute follows the curriculum given by Anna University. Being an Development affiliated Institute, the academic flexibility is limited. Action plan is

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 stake holders. 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. 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 Examination and reforms for the benefit of students. Two Continuous Internal Assessment Evaluation 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. 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, Library, ICT and Physical Dining hall, canteen, laboratories and a well -stacked library. The Infrastructure infrastructure available is in line with the norms laid down by AICTE and Anna University. The computer labs are equipped with requisite terminals and Instrumentation 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

# 6.2.2 - Implementation of e-governance in areas of operations:

E-governace area	Details
Examination	• Internal Marks-Entry Assessment • Attendance web portal Assessment •

to facilitate the effective use of library resources digital library

	End Semester Marks Summary		
Planning and Development	• Curriculum Delivery Planning • Academic Calendar-Planner • Continuous Assessment Planning		
Administration  • Student Details • Attendance Monitoring • Master Time table and Implementations			
Finance and Accounts	• Income/Expenditure • Fees payments/Receipts • Supports Mobilization of Funds		
Student Admission and Support	Admission Relevant entries    Details of certificates/Any proof related to admissions		

# 6.3 - Faculty Empowerment Strategies

6.3.1 - Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support	
No Data Entered/Not Applicable !!!					

#### View File

6.3.2 - Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date		narricinants	Number of participants (non-teaching staff)
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No Data Entered/Not Applicable !!!

### **View File**

6.3.3 - No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
No Data Ente				

# View File

# 6.3.4 - Faculty and Staff recruitment (no. for permanent recruitment):

Teachi	ing	Non-tead	ching
Permanent	Full Time	Permanent	Full Time
30	30	7	7

# 6.3.5 - Welfare schemes for

Teaching	Non-teaching	Students
The Institution ensures good quality of teaching by means of	Employees	Government
conducting quality improvement programs, workshops, faculty	Provident Fund	Scholarships
training programmes facilitating teaching learning	(EPF) scheme	Management
opportunities for staff. $\square$ Free Medical emergency	right from the	Scholarships
transportation $\square$ Concessional transport facilities $\square$ Waiver of	year of	Free
fees for teachers' children in Mahendra Schools. 🗆 Medical	joining.   Free	Transport
leave and Maternity leave. $\square$ Supporting for education of the	Medical	facilities
children of the teachers in the group institutions.   Sanction	emergency	to SC/ST
of one week leave for marriage. $\square$ Sponsorship for attending	transportation	Students
conference, workshops and FDPs.   Incentive for publication of	☐ Concessional	Free food
papers / research articles. $\square$ Reward for producing University	transport	Hostel
Ranks. $\square$ Cash awards for academic excellence / 100 pass. $\square$	facilities. $\square$	facilities
Subsidised canteen fares for teachers. $\square$ Group Insurance. $\square$	Waiver of fees	to SC/ST
Motivation for organizing guest lectures, attending	for teachers'	Students
orientation, refresher programmes short term courses. $\square$ Causal	children in	
leave/ earned leave / Compensatory leave to all eligible staff.	Mahendra Matric	
$\square$ Winter and summer vacation leave to all teaching staff. $\square$	Higher	
Faculty members opting to stay in hostel are given	Secondary	
accommodation with fee concession.   Motivation to register for	School.	
Ph.D for taking necessary steps to apply research proposals,	Medical leave	
getting financial grants, funds patent etc.   Encouragement to	and Maternity	
enrol as members of various professional bodies and societies	leave. $\square$	
with financial support.   Research facilities to the faculty to	Sanction of one	
present their research work at conferences (national	week leave for	
international) and share their technical expertise as resource	marriage. $\square$	
persons. $\square$ All facilities such as use of laboratories, use of	Special Study	
computers, e-library is provided to faculty to pursue research.	Leave (SSL) to	
$\square$ In-House faculty development programmes are conducted to	pursue higher	
enhance professional teaching communication skills. $\square$ All	education. $\square$	
	I	

7/2021 https://assessmentonline.naac.gov.in/public/index.php/postaccreditation/aqarFilledData/eyJpdil6ImNVMVNydUxoXC85Y	VdKbEZiMGR2aFl3PT0iLCJ2YWx1ZSI6IjRN	//SkdSeitXa2ExTW1X			
adequate facilities are provided to the faculty to make best	Subsidised				
use of all the resources like internet, e-learning resources,	canteen fares				
library facilities, national international journals. $\square$ A	for non				
central research facility is also available for facilitating	teaching staff.				
experimentation high end computing.	□ Group				
	Insurance. $\square$				
	Winter and				
	summer vacation				
	leave.				
6.4 - Financial Management and Resource Mobilization					
6.4.1 - Institution conducts internal and external financial audits regularly (with in 100 v	vords each)				
An effective mechanism is followed by the institution for auditing all the accounts. The institution has appointed a full time Charted Accountant Mr. Ramesh designated 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. 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.  6.4.2 - Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not					
covered in Criterion III)	s/Crasts resolved in Ds	Durnoso			
	s/ Grnats received in Rs.	Purpose			
No Data Entered/Not Applicable !!	!				
No file uploaded.	No file uploaded.				
6.4.3 - Total corpus fund generated					
235767					
6.5 - Internal Quality Assurance System					

6.5.1 - Whether Academic and Administrative Audit (AAA) has been done?

**External** 

**Audit Type** 

Internal

	Yes/No	Agency	Yes/No	Authority
Academic	Yes Advisor - Quality Assurance, Aassaan eduCare Foundation, Yes Mahendra Institution		Dr. M. Senthil Kumar, Principal Mahendra Institute of Engineering Technology Mallasamudram, Namakkal-637503	
Administrative	Yes	Mr. R B Saravanan, Senior Advisor - Quality Assurance, Aassaan eduCare Foundation, Chennai	Yes	Dr. C. Dhavamani, Associate Professor/Aeronautical Engineering Mahendra Engineering College Mallasamudram-637503

#### 6.5.2 - Activities and support from the Parent - Teacher Association (at least three)

Regular communication of their performance to the respective parents through post and mobile.
 Review of their class attendance and continuous internal examination performance.
 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.
 Mark list of the students are prepared, it is displayed in the notice board and conveyed to their parents by post.

### 6.5.3 - Development programmes for support staff (at least three)

1. Knowledge enhancement in programming and coding methods for technical assistants of circuit branches. 2. Maintenance and disposal of e-waste and scrap materials. 3. Updating and upgrading of skills in handling the latest components for effective conduct of laboratory experiments.

### 6.5.4 - Post Accreditation initiative(s) (mention at least three)

 Applied autonomous status -Submitted Application to Anna University, Chennai and UGC New Delhi in the month of April 2019. Anna University inspection was completed on May 8, 2019 and forwarded the application to UGC. UGC Inspection was scheduled in the month of July 2019. 2. Institution Innovation council with MHRD has been established to encourage, inspire and nurture young students by supporting them to work with new ideas and transforms them into prototype. 3. The Institute distinctiveness has been improved with SES- German initiative with an improved component of Industrial oriented hands on training practice

### 6.5.5 - Internal Quality Assurance System Details

	a) Submission of Data for AISHE portal	Yes
	b)Participation in NIRF	Yes
I		

c)ISO certification	Yes
d)NBA or any other quality audit	Yes

6.5.6 - Number of Quality Initiatives undertaken during the year

Year Name of quality initiative by IQAC Date of conducting IQAC Duration From Duration To Number of participants

No Data Entered/Not Applicable !!!

View File

# **CRITERION VII - INSTITUTIONAL VALUES AND BEST PRACTICES**

# 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
International Women's Day 2019	08/03/2019	08/03/2019	120	Nill
Self Defence Camp for Women	13/02/2019	13/02/2019	62	56
Mahendra Gran Prix	09/02/2019	09/02/2019	123	82
Pongal Thiruvizha 2019	12/01/2019	12/01/2019	145	105
Cyber Crime Security Awareness	02/08/2018	02/08/2018	126	174

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

21.75

# 7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities		Number of beneficiaries
Physical facilities	Yes	Nill
Provision for lift	Yes	Nill
Ramp/Rails	Yes	Nill
Braille Software/facilities	No	Nill
Rest Rooms	Yes	Nill
Rest Rooms	Yes	Nill

Scribes for examination	Yes	Nill
Special skill development for differently abled students	Yes	Nill
Any other similar facility	Yes	Nill

### 7.1.4 - Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages		Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
No Data Entered/Not Applicable III							

No Data Entered/Not Applicable !!!

#### View File

# 7.1.5 - Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
HR Policy Hand Book	02/07/2018	This hand Book consists of various guidelines about the Conduct of Faculty Staff in the college, various welfare measures, policies on Recruitment, Promotion, Number of participating students and staff Resignation etc., It also includes the leave rules, guidelines for attending Conferences, Seminars etc.,

# 7.1.6 - Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Awareness of Yoga on International Yoga Day	21/06/2018	21/06/2018	50
Independence Day	15/08/2018	15/08/2018	50
Republic Day	26/01/2019	26/01/2019	50
Medical Camp	07/02/2019	07/02/2019	150
International Womens Day	08/03/2019	08/03/2019	180

#### View File

- 7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)
  - 1. Green rich eco friendly farm land are surrounded the institute 2. Pollution free campus

using bicycles and battery cars 3. Smokeless campus 4. Irrigation based farming method to avoid water wastage around the campus 5. Rain water farming for vegetables cultivation 6. Solar energy based lighting system

#### 7.2 - Best Practices

#### 7.2.1 - Describe at least two institutional best practices

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 tress and remove the unwanted Karuvelam (Prosopis juliflora) trees which is ecological threat. 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/quardians 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.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

http://mahendratech.org/academic/Best%20practices.pdf

#### 7.3 - Institutional Distinctiveness

7.3.1 - Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

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 Schrodt, 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.

#### Provide the weblink of the institution

http://mahendratech.org/academic/Distinctiveness.pdf

### 8. Future Plans of Actions for Next Academic Year

• 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 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 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.