

YEARLY STATUS REPORT - 2021-2022

Part A		
Data of the Institution		
1.Name of the Institution	MAHENDRA INSTITUTE OF TECHNOLOGY	
Name of the Head of the institution	Dr. T. ELANGO	
• Designation	PRINCIPAL	
Does the institution function from its own campus?	Yes	
Phone No. of the Principal	04288288527	
Alternate phone No.	04288288527	
Mobile No. (Principal)	9443457824	
Registered e-mail ID (Principal)	principal@mahendratech.org	
• Address	Mahendra Institute of Technology, Salem- Tiruchengode Highway, Mahendrapuri	
• City/Town	Mallasamudram, Namakkal DT	
• State/UT	Tamilnadu	
• Pin Code	637503	
2.Institutional status		
Autonomous Status (Provide the date of conferment of Autonomy)	31/07/2020	
Type of Institution	Co-education	
• Location	Rural	

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• Financial Status	Self-financing
Name of the IQAC Co-ordinator/Director	Dr. L. SELVARAJAN
• Phone No.	04288288527
Mobile No:	9894098486
• IQAC e-mail ID	iqac@mahendratech.org
3.Website address (Web link of the AQAR (Previous Academic Year)	http://mahendratech.org/AQAR/AQAR 2020 2021.pdf
4. Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://mahendratech.org/IQAC/Academic%20Calendar%202021-2022.pdf

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.04	2019	28/03/2019	27/03/2024

6.Date of Establishment of IQAC 12/06/2017

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

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Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding Agency	Year of Award with Duration	Amount
Department of Electronics and Communicatio n Engineering	Two Days National Seminar on "Artificial Intelligence for Women Empowerment and Safety: A New Initiative with Government Policy"	ICSSR, New Delhi	09/05/2022	150000
Deaprtment of Electrical and Electronics Engineering	Seminar on "Challenges and Technical Solutions on Internet for Industrial Applications "	SERB, DST, New Delhi	22/03/2022	50000

8.Provide details regarding the composition of the IQAC:

 Upload the latest notification regarding the composition of the IQAC by the HEI 	View File
9.No. of IQAC meetings held during the year	4
Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes
If No, please upload the minutes of the meeting(s) and Action Taken Report	View File

10.Did IQAC receive funding from any funding agency to support its activities during the year?	No
• If yes, mention the amount	

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

Participated in National Institute Ranking Framework (NIRF) for the academic year 2021-2022.

Academic and Administrative Audit was Conducted to ensure quality and scope for further improvements.

32 Research papers have been published by our faculty members. Faculty members are further informed to intensify their research and publications in SCI/SCIE/Scopus listed journals.

Motivated faculty members to attend various programmes. 95 Faculty members attended Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programme etc during the year 2021-2022.

Improved Industry linkages and effective training for placements were given to our students. 371 students were placed in 59 Industries.

12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
NPTEL online certification courses	24 Faculty Members Successfully completed exam during July 2021 to April 2022
To submit a Proposal to funding agencies	Department of ECE received grant of Rs. 1,50,000/- from ICSSR, New Delhi to organize Two Days National Seminar on "Artificial Intelligence for Women Empowerment and Safety: A New Initiative with Government Policy" during 1st & 2nd June 2022. Dr. P. Venkatesan, AP/EEE, received Rs. 50,000 from SERB, DST, New Delhi for a seminar on "Challenges and Technical Solutions on Internet for Industrial Applications".
Membership in Professional Bodies	5 Faculty Members Registered as Life Member from Institution of Engineers (India), Kolkata in the month of March 2022. 7 Faculty Members Registered as life member from Biomedical Engineering Society of India (BMESI) in the month of April 2022.
GATE Examination	Mr. M. Sivashankar, IV year, EEE, Cleared the GATE Examination(2022)
Research Activities	6 Patent published by the faculty members
13.Was the AQAR placed before the statutory body?	Yes
Name of the statutory body	1
Name of the statutory body	Date of meeting(s)

14. Was the institutional data submitted to AISHE ?	Yes

• Year

Year	Date of Submission	
2021-2022	11/02/2023	

15. Multidisciplinary / interdisciplinary

- To provide very high standard of technical knowledge in all fields of engineering through quality education
- To encourage the students to face the technical scenario with excellent technical skills obtained through critical thinking, quantitative reasoning
- To motivate students with good moral support by conducting various counseling events to strengthen them and gain more knowledge
- To ensure that every student is aware of the role and responsibilities of a professional engineer in the society
- To develop life-long learning skills that allow them to be adaptive and responsive to changes in society, technology and the environment, as well as career demands
- To provide an accredited dynamic scholarly environment wherein students learn to develop technology, communications and leadership abilities to emerge as a complete professional.

16.Academic bank of credits (ABC):

Every B.E. / B. Tech. Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

- 1. Humanities and Social Sciences (HS) courses include Technical English, Employability Skills, Engineering Ethics and Human Values, Communication skills, Environmental Science and Engineering.
- 2. Basic Sciences (BS) courses include Mathematics, Physics, Chemistry, Biology, etc.
- 3. Engineering Sciences (ES) courses include Engineering practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc.
- 4. Professional Core (PC) courses include the core courses

- relevant to the chosen specialization/branch.
- 5. Professional Elective (PE) courses include the elective courses relevant to the chosen specialization/ branch.
- 6. Open Elective (OE) courses include the courses relevant to the chosen specialization / branch which a student can choose from the curriculum of other B.E. / B. Tech. programmes offered in the College and courses offered by the Departments of Science and Humanities.
- 7. Employability Enhancement Courses (EEC) include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.

Curriculum of a semester shall normally have a blend of 5 or 6 lecture courses and laboratory courses not exceeding 3. In addition, Employability Enhancement Course(s) may also be included. Each course may have credits assigned as per clause 4.4. However, the total number of courses per semester shall not exceed 10 (including EEC).

Each course is assigned certain number of credits based on the following:

Contact period per week	Credits
1 Lecture Period	1
1 Tutorial Period	1
2 Practical Periods (Laboratory /Seminar	1
/ Project Work, etc.)	

Every semester we issue mark sheets in which credits earned by the students for each course is clearly mentioned.

17.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.

18.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

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.

19. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

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University Grant Commision (UGC), New Delhi and Anna University, Chennai granted Fresh Autonomous status for a period of 10 years from 2020-2021. The curriculum provided by the Anna University, Chennai is adopted for the students of Second, Third & Final Year under Regulation 2017. MIT Autonomous Curriculum is adapted for First Year Students under Regulation 2020. The institution aim is to develop and organize various activities for effective implementation of the curriculum with the approval of the Academic council members and Board of Study members.

The Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) are well defined and stated in the Curriculum for the regulations 2017 and Regualtion 2020.

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 out comes 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 stakeholders. 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 provide 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.

• 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 coordinator. The outcome of analysis will be used to improve the teaching and learning in the particular course.

20.Distance education/online education:

- Students may be permitted to credit only one online course / Self Study course (3 credits) during the entire duration of study with the approval of Departmental Consultative Committee and Principal.
- Students may be permitted to credit online courses such as courses offered by NPTEL (which are provided with certificate) with the approval of Departmental Consultative Committee and Principal subject to a maximum of three credits. The student needs to obtain certification to become eligible for writing the End Semester Examination to be conducted by the College.
- The student can opt for Self Study course provided the student does not have current arrears and earns a CGPA of 8.0 and above.
- The Department may offer self study courses. The purpose of the course is to permit the student to study a course / a topic of the student?s choice. The students shall study on

their own under the guidance of a faculty member. No formal lectures need be delivered. The syllabus of the course and mode of assessments shall be approved by the Departmental Consultative Committee and forwarded to the Principal for the formal approval. Preferably one faculty member approved by the Head of the Department shall be responsible for the periodic monitoring and evaluation of the course.

 The self study course / online course of 3 credits can be considered instead of one elective course.

Extended Profile		
1.Programme		
1.1	11	
Number of programmes offered during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.Student		
2.1	1694	
Total number of students during the year:		
File Description	Documents	
Institutional data in Prescribed format	View File	
2.2	418	
Number of outgoing / final year students during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.3	1638	
Number of students who appeared for the examinations conducted by the institution during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	

3.Academic			
3.1		756	
Number of courses in all programmes during the year:			
File Description	Documents		
Institutional Data in Prescribed Format		View File	
3.2		209	
Number of full-time teachers during the year:			
File Description	Documents		
Institutional Data in Prescribed Format		<u>View File</u>	
3.3		202	
Number of sanctioned posts for the year:			
4.Institution			
4.1		786	
Number of seats earmarked for reserved categories as per GOI/State Government during the year:			
4.2		60	
Total number of Classrooms and Seminar halls			
4.3		620	
Total number of computers on campus for academic purposes			
4.4		258.10	
Total expenditure, excluding salary, during the year (INR in Lakhs):			
Part B			
CURRICULAR ASPECTS			
1.1 - Curriculum Design and Development			
1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global			

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developmental needs which are reflected in Programme Outcomes (POs), Programme Specific

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Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

Being an Autonomous Institute Mahendra Institute of Technology, the curricula are designed and implemented within the framework of guidelines given by regulatory bodies like Anna University, UGC and AICTE., the process includes benchmarking content with premier institutions also addressing the recent technologies and opportunities existing in global level with all necessary fundamentals. Feedback and suggestions received from stakeholders (Students, faculty, employers) are taken into consideration by statutory bodies, that meet at regular interval, such as board of studies, academic council and governing council, for designing curriculum. It facilitates incorporating the focus on global, national, regional and local requirements.

Accordingly, Programme Educational Objective (PEO) Programme outcomes (Pos), Programme Specific outcomes (PSO) are framed to match the emerging trends and Industry demanded skills. PSOs are designed considering knowledge - skill- attitude recommended by professional bodies focusing on technical, societal and global needs. Pos and PSOs are delineated into different courses, characterized by relevant courses outcomes. (Co) and syllabi are revised at the regular intervals to update the contents and accommodate the emerging trends in science, engineering and technology.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	Nil

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

10

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	<u>View File</u>

1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development

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offered by the Institution during the year

65

File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	<u>View File</u>
Any additional information	<u>View File</u>

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced across all programmes offered during the year

52

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	<u>View File</u>

${\bf 1.2.2 - Number\ of\ Programmes\ offered\ through\ Choice\ Based\ Credit\ System\ (CBCS)/Elective\ Course\ System}$

10

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human

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Values, Environment and Sustainability, and Human Values into the curriculum

Mahendra Institute of technology offered the curriculum effectively integrates cross-cutting issues relevant to Professional ethics, gender, environment and sustainability and human values for strong value based holistic development of students. These courses are mandatory courses that the students must complete and enhance the skills related to human values and professional ethics. Environment Studies helps students to understand how their decisions and actions affect the environment, builds knowledge and skills to address complex environmental issues as well as to take action in keeping the environment healthy and sustainable for the future generations. The Constitution of India offered for all the students to understand the role of human values and ethics in the professional world, also addresses to develop leadership qualities, team spirit, managerial skills, attitude and ethics needed for successful career and entrepreneurship. MIT organized seminars, guest lectures and awareness activity under women Empowerment cell and NSS that help the students are sensitized and encouraged to work towards gender sensitization. The Institution has integrated these cross-cutting issues consciously with the objective of making students as responsible and socially sensitive citizens, besides making them knowledgeable and intelligent in their respective specializations.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	<u>View File</u>

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

8

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	<u>View File</u>

1.3.3 - Number of students enrolled in the courses under 1.3.2 above

222

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

1.3.4 - Number of students undertaking field work/projects/ internships / student projects

443

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	<u>View File</u>

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni

A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	https://mahendratech.org/download/2022-23/1. 4.1%20and%201.4.2.pdf
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
Any additional information	No File Uploaded

1.4.2 - The feedback system of the Institution comprises the following

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

File Description	Documents
Provide URL for stakeholders' feedback report	https://mahendratech.org/download/2022-23/1. 4.1%20and%201.4.2.pdf
Any additional information	<u>View File</u>

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

2.1.1.1 - Number of students admitted (year-wise) during the year

422

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

195

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

Programmes for advanced learners and slow learners

Programmes for Advanced Learners:

- 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
- English communication

- Basic computer programming
- Aptitude skills
- 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.

Programmes 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.
- 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.
- 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.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
13/06/2023	1694	209

File Description	Documents
Upload any additional information	<u>View File</u>

2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problem-

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solving methodologies are used for enhancing learning experiences:

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 ways, 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.

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 IV and workshops the students experimentally learn the process which is related to the theory subjects.

Participative learning and problem solving methodologies:

1. 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. It makes several participative learning activities to broaden the scope of education imparted to the students.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	Nil

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

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.

All the class rooms are provided with Wi-Fi facility.

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Students are encouraged to be interactive in class through discussions.

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.

SMART Board and ICT supportive learning methods are being used by the faculty for better content delivery. (for demonstration, video(NPTEL), audio lectures).

One can access the database of digital library, NPTEL videos and other internet facilities which consists of course material and Recorded video lecturesFaculty and Students can access the journal resources also in the seminar hall.

In order to improve the self-learning capability of the students the following facilities are provided. 1. Central library and Department library 2. Digital library, Journals and Magazines. 3. E-Learning and Online Certification Courses NPTEL course materials.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://mahendratech.org/download/2022-23/2. 3.2.pdf
Upload any additional information	<u>View File</u>

2.3.3 - Ratio of students to mentor for academic and other related issues

2.3.3.1 - Number of mentors

85

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<u>View File</u>
Circulars with regard to assigning mentors to mentees	<u>View File</u>

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

The extract of Academic calendar for every year is prepared at the end of the previous academic year. Principal conducts meeting with Dean, IQAC Coordinator, HODs, , 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	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

2.4 - Teacher Profile and Quality

2.4.1 - Number of full-time teachers against sanctioned posts during the year

209

File D	Description	Documents
	wise full-time teachers and oned posts for the year	<u>View File</u>
	f the faculty members nticated by the Head of HEI	<u>View File</u>
Any a	dditional information	No File Uploaded

2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

17

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<u>View File</u>
Any additional information	<u>View File</u>

2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

773

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

2.5 - Evaluation Process and Reforms

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

26

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File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	<u>View File</u>

2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

22

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	No File Uploaded

- 2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution
 - Two continuous internal examinations of 1 hour 30 minutes for 50 marks and a model examination of 3 hours for 100 marks.
 - 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 format of the question papers are displayed in the notice board and 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 questio paper pattern are transparent to all the students.
 - The QPs of the examinations are verified by the moderation committe in order to rectify the mistakes and the ambiguity in the questions are fully rectified.

The corrected examination answer scripts are distributed to the student 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 few of them are collected and retaine in the department.

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File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

- The institute is Autonomous and affiliated to Anna University, Chennai. The Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) are well defined and stated in the department Curriculum for the regulations 2020 and 2022.
- 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 committee comprising 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 out comes 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.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	Nil

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

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 equivalant 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 leve 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.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

2.6.3 - Pass Percentage of students

2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

400

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	Nil

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

https://mahendratech.org/ssr/SSR 2021-22.pdf

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

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

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.

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 for that too research promotion activity.

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.

Research Activities:

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 strength the research, the center has signed MoU with some research organization.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://mahendratech.org/download/2022-23/3. 1.1-Research%20policy.pdf
Any additional information	<u>View File</u>

3.1.2 - The institution provides seed money to its teachers for research

3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

0.365

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<u>View File</u>
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View File</u>
List of teachers receiving grant and details of grant received	<u>View File</u>
Any additional information	No File Uploaded

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3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

4

File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	No File Uploaded

3.2 - Resource Mobilization for Research

3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

2 Lakhs

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<u>View File</u>
List of projects and grant details	No File Uploaded
Any additional information	<u>View File</u>

3.2.2 - Number of teachers having research projects during the year

NIL

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
List of research projects during the year	<u>View File</u>

3.2.3 - Number of teachers recognised as research guides

8

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File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

0

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	Nil
Any additional information	No File Uploaded

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

The institute has created an ecosystem for Research and Innovation by recruiting & developing desirable human resource, taking initiative for creation & dissemination of knowledge and establishing state of the art infrastructure. The details are as under:

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.

The staff and students of Mahendra Institute of Technology are expected to develop innovative thinking and intellectual curiosity in the research centres.

Researchand development constitutes the first stage of development of a potential new service or the production process. Research is the foundation of any nation's economic growth; it refers to innovative activities undertaken by corporations or governments in

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developing new services or products, or improving existing services or products.

Promoting Innovation: The College has created an Innovation & Entrepreneurship Development Cell (IEDC) and Institutional Innovation Council (IIC) for promoting innovation & entrepreneurship activities. The formation of IIC is as per the guidelines of MHRD & AICTE. Students are encouraged to present their innovative working project models & products through annual project contest "Project Expo".

Research infrastructure: The College has a Research Cell to motivate the faculty members to write research projects and submit it to various supporting agencies like DRDO, DST, AICTE, DBT, SERB, UPCST, etc. Research Cell also helps to create research culture among faculty members and students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

58

File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
Any additional information	<u>View File</u>

3.4 - Research Publications and Awards

3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check

C. Any 2 of the above

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through authenticated software

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<u>View File</u>
Any additional information	<u>View File</u>

3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

2

File Description	Documents
URL to the research page on HEI website	https://mahendratech.org/research_center.php
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

32

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	<u>View File</u>

3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

12

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

3.4.5.1 - Total number of Citations in Scopus during the year

1299

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

3.4.6.1 - h-index of Scopus during the year

28

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

3.5 - Consultancy

3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

BITT	23	_

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<u>View File</u>
List of consultants and revenue generated by them	No File Uploaded
Any additional information	No File Uploaded

3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

NIL

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View File</u>
List of training programmes, teachers and staff trained for undertaking consultancy	No File Uploaded
List of facilities and staff available for undertaking consultancy	No File Uploaded
Any additional information	No File Uploaded

3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

The NSS and its unit contributed the extension activity like covid awareness program; covid extension activity (Vaccination Program) and the yoga day celebration were successfully completed. The institution promotion activity involved through online mode in Hand Wash for preventing from Covid 19 to the school students.

EDC cell conducted Entrepreneurship Development Program conducted through online mode.

The following activities are doing for community development.

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- WORLD ENTREPRENEURSHIP DAY
- National Innovation day
- Women's Day
- Social activities for Covid 19 awareness programme
- Awareness programme on Sanitizing and Hand Wash for preventing from Covid 19
- Awareness programme on Wearing Mask and Social Distancing for preventing from Covid 19
- Awareness programme on Stay home and Stay Safe for preventing from Covid 19
- Social activities for dengue awareness programme
- Tree plantation
- Road safety awareness programme
- World water day
- Blood Donation Camp
- National Education Day
- Trekking Camp
- Republic Day Celebrations
- YOGA TRAINING CAMP
- TREE PLANTATION CAMP
- CLEAN INDIA CAMP
- MEDICAL CAMP
- WORLD WATER AWARENESS CAMP
- STUDENTS MOTIVATIONAL CAMP
- AIDS awareness
- World first aid day
- Medical Camp
- Blood Donation Camp

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

3		

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File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

13

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

935

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

3.7 - Collaboration

3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

10

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

3

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	<u>View File</u>

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

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 classrooms (54-Nos), seminar-halls (6-Nos), various department laboratories, library with ILMS, and 64 Mbps internet facility includingWi-Fi. Total area of our institution is 48562 sq.meters and it's built up area is 26605 sq.meters.

Laboratories/Computing facility/Auditorium

Our institution has seven computer laboratories with 620 computers connected through LAN or Wi-Fi connection with more than 64Mbps interne 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 compute laboratory is 120 sq. meters. 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- curricula events.

Library

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 also owns its digital set up

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with 64Mbp 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, cencage learning is also available for all students to upgrade their knowledge.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://mahendratech.org/download/4.1.1.pdf

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

Gym

For all-round development of the students, there is fully equipped gym (100 sq. meters) - fitness zone containing all modern equipment. 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 facilitie and the gallery can accommodate about 2500 students.

Outdoor games

The institute has playground measured 16,800 sq. meters to accommodate basketball court, ball badminton court, football ground, cricket groundkho-kho court, Kabaddi court, handball court, hockey ground, volleyball ground and well laid 400 m standard track which all fall outdoor games.

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.

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.

Yoga and Clubs

The Yoga is conducted for students regularly through Yoga club which wa established in the year 2013. Yoga day is organized every year. All our faculties, students and colleagues participate in this program. Student are encouraged to perform yoga during college cultural events and they take part in competitions and bring laurels and plaudits to the institution.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	https://mahendratech.org/sports.php?sports

4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

54

File Description	Documents
Upload any additional information	<u>View File</u>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

51.62

File Description	Documents
Upload audited utilization statements	No File Uploaded
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	No File Uploaded

4.2 - Library as a Learning Resource

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

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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 developer 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 Authority List Authors, Publishers, Suppliers, Subjects, Keywords
- 2. Search (Online Public Access Catalogue)
- 3. Circulation Management Transaction
- 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 allow to:

• Create new user log-in, password and grant rights to access various modules

- 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	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

4.2.2 - Institution has access to the following: ejournals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	No File Uploaded

4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

9.68

File Description	Documents
Audited statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

4.2.4.1 - Number of teachers and students using the library per day during the year

65

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File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	No File Uploaded

4.3 - IT Infrastructure

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

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 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 Cente and the enhanced configuration is IntelCoreI5/3.30GHz/2GB/250 GB SATA HDD/Intel Onboard E'Net.

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 GBIC 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
```

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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

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
1639	620

File Description	Documents
Upload any additional information	No File Uploaded

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus

A. ?50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

A. All four of the above

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil
List of facilities for e-content development (Data Template)	<u>View File</u>

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

116.14

File Description	Documents
Audited statements of accounts	No File Uploaded
Upload any additional information	No File Uploaded

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

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, laborator work benches, chairs, stools, lights, fans, switches, water pumping motors, college bells, UPS, electricity generator and wirings. 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.
- Once External maintenance/service is completed, HOD/Supervisor need to verify the acquired service with the help of technicians and the 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 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.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://mahendratech.org/academic/Maintenanc e_Procedures.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

1866

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	No File Uploaded

5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

1531

File Description	Documents
Upload any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology

A. All of the above

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File Description	Documents
Link to Institutional website	
	https://mahendratech.org/value_added_courses
	.php?value_added_courses
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

940

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti- ragging committee	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	<u>View File</u>

5.2 - Student Progression

5.2.1 - Number of outgoing students who got placement during the year

333

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

5.2.2 - Number of outgoing students progressing to higher education

18

File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	<u>View File</u>
Any additional information	<u>View File</u>

5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

0

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	<u>View File</u>

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

2

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

CLASS COMMITTEE

- Each class in the degree programme includes a class committee composed up of Facultyand students that shall review each student's performance verify that each subject's academic plan is carried out during the entire semester.
- This Class committeesuggests ways to improve each student's academic performance.

IQAC

- IQAC createsa structure for deliberate, determined, and catalytic action to enhance the institution's performance in both academics and management.
- It supports actions that can assist institutions run better byintegrating a quality culture andestablishing bestpractices.

ASSOCIATIONOFALUMNI

- Alumni Association creates interactions that are mutully beneficial between MahendraInstituteofTechnologyalumniandprese ntstudentsaswellasbetweenthe alumnithemselves.
- This forum fosters a unique link between graduates and helps them stay in touch with faculty and the institution.

NATIONAL SERVICE SCHEME

- National service scheme identifies community needs and problems which involves volunteer in the problemsolvingprocess.
- This community encourages individuals to take on an awareness of social and civic duty and apply the student's skillstouseinfindingfitting solutions in individual and social problems.
- ThroughavarietyofNSSactivities, this clubestablishes consistent traits for living in a group and sharing responsibilities.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://mahendratech.org/club.php?club

5.3.3 - Number of sports and cultural events / competitions organised by the institution

14

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	<u>View File</u>

5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

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

Few of our primitive alumni are

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- 1. S.Senthil, Assistant Engineer/TNEB, Kangayam South section
- 2. K. Vignesh Gokul, Officer, Bank of Baroda, Madurai
- 3. M.Suresh, General Service, Indian Navy
- 4. T.Ashokkumar, Constable/GD in Central Industrial Security Force.
- 5. N.Priyadharshini, Founder & Chief Visionary Officer, Cueball Creatives OPC Pvt. Ltd, Salem
- 6. R.Sachithanantham, Data Scientist, Ernst & Young, Bangalore
- 7. P.Anu, Quality Engineering Senior Analyst, Accenture Solutions, Bangalore

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

5.4.2 - Alumni's financial contribution during the year

B. 10 Lakhs - 15 Lakhs

File Description	Documents
Upload any additional information	<u>View File</u>

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

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 stateof-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 topnotch professionals with enduring human and ethical values to satisfy the vision and mission of the institute.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://mahendratech.org/vision.php

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

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.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/Perspective plan has been clearly articulated and implemented

The Institution has plans for the development of Statergic/perspective plan

- 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 get National Board of Accreditation for the eligible departments
- 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.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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

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.

File Description	Documents
Paste link to Organogram on the institution webpage	https://mahendratech.org/download/6_2_2_Org. pdf
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://mahendratech.org/download/6 2 2.pdf

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	<u>View File</u>

6.3 - Faculty Empowerment Strategies

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

Welfare Schemes for Teaching Staff

- 1. Free Medical emergency transportation
- 2. Concessional transport facilities

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- 3. Waiver of fees for teachers' children in Mahendra Schools.
- 4. Medical leave and Maternity leave.
- 5. Supporting for education of the children of the teachers in the group institutions.
- 6. Sanction of one week leave for marriage.
- 7. Sponsorship for attending conference, workshops and FDPs.
- 8. Incentive for publication of papers / research articles.
- 9. Reward for producing University Ranks.
- 10. Cash awards for academic excellence / 100% pass.
- 11. Subsidised canteen fares for teachers.
- 12. Group Insurance.
- 13. Motivation for organizing guest lectures, attending orientation, refresher programmes & short term courses.
- 14. Causal leave/ earned leave / Compensatory leave to all eligible staff.
- 15. Winter and summer vacation leave to all teaching staff.
- 16. Faculty members opting to stay in hostel are given accommodation with fee concession.
- 17. Motivation to register for Ph.D taking necessary steps to apply for research proposals, getting financial grants, funds & patent etc.
- 18. Research facilities to the faculty to present their research work a conferences (national & international) and share their technical expertise as resource persons.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

63

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

19

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

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

The Governing Body of the Institution consisting of university and UGC 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 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. The last audit was prepared in the month of May 2022. No major irregularities are found in the audit. External Audit Committe verifies the income and expenditure details of the Institution as per the balance sheet. Then all the statements are forwarded to External Auditor.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	No File Uploaded

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

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 Nad (35%) with the collection of fees as prescribed by the Tamil Nadu Government higher education regulations.

Grants from Government Organizations and Non Government Organizations

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

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.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

- 24 Faculty Members successfully completed NPTEL SWAYAM exam during July 2021 to March 2022.
- Department of ECE received grant of Rs. 1,50,000/- from ICSSR, New Delhi to organize Two Days National Seminar on "Artificial Intelligence for Women Empowerment and Safety: A New Initiative with Government Policy" during 1st & 2nd June 2022.
- Dr. P. Venkatesan, AP/EEE, received Rs. 50,000 from SERB, DST, New Delhi for a seminar on "Challenges and Technical Solutions on Internet for Industrial Applications".
- Ms. G. Nirmala, AP/ECE and Mr. K. Murugan, AP/Automobile awarded Doctor of philosophy by Anna University, Chennai during March 2022.
- 6 Patents were published by the faculty members during 2021-2022.
- 13 faculty members registered Ph.D in Anna University, Chennai.
- Participated in National Institute Ranking Framework (NIRF) for the academic year 2021-2022.
- Mr. M. Sivashankar, IV year, EEE, Cleared the GATE

- Examination(2022).
- 7 Faculty Members of BME department Registered as life member from Biomedical Engineering Society of India (BMESI) in the month of April 2022.
- 5 Faculty members Registered as Life Member from Institution of Engineers (India), Kolkata in the month of March 2022.
- 371 students were placed in 59 Industries.
- 95 Faculty members were attended Orientation Programme, Refresher Course, Short Term Course and Faculty Development Programme during the year 2021-2022.
- Dr. K. Rajkumar, HoD/Mechanical Engineering, Received "Best Teacher" Award from Educators Production and welfare Association and Tamilnadu Tennis cricket Association at Namakkal during the Year 2022.
- 31 Research article was published in SCI/SCIE/Scopus and UGC listed journals through faculty members.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://mahendratech.org/download/6.5.1.pdf

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

A regular assessment of the curriculum is done through the feedback from the stakeholders of the institution i.e. students, alumni, subject experts, employers and the experts from the industry. The suggestions received from the stakeholders are reviewed by the Department Consultative Committee; relevant and innovative suggestions are considered for inclusion in the curriculum. In the process of developing the curriculum, care is taken to ensure adherence to norms and guidelines prescribed by the Anna University, AICTE and UGC.

IQAC plays a vital role in quality assurance and continuous improvement. IAQC, through regular Internal Quality Audit, reviews the teaching-learning process, adherence to procedures, updating documents, etc. Three Class Committee meetings are conducted during every semester to get feedback from faculty members and student representatives to review and improve teaching-learning. Feedback from the students is also obtained during every semester. It is collected and consolidated by Class Advisers, analyzed and any corrective action needed is taken by the concerned HOD/Department.

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IQAC also conducts an External Audit by External Peer Team, once in a year, which reviews the academic activities, progress, improvement, and suggests measures for sustenance or further improvement.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://mahendratech.org/download/6 5 2.pdf

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://mahendratech.org/download/2022-23/6. 5.3%20Annual%20Report%20of%20the%20Instituti on.pdf
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Mahendra Institute of Technology organized a webinar on "Gender Sensitization and Awareness in College Campus" with the Department

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of Computer Science and Engineering. Dr. P. JamunaRani, the HOD/Chemistry and head of the Women Empowerment Cell (WEC), welcomed participants, and Dr. I. Infanta Mary Priya from SRM Institute of Science and Technology delivered an engaging session on gender sensitization. Another event by the Women Empowerment Cell was the "Women's Health in Women's Hand" awareness program held on November 20, 2021. where Dr. C. Kavitha from Shanmuga College of Nursing covered topics like women's diseases, strategies for health issues, dietary habits, and stress management. The Women Empowerment Cell organized a seminar for "National Girl Child Day" featuring Dr. S. Nagalakshmi from Saraswathi Narayanan College, focusing on raising awareness about inequalities faced by girls and advocating for their rights, education, health, and nutrition. Government initiatives addressing gender discrimination include restrictions on child marriages and the "Save the Girl Child" scheme. The Women Empowerment Cell also hosted webinars on topics like "International Women's Day Celebrations" and "Data Protection and its Importance," with expert speakers. The Principal, Dr. T. Elango, emphasized key points regarding women's safety, while Dr. Prof. J. Rajavel, the Dean of Academics, appreciated the Women Empowerment Cell's efforts. Prof. P. Jamunarani, the HOD of the Department of Chemistry, delivered a speech on Women's Day.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

B. Any 3 of the above

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

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 are done suitably.

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 i free from health related hazards. The treatment plant has a treatment capacity of about 1 lakh litre/day. The treatment plant from Wock-Olive India Ltd... is installed. The waste water from our hostels, canteen an 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 device are in working conditions and no scraps are generated. The toners in th 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	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded
Geotagged photographs of the facilities	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Geotagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	No File Uploaded
Any other relevant documents	No File Uploaded

7.1.6 - Quality audits on environment and energy undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

A. Any 4 or all of the above

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

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File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded

- 7.1.7 The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.
- A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of facilities	<u>View File</u>
Policy documents and brochures on the support to be provided	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

To educate students about our country's unity in diversity to respect the different religion, language and culture. To create an environment that indulges students to feel that college is the second home and all faculties like a family member. Greeting and wishing each other at different festivals and invite them to have a feast to get introduced with ones culture to have amicable relations and to maintain the religious, social and communal harmony. To build

a nation of youth who are noble in their attitude and morally responsible, the college organizes and conductsseveral activities to build and promote an environment for ethical, cultural, and spiritual values among the students and staff. To develop the emotional and religious feelings among the students and the faculty, commemorative days are being celebrated on the campus with the initiative and support of the management for not only recreation and amusement but also to generate the feeling of oneness and social harmony. The college and its teacher and staff jointly celebrate the cultural and regional festivals, like Pongal, Mahendra program etc. activities are performed in the campus. The student activities are utsav day, Teacher's day, Induction program, Women's day, Yoga day orientation and farewell generally designed to allow students to get more involved and offer them opportunities in leadership, social responsibility, citizenship, volunteerism, and student employment. The college is also taken initiative to crate many students clubs to involve the students in such activities.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

Yes, The institution offers a course on human values and professional ethics OBJECTIVES: To enable the students to create awareness on Engineering Ethics and Human Values, to instill Moral and Social Values and Loyalty and to appreciate the rights of others.

HUMAN VALUES Morals values and Ethics - Integrity - Work ethic - Service learning - Civic virtue - Respect for others - Living peacefully - Caring - Sharing - Honesty - Courage - Valuing time - Cooperation - Commitment - Empathy - Self confidence - Character - Spirituality

ENGINEERING ETHICS Senses of 'Engineering Ethics' - Variety of moral issues - Types of inquiry - Moral dilemmas - Moral Autonomy - Kohlberg's theory - Gilligan's theory - Consensus and Controversy - Models of professional roles - Theories about right action - Self-interest - Customs and Religion - Uses of Ethical Theories

ENGINEERING AS SOCIAL EXPERIMENTATION Engineering as Experimentation - Engineers as responsible Experimenters - Codes of Ethics - A Balanced Outlook on Law.

SAFETY, RESPONSIBILITIES AND RIGHTS Safety and Risk - Assessment of Safety and Risk - Risk Benefit Analysis and Reducing Risk - Respect for Authority - Collective Bargaining - Confidentiality - Conflicts of Interest - Occupational Crime - Professional Rights - Employee Rights - Intellectual Property Rights (IPR)

GLOBAL ISSUES Multinational Corporations - Environmental Ethics - Computer Ethics - Weapons Development- Engineers as Managers - Consulting Engineers - Engineers as Expert Witnesses and Advisors - Moral Leadership

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	<u>View File</u>

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

A. All of the above

File Description	Documents
Code of Ethics - policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

Mahendra Institute of Technology conducted an event in view of the celebration of "Science Day". The programme was focused on the necessity of Science Day. In the beginning of the session, The Resource person Mr. G.Nagarajan, Senior Application Engineer, Vi-Solution, Bengalore highlighted the importance of Science in the current scenario. Succeeding up, Children"s Day was started by our respected Principal Dr. T. Elango and he gave a special address about the greatness of education. On account of celebrating Mahavir Jayanti, students and faculty members were invited to participate on 12th April 2022. In view of Diwali Celebration, the Resource person Mr. N. Ragavendran, Cyber Security Consultant, Salem narrated the necessity of Diwali. Further, Christmas Day was splendidly celebrated in our college premises on 22.12.2021. More than 500 students and staff members got benefitted by these events.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	No File Uploaded
Geotagged photographs of some of the events	No File Uploaded
Any other relevant information	<u>View File</u>

7.2 - Best Practices

- 7.2.1 Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC
- 7.2.1.1 TITLE: MAHENDRA OUTREACH ENRICHMENT AND SOCIAL RESPONSIBILITIES
- 7.2.1.2 OBJECTIVES: To 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, Talen 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 an 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.
- 7.2.2.1 TITLE: MENTOR SYSTEM FOR THE STUDENTS: Under graduate engineering programme students frequently required direction and counselling from the faculties to refresh their intellect. Each faculty plays as a mentor for a group of 10 to 20 students.

File Description	Documents
Best practices in the Institutional website	https://mahendratech.org/download/7_2_1.pdf
Any other relevant information	https://mahendratech.org/best_practices.php? best_practices

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Placement and Training (PAT)

The Placement Cell of MIT plays a vital role by being a platform for Corporate and young graduates to interact for mutual benefits. Center of Excellence for Industry Innovation Practices (CEIIP Hands on Training: This course is the core strength of MIT placement cell, which was established to promote Training through which the students are trained in the industries directly. Objective: It will be highly interactive during hands on training session which covers the entire 360° view on machine tool training aspects. Resource Person: These hands-on training will be conducted by the Senior Expert HansJoachim Schrodt, who has more than 30 years of professional experience as a teacher. He has a comprehensive knowledge of Mechatronics and related subjects. In-plant training creates the opportunity for the students to explore their skil & job offer after graduation. . The Institute insists the students to make use of the offer for In-plant training in order to enrich their practical knowledge. Industry -Institute Partnership: MIT has 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.

File Description	Documents
Appropriate link in the institutional website	Nil
Any other relevant information	<u>View File</u>

7.3.2 - Plan of action for the next academic year

- To arrange visits to foreign universities and industries for technical collaborations.
- To involve more alumni for students mentoring and placement orientedtraining.
- To increase number of patent filing, publishing and grant.
- To increase the number of consultancy service/projects.
- To initiate more Industry Institute interaction activities.
- NIRF- To acheive Rank band between 100-200.