Yearly Status Report - 2019-2020

Part A	
Data of the Institution	
1. Name of the Institution	**MAHENDRA COLLEGE OF ENGINEERING**
Name of the head of the Institution	**Dr Malmurugan N**
Designation	**Principal**
Does the Institution function from own campus	**Yes**
Phone no/Alternate Phone no.	**0427-2482884**
Mobile no.	**9442294359**
Registered Email	**principal@mahendracollege.com**
Alternate Email	**n.malmurugan@gmail.com**
Address	**Mahendra College of Engineering, Attur Main Road, Minnampalli, Salem 636106**
City/Town	**Salem**
State/UT	**Tamil Nadu**
Pincode	**636106**

2. Institutional Status

Affiliated / Constituent	**Affiliated**
Type of Institution	**Co-education**
Location	**Rural**
Financial Status	**private**
Name of the IQAC co-ordinator/Director	**Dr.N.Mohanasundararaju**
Phone no/Alternate Phone no.	**04272467292**
Mobile no.	**9443695412**
Registered Email	**dean.academic@mahendracollege.com**
Alternate Email	**mohanasundararaju@gmail.com**

3. Website Address

Web-link of the AQAR: (Previous Academic Year)	http://www.mahendracollege.com/AQAR/AQAR%202018-19.pdf

4. Whether Academic Calendar prepared during the year	**Yes**
if yes,whether it is uploaded in the institutional website: Weblink :	http://www.mahendracollege.com/IQAC%20Minutes/BOTH%20EVEN%20&%20ODD%20SEM.pdf

5. Accrediation Details

Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	**B**	**2.71**	**2016**	**19-Jan-2016**	**18-Jan-2021**

6. Date of Establishment of IQAC	**05-Feb-2016**

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
No Data Entered/Not Applicable!!!		

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

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
INSTITUTION	Skill and Personality Development Center For SC/ST students	AICTE	2020 1095	1768087
DEPARTMENT	MODROBS	AICTE	2020 1095	756334
INSTITUTION	Unnat Bharat Abhiyan	MOE	2019 365	50000
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	View File
10. Number of IQAC meetings held during the year :	4
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

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

• Through IQAC initiatives, 13 proposals were submitted to AICTE Quality Improvement Schemes. As the result the Institution has received funding for two proposals: o Funding for Skill Development center for SC/ST students of amount Rs.17.68 Lakhs o Funding for MODROBS of the amount of Rs.7.56 Lakhs • 3 star rating obtained from MoEs Institution Innovation Cell. • Participated in ATAL Ranking 2020 (ARIIA), and secured a ranking of band C institution (Ranked between 51 to 75). • Selected and funded by Ministry of Education (MoE) under Unnat Bharat Abhiyan scheme. • 49 programmes organized for Faculty Development. • Generated Rs.5.5 Lakhs as additional revenue through consultancy from Non Govt. agencies.

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

Plan of Action	Achivements/Outcomes
To organize more Faculty Development programmes and increase the Faculty Participation	49 programmes organized for Faculty Development and 84 Teaching staff participated in various FDP programmes
To Receive funds from Govt. agencies for the Institutional Quality Initiatives	Received Grant in aid of Rs. 27 lakhs from AICTE Quality Improvement Schemes, MoE, TNSCST, CSIR and BMESI
To file a minimum of Five Patents	Nine Patents published
To publish Text Books and Research Publications	Published 3 text books and 26 research articles
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14. Whether AQAR was placed before statutory body ?	**Yes**

Name of Statutory Body	Meeting Date
Governing Council	12-Mar-2020

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	**No**

16. Whether institutional data submitted to AISHE:	**Yes**
Year of Submission	2020
Date of Submission	05-Feb-2020

17. Does the Institution have Management Information System ?	**Yes**
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	Management Information System (MIS) performs a task of developing a complete Education Management Information System in Mahendra College of Engineering (MCE) with a sense of appropriateness and coherence for all the stakeholders of the college. The objective is to provide an extensive support in the capture, processing, storage and retrieval of relevant, up to date and demand driven data and

information for management functions including Policy planning and implementation, Decision making, monitoring and evaluation of the education system, and Follow up on the daily activities of each major entity in a streamlined, systematic and timely manner. All the data at MCE, especially those related to resources, quality processes, students and faculty, placement, hostels, etc., are operated through the MIS. MIS system in its current form is fool proof and operates according to a well defined logic, methodology for varied distinct purposes. The automated MIS module is used for several functions, which are listed below: 1. Admission 2. Students Registration 3. Students Fees 4.Examination 5. Online Assessment 6. Academics 7. Faculty and Staff members 8. Student Feedback 9. Student Performance 10. Faculty Record Book 11. Placement 12. Faculty appraisal 13. Attendance Management 14. HR Management 15. Hostels 16. Events 17. Dispatch 18. Security and 19. SMS based services

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Planning and Implementation

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

The Institution is affiliated to Anna University, Chennai and the curriculum and syllabi prescribed by the University are strictly adhered. In order to have effective teaching - learning process, the Institution has identified the following steps of pedagogic and educational administrative procedures. • Prior planning of Academic activities and preparation of institute academic calendar in alignment with the University Academic schedule. • Formulation of objective driven teaching plan for all courses at the beginning of the semester. • Updating the library facilities and e-journals in line with Curriculum and syllabus changes of the University for the Regulations in force. • Organization of the Course files. Course File 1: • Vision & Mission statements of the Institute and Department • Programme Educational Objectives (PEOs) Statements and mapping with PO and CO • Course Syllabus • Course Data Sheet • Lesson plan • Course materials (Unit Wise) • Lecture notes • Content beyond syllabus • Power point presentations • Internal Test Question papers with key (Three tests per semester) • Assignments topics • Tutorial Problems • Question Bank & University Question papers • NPTEL Video Lecture CD Course File 2: • Time table • Teacher Log Book/Attendance Register • Continuous Evaluation marks • Internal Test Analysis • Corrective & preventive actions • Sample answer sheets of Test papers • Sample Assignments sheets • Record of Tutorial Classes & Remedial Classes • Retest Marks & Analysis • Details of Add-on programs • University Result Analysis Students Attendance and Assessment record includes the following: • College & department Vision and Mission • Programme Specific

Outcomes (POSs) • Faculty details, programme, branch, course details. • Details of Syllabus completion • Programme Outcomes • Programme Educational Objectives (PEOs) • Course Objectives (COBs) • Course Outcomes (COs) • COs Mapping with POs and PSOs • PEOs Mapping with POs and PSOs • Course Syllabus • Online Courses- NPTEL details • Course delivery plan & Record of class work includes the Topic covered, Mode of delivery, date & period of execution. • Content beyond syllabus • Details of Assignments • Details of Tutorials • Portion Covered • Faculty member's time Table • Class Time Table • Details of students -Number of hours present, percentage of attendance, Assignments Marks, Test Marks, Internal Assessment Marks, Remedial test marks, No. of COs attained, University Exam marks. • Slow learners class attendance • Students Counselling Particulars includes the following details: • Date of Counselling, Name of the student, date of counselling, Faculty & Student Signature • Performance Analysis of Students. • Verification of Academic Schedule, Unit Wise with date of Completion by Head of the Department concerned and Principal • Head of the department and Dean - Academics do the periodical review of the portions covered by the faculty members and the students' attendance. • Systematic examination process, standard question papers as per Bloom's Taxonomy, proper and prompt evaluation and dispatch of reports to parents. "Outcome based approach" is adopted for the effective delivery of the curriculum.

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
Industrial Automation with PLC	00	20/07/2019	4	Employabil ity	Yes
Bio Medical Diagnostics	00	07/09/2019	4	Employabil ity	Yes
Solar Energy Basics	00	17/08/2019	4	Employabil ity	Yes
CNC operations and programming	00	20/07/2019	4	Employabil ity	Yes
STAAD Pro- Structural Analysis and Design	00	20/07/2019	4	Employabil ity	Yes
Open Source tool- Weka for Data Mining	00	10/08/2019	4	Employabil ity	Yes
IOT applications in Healthcare	00	10/08/2019	4	Employabil ity	Yes
Entrepreneurship Development for	00	21/09/2019	4	Entreprene urship	Yes

Beginners					
Smart Manufacturing and Automation with Industry 4.0	00	04/01/2020	4	Employability	Yes
Graphical Database Tool-GraphDB	00	04/01/2020	4	Employability	Yes
Non-Destructive Testing	00	04/01/2020	4	Employability	Yes
Basic Concepts of Python Programming V5.0	00	04/01/2020	4	Employability	Yes
--	Diploma Courses	Nil	Nil	As Non-Autonomous College we are not eligible to conduct Diploma Courses	Nil

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
No Data Entered/Not Applicable !!!		
[View File](#)		

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

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Electronics and Communication Engineering	01/07/2019
BTech	Information Technology	01/07/2019
BE	Mechanical Engineering	01/07/2019
BE	Mechatronics Engineering	01/07/2019
BE	Biomedical Engineering	01/07/2019
BE	Computer Science and Engineering	01/07/2019
BE	Electrical and Electronics Engineering	01/07/2019
BE	Civil Engineering	01/07/2019
ME	Power Electronics and	01/07/2019

	Drives	
ME	Engineering Design	01/07/2019
ME	Communication Systems	01/07/2019
ME	Computer Science and Engineering	01/07/2019
Mtech	Information Technology	01/07/2019

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

	Certificate	Diploma Course
Number of Students	963	Nil

1.3 – Curriculum Enrichment

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

Value Added Courses	Date of Introduction	Number of Students Enrolled
No Data Entered/Not Applicable !!!		
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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Mechatronics	41
BE	Biomedical Engineering	95
BE	Electrical and Electronics Engineering	62
BE	Mechanical Engineering	92
BE	Civil Engineering	31
BE	Computer Science and Engineering	65
BTech	Information Technology	34
BE	Electronics and Communication Engineering	153
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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

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

Feedback Obtained
The institution collects feedback on curriculum aspects and courses at department level from different stakeholders such as students, alumni, faculty, employers and parents every Academic year. The Students' Feedback on curriculum

and teaching learning process at Mahendra College of Engineering is designed to get significant inputs from students, that can be used towards the enrichment in the quality of course delivery, as well as student learning experiences. For the academic year 2019-2020, students' feedback is obtained from around 1000 students about the curriculum and teaching learning process of Regulations 2017 in the subjects of senior classes. Majority of the students agreed that the syllabus is challenging and the allocation of credits is appropriate in relation to the level of course work. The students' feedback revealed that the elective courses introduced by the university are much appropriate to the specialization streams and technological advancements. Employers are major stakeholders, feedback of whom gives input regarding enhancing the employability of students. Their feedback is valuable, as it provides the basis for further enrichment in curriculum aspects and overall performance of students. Feedback is received from major recruiters like NU Technologies, Mphone Electronics, JBM Private Limited, Nandha Infotech etc. Feedback is collected from the employers on the Curriculum and Syllabi. The employers are satisfied with the syllabi provided by the Anna University and they suggested the need for more practical sessions to improve the skills of students. This point is addressed by augmenting the duration of practical sessions. Feedback is also received from the parents for the parameters on the curriculum designed by university and the syllabi to understand its capability of improving the knowledge and skills of their wards. Alumni of MCE appreciated the existing pattern of curriculum and they strongly agreed with the content of syllabus, as it enhances the employability opportunities. They also found that the syllabus followed is relevant to real life situations and useful in undertaking internship and projects. Their valuable suggestions will support our students in employment, create a consciousness of expectations of the industry in fresh graduates. Teachers' feedback strongly agrees with the syllabus in clarifying the teaching goals. They provide the feedback on heaviness of content in some subjects, irrelevance in the flow of the courses of the programme and requirement of some additional topics in few subjects. As teachers play an essential role in designing and implementing the curriculum, the inputs received from their feedback was taken into concern for further necessary action wherever applicable. The feedback received from different stakeholders is analyzed, corrective actions are initiated to prevail over any deficiencies indicated in the feedback and the valuable suggestions given by the stake holders are sent to Affiliating University for necessary action.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
No Data Entered/Not Applicable !!!				
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2.2 – Catering to Student Diversity

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

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	1388	37	176	32	Nill

2.3 – Teaching - Learning Process

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

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
208	208	19	50	15	752

View File of ICT Tools and resources

View File of E-resources and techniques used

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

During their four years of study in U.G as well as two years in the case of P.G., students often need mentoring, guidance and counseling from a senior person, who will be a great guide and friend within the campus above their level. Obviously, a student should have the same mentor all through his/her journey. The system practiced contributes immensely to the improvement of the overall academic quality. The students will be greatly benefited by continuous expert guidance. Number of students allotted to a mentor depends on the total number of students enrolled for different programs in a department. Each faculty will be the mentor of a group around 25 students. Department faculty members will continue to be mentors for the same group of students from the first year, till the completion of their programme. Mentor will have frequent discussions on various issues including their needs in the college and special guidance in the participation of Seminar / Conferences and technical event, any academic difficulty faced and career development. The objectives of the practice followed by the institution are to • Monitor the students' regularity and discipline • Enable the parents to know about the performance of their wards on a regular basis. • Improve teacher-student relationship • Counsel students to provide confidence to improve their quality of life. • Guide students to choose a right career path for job, higher studies, entrepreneurship, etc. A mentor can always contribute more for the benefit of the students. 1. Meet the group of students at least twice a month. 2. Continuously monitor, counsel, guide and motivate the students in all academic matters. 3. Advise students regarding choice of electives, project, summer training etc. 4. Contact parents/guardians if situation demands e.g. academic irregularities, negative behavioral changes and interpersonal relations, detrimental activities, etc. 5. Advise students in their career development/professional guidance. 6. Keep contact with the students even after their graduation. 7. Intimate HOD and suggest if any administrative action is called for ... and other needy areas The mentors are made to attend Mentoring the Mentor Program once in six months for necessary motivation and to understand the new challenges demanded by the current Socio- Economic status of the students. The mentoring process is reviewed by the respective department heads and Principal at regular intervals. This mentoring is for the overall development of the student.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1425	102	14

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
208	208	Nill	32	20

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

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
No Data Entered/Not Applicable !!!			

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2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
No Data Entered/Not Applicable !!!				
[View File](#)				

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

For all theory and practical courses (including project work) assessment is continuous. This continuous assessment is done as per the procedure given below: Tests Conducted by the Institution: Two term tests and one model Examination per theory course conducted for all theory courses. One model examination per practical subject conducted for all practical courses. The department will carry out internal assessment on all courses based on internal test performance of the students. Continuous evaluation procedure is followed for practical subjects. Effective implementations of evaluation reforms of the University are strictly followed and those initiated by its own by the institution are ensured strict compliance of process and procedure suggested by the University. The Institution has taken various measures for the effective implementation of the evaluation reforms within the purview of the rules and regulations of the University. The examination committee meets periodically to discuss all the examination related matters. At Institution level, effective implementation of tutorial and mid-semester tests takes place and results are informed to the students within seven days. The students can view their evaluated answer scripts, discuss the same with faculty concerned and will be sorted out immediately. Retests are conducted to the students if they ought to improve their marks. Third test is conducted similar to the end semester examination. For all the internal tests, Question paper is prepared based on revised Bloom's Taxonomy.

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

Academic calendar is prepared by the institution as per the following procedure: The University publishes in advance, the academic schedule containing plans for curricular activities based on the available working/teaching days as per University norms. It clearly specifies the dates and deadlines for entering the student's attendance and continuous evaluation test marks. Academic calendar of the Institution is prepared in line with the University Academic Schedule. Approval for the same is given by the Principal in consultation with Dean- Academics. The academic calendar is circulated to all faculty members before the commencement of the semester and to the students on the day opening/reopening along with time-table. Lesson plans are then prepared based on the academic calendar. The lesson plan comprises of content, learning aid and methodology, faculty approach and course outcomes. The lesson plan generally highlights the content and total lectures for completion of the curriculum. Academic calendar includes schedule of curricular activities, assessment dates, technical events, class tests, submission of mark lists, placement Training slots, list of holidays and extracurricular activities. Monitoring of implementation of lesson plan is done by Heads of the departments and corrective actions are suggested wherever required. All the continuous Internal Evaluation tests are conducted strictly as per the Academic Calendar.

2.6 – Student Performance and Learning Outcomes

	2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

http://mahendracollege.com/downloads/2.6.1.pdf

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
No Data Entered/Not Applicable !!!					
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2.7 – Student Satisfaction Survey

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

http://www.mahendracollege.com/downloads/SSS%20Questionnaire%202019-20.pdf

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Resource Mobilization for Research

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

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
No Data Entered/Not Applicable !!!				
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3.2 – Innovation Ecosystem

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

Title of workshop/seminar	Name of the Dept.	Date
Online Session on "Intellectual Property Rights"	**Mechanical Engineering**	**25/11/2020**
Online session on "National Innovation and Start-up Policy"	**Mechanical Engineering**	**04/11/2020**
Online session on "Entrepreneurship Development Phases"	**Mechanical Engineering**	**21/10/2020**
3 Day Seminar on "Entrepreneurship Awareness Camp"	**Mechanical Engineering**	**05/03/2020**
Seminar on "How to plan for Start-up and legal and Ethical Steps"	**Mechanical Engineering**	**20/02/2020**
3 Day Seminar on "Entrepreneurship Awareness Camp"	**Mechanical Engineering**	**13/02/2020**
One Day Seminar on "Hangout with Successful	**Mechanical Engineering**	**10/02/2020**

Start-ups"		
3 Day Seminar on "Entrepreneurship Awareness Camp"	Mechanical Engineering	30/01/2020
One Day Workshop on "Product Design"	Mechanical Engineering	08/01/2020
One Day Seminar on "Product Development Phases - Story Telling"	Mechanical Engineering	03/01/2020
Workshop on National Innovation and Start-up Policy (NISP)	Mechanical Engineering	19/12/2019
A Paradigm of Research from Synopsis to Thesis	Electronics and Communication Engineering	08/06/2020
One day Seminar on Industry 4.0"	Mechatronics Engineering	21/02/2020
Webinar on Upcoming open source technology innovations	Computer Science and Engineering	18/05/2020
Seminar on IPR and its Career opportunities	Computer Science and Engineering	10/07/2019
Seminar on Promoting Academic Integrity and Prevention of Plagiarism	Computer Science and Engineering	23/12/2019
Seminar on Industry Innovation Program	Computer Science and Engineering	15/07/2019
Seminar on Innovation for Resurgent India	Information Technology	22/08/2019
Seminar on "Strategies of innovator in finding success of Digital Marketing"	Information Technology	06/06/2019

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

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
No Data Entered/Not Applicable !!!				
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3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
No Data Entered/Not Applicable !!!					
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3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
4	5	1

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

Name of the Department	Number of PhD's Awarded
Electronics and Communication Engineering	10
Computer Science and Engineering	1

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

Type	Department	Number of Publication	Average Impact Factor (if any)
No Data Entered/Not Applicable !!!			
View File			

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

Department	Number of Publication
Mechanical Engineering	1
Electrical and Electronics Engineering	3
Electronics and Communication Engineering	7
Computer Science and Engineering	9
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3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

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

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

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
No Data Entered/Not Applicable !!!						
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3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
No Data Entered/Not Applicable !!!				
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3.4 – Extension Activities

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

Title of the activities	Organising unit/agency/	Number of teachers	Number of students

collaborating agency	participated in such activities	participated in such activities
No Data Entered/Not Applicable !!!		
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 3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

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

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

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

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

Nature of activity	Participant	Source of financial support	Duration
No Data Entered/Not Applicable !!!			
View File			

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

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

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

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
No Data Entered/Not Applicable !!!			
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CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development

115	114.6

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Seminar Halls	Newly Added
Laboratories	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added

No file uploaded.

4.2 – Library as a Learning Resource

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

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
Bloom Tech	Fully	6.3	2015

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	36762	13237215	2500	1114290	39262	14351505
Journals	1166	2860427	185	723840	1351	3584267
e-Journals	8800	217844	595	868605	9395	1086449
e-Books	2206	Nill	250	Nill	2456	Nill
Digital Database	28903	Nill	2800	Nill	31703	Nill
CD & Video	2579	154740	340	185910	2919	340650
Weeding (hard & soft)	2	8095	Nill	Nill	2	8095

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

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
No Data Entered/Not Applicable !!!			
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4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/ GBPS)	Others

Existing	646	474	0	30	90	12	40	64	0
Added	0	0	0	0	0	0	0	0	0
Total	646	474	0	30	90	12	40	64	0

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

64 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
MCE Media Center	http://www.mahendracollege.com/mediacentre.php?facilities&mediacentre

4.4 – Maintenance of Campus Infrastructure

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

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
30	32	54	55

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

The Institution has appointed several personnel for maintaining the infrastructure by way of building maintenance, transport, furniture and generator operator in case if power shut downs. Separate Complaint registers were maintained for various services like electrical, plumbing, housekeeping, transport, canteen etc. The people, who work here on maintenance of the college, will report regularly about breakage of instruments and devices to higher authority. Computing Facilities-Maintenance Utilization: System Admin and Technical Team members are responsible for maintenance of computers and network facility of the institution. In addition to that, each department has a non-teaching staff for respective laboratories to maintain systems available in the department periodically. Institution follows the online Maintenance and Services procedure for Systems. Faculty members and Students can directly send the systems complaint to the support@mahendra.info mail. Due to failure of SMPS, UPS, booting process of system, Printer toner-refilling process, Complaints are registered through email (support@mahendra.info) and ticket is generated for the corresponding complaints. If complaints are minor then this problem is rectified by the Technical Team immediately. Otherwise, this problem is overcome within a week by company services. Maintenance of Electrical and Electronics Equipments: • Regular check up of equipment is carried out at the end of semester. • Breakdown register is maintained in the laboratories. • As per the requirement minor repairs are carried out by lab assistant of faculty member. • Major repairs are outsourced by based on institutional procedure. • The measuring Instruments are calibrated regularly by standards companies. • Stock verification is done at the end of every year by staff members from other department and the report is submitted to the Principal. Library: Institution has constituted Library Advisory Committee for effective accessibility and availability of learning resources to students and faculty. Library maintenance is computerized and automated with regular/constant up-keeping. The committee follows up with the librarian and regularly monitors the library to ensure and

maintain all text books, reference books, articles, competitive examination books, magazines, journals, e-magazines, e-books and e-journals. Sports: Physical Education Director will have the responsible for maintenance of sports goods, play fields and other items related to the Physical Education. They are maintaining sports goods information in stock ledger. They are properly maintaining the items for indoor games, outdoor games, boy's hostel gym equipments and Girl's hostel gym equipments. Stock verification is done periodically at the end of every year which gives information about working status of items and defective items. Transportation: Transport in-charge is responsible for allotting the routes considering the number of students and faculty travelling from various locations to ensure safe and comfortable travel. The transport in-charge also maintains college vehicles and obtains necessary clearance certificates, insurance, and permits from the RTA. Transport in-charge allocates faculty in-charge for each bus and they are responsible for taking students attendance regularly in the college bus. Classroom: Mahendra College of Engineering has a supervisor who regularly maintains the boards, benches, fans and lights. Class Advisor act as a supervisor to check the class room amenities.

http://www.mahendracollege.com/downloads/4.4.2%20Maintenance%20of%20Facilities.pdf

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Management Scholarship	514	7791500
Financial Support from Other Sources			
a) National	Government Scholarship-(SC/ST/BC/MBC/First graduate Financial Support)	859	51423600
b)International	00	Nill	0
No file uploaded.				

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

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
No Data Entered/Not Applicable !!!				
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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2019	GATE coaching	50	Nill	Nill	Nill

2019	Competitive Examinations - Mahendra Training Academy (MTRACE)	662	312	5	2

No file uploaded.

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

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

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
No Data Entered/Not Applicable !!!					
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5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
No Data Entered/Not Applicable !!!					
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5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
Any Other	5

No file uploaded.

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

Activity	Level	Number of Participants
No Data Entered/Not Applicable !!!		
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5.3 – Student Participation and Activities

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

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	00	National	Nill	Nill	00	00

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

The Institution provides ample avenues for developing technical skills, updating knowledge, personality development and service to the society through various associations, club activities and societies. There will a faculty Coordinator to guide the students in the smooth and effective functioning of the Associations. Department Level: Students are integral part of the various academic and administrative bodies. Following Associations at department levels have students' representation: • Mechanical and Mechatronics Engineering Students Association • Electrical Engineering Students Association • Electronics and Communication Engineering Students Association • Civil Engineering Students Association • Computer Science and Information Technology Students Association • Biomedical Engineering Students Association The Composition of the Office Bearers of the above associations is as follows: Chairman - A Student from Final Year (Boy or Girl) Secretary - A Student from pre Final year (Boy or Girl) Treasurer - A Student from second year (Boy or Girl) Member - all the students of the department. Faculty Coordinators: Class advisors of the final year. Above committee will plan and execute various technical events organised by the department. There will be sub-committees within this committee. During the department events, these sub- committees will have specific tasks assigned to them like arranging and inviting the Chief guest,Registration, Compering, decoration, Certificates printing and distribution, publicity etc., All these sub- committees will have students from all the years.Hence, there is coordination among the students and their skills in organising a function are improved. Department symposia are completely planned, organized and conducted by the students under the guidance of the faculty. Students play vital role in Institutional activities such as organizing Cultural festivals, Motivational lectures, Annual day, Sports day, Graduation Day, Independence day, Republic day etc. All the students voluntarily involve in various works in organising above functions.The student representatives also participate in the preparation of college calendar every year to plan college activities Department wise. The students involve themselves in various club activities. Each club has a structured way of functioning. Chairman of the club will be from Final year, Secretary from the third year and representative from second year and many other students as members. Students can become a member of any club of his / her choice. No student is compelled to join any club. Many students take leadership roles and organize the events and get very good exposure. The student representatives also actively participate in Sports committee, cultural committee, magazine committee, calendar committee etc. Final year students show good interest in arranging the Placement Training sessions. Even after some of the students are placed, they help their friends to get placement through arranging mock interviews, personality development etc., This is a very healthy sign of involvement of students.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Mahendra College of Engineering (MCE) has an officially registered Alumni Association (Reg. No. No:133/2011). This Association has alumni, who are the Brand Ambassadors of the Institution residing in different parts of the world. MCE Alumni Association is an independent, non-profit membership organization. The association endeavors to strengthen the ties among its alumni by addressing the concerns of members with a view to learn and adapt to changes that are necessary. The Alumni Association of MCE works as an interface for maintaining

the relationship with the alumni and to involve them in the development and growth of the institution. The Office bearers of the MCE Alumni Association include Chairman, Vice Chairman, Secretary, Treasurer and Executive Committee Members. The vision of MCE Alumni Association is to establish a strongly connected Alumni Institution. It acts as a bridge between the students, management, staff and alumni of MCE for mutual benefit and synergy. MCE Alumni Association believes in fostering a strong alumni network that not only helps former students remain connected but also provides an avenue for the philanthropic spirit of successful alumni. This Association will provide a platform for sharing intellectual, cultural, career and professional experiences not just with the present students, but also with other alumni. The MCE Alumni Association will also interact with the alumnus for the campus drive and also for signing MoUs. MCE Alumni is made to involve in different activities such as • Department Advisory Committee member for the review of curriculum. • Industrial mentor to enhance the students' knowledge with respect to industry standards in the current area . • Presenting guest lecturers to enrich the student skills. • Providing training for the final year and third year students. They conduct Mock interviews, Group Discussions which helps the students to face the campus drive. The main objectives of MCE Alumni Association are Providing Technical Moral support to MCE alumni to conduct Research, Encourage social networking and support gatherings for alumni all across the globe, Encourage the alumni to publish e-articles, Encourage and support the budding engineers with sharing experiences of alumni in different domains, Encourage the alumni to participate in the Projects Placement of students, Maintain a directory of the alumni, Help the alumni to maintain contacts with the college and their friends, Arrange annual gatherings of the alumni and enroll fresh members, Alumni Day is being organized every year as a calendar event by the Management to bring the alumni of various departments to celebrate their memories with college and contribute back to the college through support in placement, career guidance for the present students. Based on the convenience of the Alumni, Alumni chapters are held at various locations to connect with them in a better way. Alumni Coordinators of the departments play a significant role in organizing the Alumni day in a grand manner.

5.4.2 – No. of enrolled Alumni:

456

5.4.3 – Alumni contribution during the year (in Rupees) :

850000

5.4.4 – Meetings/activities organized by Alumni Association :

Alumni meeting was conducted on 21.09.2019 at Mahendra College of Engineering, Salem in which 375 alumni participated.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

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

Decentralization: The institution functions with a decentralized governance system. The heads of the department have been permitted with the authority of deciding the activities and delegating the responsibilities to the staff members. Every department decides individually on timetable, subject allocation, purchase and maintenance of equipment and consumables, organizing conferences, symposia, guest lectures and workshops and recommends necessary industrial visits, in-plant trainings, internships and MoUs in consultation with the Department Advisory Committee. Heads of Department have the powers to

plan their academic, co-curricular and Extra-curricular activities, technical events, Resource Persons to be invited etc., aligning with the Academic Calendar of the Institution. Principal and Heads of Department are given financial powers up to Rs.25000 and Rs.5000 respectively for the purchase of consumables and any other contingency. Participative management: The Institution is functioning effectively with the culture of participative management which enables the faculty and students to give their opinion and suggestions for improvement. All the academic activities are decentralized and decisions are taken based on discussion and deliberations in the class committee meetings, department meetings, faculty meetings, HODs' meetings with Principal and HODs meetings with Chairman. The Principal coordinates with the departments, administration and management. Participative management provides extensive scope for having collaboration among the departments and ensures the quality of planning and implementation of all the activities in the institution uniformly and as a team. Management, Principal, Heads of Department, Non teaching Staff and administrative staff work towards a common goal of achieving Excellence. Various processes where this is evident are • Admission Process • Staff Student Welfare Activities • College level Events Functions • Training Placement • Alumni Interaction • Industry-Institute Interaction In all the above processes, Management , Principal, Heads of Department, Non teaching Staff and administrative staff work together in a conducive atmosphere, with a sense of belonging and keeping the goal in mind. The Management understanding the academic and other pressures faced by the faculty, is kind enough to arrange the Faculty Retreat annually in which the members from the management also participate. Total cost of the faculty retreat is borne by the management and the faculty members participate in this annual event with enthusiasm. With a sense of satisfaction, they thank the management for this nice gesture.

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

Yes

6.2 – Strategy Development and Deployment

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

Strategy Type	Details
Admission of Students	As an affiliated institution, admissions are carried out as per the norms and guidelines of Anna University, Chennai and the State Government. The Institution follows the procedure of 65 percentage of seats admission through Centralized Counselling conducted by TNEA (Tamil Nadu Engineering Admissions), Government of Tamil Nadu and of 35 percentage seats admission by Consortium of Self-financing Engineering Colleges of Tamil Nadu. The admission by the Consortium is on merit basis and every student is allotted a rank by the Consortium. All the admissions are finally verified and approved by the Directorate of Technical Education, Government of Tamil Nadu. The fee structure for both Government Quota and Consortium Quota is fixed by fee fixation committee of Government of Tamil Nadu headed by

	Retired Chief Justice Honourable Balasubramaniam as a mandate of Supreme Court of India.
Industry Interaction / Collaboration	MoUs have been signed with the leading industries to take up • in-plant training at the end of every semester during the vacation period • internship for eligible students in the pre-final and final year • Training in the cutting edge technologies by the experts from the Industry either in the campus or in the Industry • Placement assistance • Inviting the experts from industries for guest lectures, seminars, workshops and conferences • Consultancy and testing activities for providing solutions to the Industry problems. The Institution is a member of Indian Chamber of Commerce and Industry, Salem which has more than 150 Industry members. Through them, the students and faculty members of the Institution are benefitted in terms of guest lectures, Industrial visits and Students Project guidance.
Human Resource Management	• Recruitment of qualified teaching and supporting staff as per the AICTE norms starts with newspaper advertisements. After receipt of applications, they are scrutinized for the consistency of the academic career of the candidate. Shortlisted candidates are called for interview. The interview panel consists of external and internal experts as per AICTE and University norms. • The HR department conducts orientation programmes and pedagogy for newly recruited faculty members. • The existing faculty members are assessed through self- appraisal, students' feedback Performance Appraisal System. • Faculty members with good academic records are appreciated and rewarded. Various welfare schemes are implemented as per Human Resource Policy for Faculty members and staff. All the information regarding the duties and responsibilities, availing management support, leave rules, promotional policy etc.,are compiled in the HR Policy Hand Book and uploaded in the Institution website for reference.
Library, ICT and Physical Infrastructure / Instrumentation	•Library is fully computerized and contains 39262 books, 1351 Journals and 9395 E-Journals. All the books are bar-coded. Bar code laser scanners are used

	in the issue counter for book transaction. Digital Library is a part of Main library to browse and use the E- Resources including E-Journals. • Every class has one library hour per week to enable the students to access the reference books and journals. • Every department has a library with adequate collection of text, reference books journals and Project works. • Every department has individual smart class room • Wi-Fi campus with a Internet Bandwidth of 64 Mbps • CCTV and security systems provided in main entrances, corridors and important places.
Research and Development	• Recognition in the form of awards / incentives are given to those faculty members who guide research works and/or do research work. • All eligible faculty are encouraged to pursue Ph.D. programme either in the college or outside the college •Funds provided for the purchase of equipments required for research work, whenever needed. Incentives are given for publishing articles in refereed journals with high impact factor. • Necessary TA and DA are granted to members of faculty for attending Seminars / Conferences / Short Term Courses in India. Grant of registration charge and travel to attend International Conferences abroad • Institution has an innovation cell to nurture and foster young researchers and entrepreneurs to convert their ideas into a Product by way of providing necessary facilities within the campus.
Examination and Evaluation	An Examination cell comprises of Principal as chairperson, Examination Cell Coordinator as member secretary and one faculty member from each department as Examination coordinator. •Three Continuous Internal Evaluation (CIE) Tests are conducted in a semester. • The answer scripts of CIE tests are discussed with the students within three days of conduct of test and marks are displayed in the notice board. If the students have any grievances in the evaluation, immediate actions are taken by the faculty member. • As an affiliated Institution, the faculty members of the Institution have been assigned with various duties like examiner, chief examiner, key

	preparation for the question papers etc., Examiners do the answer scripts evaluation of theory examinations and practical examinations assigned by the Zone VIII Centre of Anna University consisting of 41 colleges.
Teaching and Learning	Creative Learning Methodology (CLM) with Revised Bloom's Taxonomy (RBT) and Customized Learning methodology propose a very interesting and informative concept of teaching which has been followed in the Institution . • Self-learning, peer learning, project based learning and group learning are practiced . Different teaching methodologies are adopted by the faculty members to cater to the needs of different categories of students based on their learning styles and patterns. • Outcome Based Education (OBE) has been incorporated in the process.
Curriculum Development	As an affiliated College, the Institution follows Anna University curriculum. Even then, there is an Academic Advisory Committee to discuss and devise syllabus for content beyond syllabus to meet the requirements of Industries and to fill the gap in the regular syllabus on advanced topics. This is covered in the course delivery along with regular syllabus and additional test is conducted exclusively for content beyond syllabus. The feedback collected from the alumni and parents regarding the curricular aspects are consolidated and discussed in the Academic Advisory Committee meeting. Based on the recommendation of Academic Advisory committee, suggestions are submitted to affiliating university for consideration, while revising the curriculum. Emerging areas which are not included in the curriculum are offered as Add-on Courses.

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

E-governace area	Details
Planning and Development	Perspective plan for the period 2018-2023 uploaded in the ERP Software. Milestones achieved are updated. Plans to be achieved are followed up by periodical reviews.
Administration	Various activities such as Scholarships, HR functions, event

	management etc., are managed through the ERP Software.
Finance and Accounts	**Fees collection from students, salary payment to staff, utilisation of grants, day to day expenditure is managed by ERP Software.**
Student Admission and Support	**Admission is done with Management Information System for both Government and Consortium Quota students. The profiles of all the students are collected, maintained and used digitally. This is also shared with affiliating University. All the data regarding different student categories and the support provided through scholarships are managed through ERP Software.**
Examination	**All the examination related activities such as students registration, seating arrangement, hall allocation, Internal Evaluation marks, End Semester Examination marks etc., are managed by online Examination System Web Portal of Anna University, Chennai. Both Staff and students can login with their credentials in the web portal to do any exam related activity. However the tests conducted for content beyond syllabus is maintained digitally by the faculty members in the Department.**

6.3 – Faculty Empowerment Strategies

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

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
No Data Entered/Not Applicable !!!				
[View File](#)				

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

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
No Data Entered/Not Applicable !!!						
[View File](#)						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher

Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
No Data Entered/Not Applicable !!!				

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

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
32	32	7	7

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Free transport facilities. Waiver of fees for teachers' children in the Institution. Medical leave and Maternity leave. Supporting for education of the children of the teachers in the group institutions. Marriage gifts with the sanction of one week leave Gifts and mementoes during Teachers' Day celebrations Sponsoring for attending conference, workshops and FDPs Incentive for publication of papers / research articles Reward for producing University Ranks Cash awards for academic excellence / 100 pass Special Study Leave (SSL) to pursue higher education Faculty Retreat. Subsidized canteen fares Group Insurance	Educational support to the children of the staff. Marriage gifts with the sanction of one week leave. Granting medical leave / maternity leave. Free transport facilities. Special Study Leave (SSL) for higher studies. Incentive for attending orientation programmes, workshops and conferences. Gifts during Teachers' Day celebrations. Faculty Retreat. Incentive for dress materials Incentive for vehicle utilization or transport allowance Incentive for dress materials for housekeeping staff. Subsidised canteen fare Group Insurance	Government Scholarships Management Scholarships Free Transport facilities to SC/ST Students Free food Hostel facilities to SC/ST Students Cash awards for University Rank Holders, Semester Toppers Cash awards for good performers in sports Culturals

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

Internal Audit is conducted by officials deputed from Trust office periodically and the reports are obtained before the conduct of the external audit which is normally done after the closure of the accounts in all respects. External Audit is carried out by the Statutory Auditors after 30th June of the subsequent year. During the course of Internal Audit, all required steps are taken to regularize the accounts and to obtain confirmations for the credit balances, to collect documentary evidences wherever necessary in respect of payments,

compliances of T.D.S. and Statutory Formalities and Reconciliation of Unit wise balances with the Control Accounts and Bank Reconciliations.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Individuals	100000	Donations to conduct technical events
No file uploaded.		

6.4.3 – Total corpus fund generated

9700000

6.5 – Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Dr. R. Murugesan Former Vice Chancellor, Anna University of Technology, Madurai and Former President, ISTE	Yes	Senior Professors from Mahendra Group of Institutions
Administrative	Yes	Dr.P Ramachandran, Professor (Retd), Academician	Yes	Internal auditors from Mahendra Group of Institutions

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

Parent –Teacher meeting is organized by individual departments at least twice in a year. Institution's achievements and events are shared with the parents. During Parents Teachers meeting, feedback regarding curriculum development, Placement opportunities, co-curricular and extracurricular aspects are collected from parents. Also the performance of their wards in the Internal Tests and other activities are discussed. • Parents are invited during the NAAC and other committee visits to give their feedback and suggestions to peer team members. • Awareness given to the parents about the importance of learning foreign languages and subsequent international placement opportunities for their wards. • Class advisors are continuously in touch with the parents to discuss the academic activities. • Attendance report and Internal test performance of the students are sent through SMS and letters to their parents.

6.5.3 – Development programmes for support staff (at least three)

• Neuro-linguistic programming (NLP) was organized for the support staff. • Yoga and Meditation classes were arranged for the support staff members to maintain their physical and mental health. • Basic computer training on MS office was conducted for Office staff to improve their computer skills. • Spoken English classes were conducted for the support staff to improve their communication skill. • A workshop on "Skill Development " was conducted for the

benefit of the support staff.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

Post Accreditation initiative(s) • Developed action plan for effective implementation of outcome based teaching and learning. • Feedback mechanism is improved. • Improved documentation for the action taken on slow and advanced learners. • Improved rubrics for evaluation of Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs). • Different teaching methodologies are employed by the faculty members for effective delivery of course contents. • Language laboratory is made more interactive. • Alumni association is made more vibrant by increased number of registrations and interactions. • Performance appraisal system for teaching and non-teaching staff is improved. • IQAC is made more functional and contribute effectively for the Quality Management Systems. • Pedagogical training is conducted before the commencement of every semester. • Stringent Internal Administrative and Academic Audit conducted. • Rainwater harvesting system is effectively maintained to collect the entire rain water in an existing well. This system was appreciated by the officials of Jal Shakti Abhiyan and referred as the model to other Institutions.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	Yes
d)NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
No Data Entered/Not Applicable !!!					

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CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

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

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Women Safety (Essay Writing)	24/07/2019	24/07/2019	102	Nill
Seminar on importance of the women Infanticide	12/08/2019	12/08/2019	77	31
Guest Lecturer on Women Empowerment	16/09/2019	16/09/2019	98	19
Health Awareness Programme	07/01/2020	08/01/2020	98	122

International Women's Day Celebration	08/03/2020	08/03/2020	144	Nill
Webinar on "Computer Education Programme for rural area women and girl students"	05/06/2020	05/06/2020	157	45
Udaan: Women status and fight for equal rights for them	27/07/2020	27/07/2020	141	54
Awareness on Women Health and Hygiene	01/10/2019	01/10/2019	465	Nill
Awareness program for Girls safety in association with all Women Police Department	20/12/2019	20/12/2019	397	Nill

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

Percentage of power requirement of the University met by the renewable energy sources
a) Connected load of the Institution : 177 KW i) Grid Power connected : 200 KVA ii) Standby power : 385 KVA and 125 KVA b) Connected load for Light sources (in Watts): 2900 c) The solar power connected to light (in Watts): 900 Percentage of solar power connected to light 30 Percentage

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	Nill
Provision for lift	No	Nill
Ramp/Rails	Yes	Nill
Braille Software/facilities	No	Nill
Scribes for examination	Yes	Nill
Rest Rooms	Yes	Nill
Special skill development for differently abled students	Yes	Nill
Any other similar facility	Yes	Nill

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to	Number of initiatives	Date	Duration	Name of initiative	Issues addressed	Number of participating

address locational advantages and disadvantages	taken to engage with and contribute to local community					students and staff
No Data Entered/Not Applicable !!!						
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7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
HR Policy Hand Book	01/06/2019	This hand Book consists of various guidelines about the Conduct of Faculty Staff in the college, various welfare measures, policies on Recruitment, Promotion, Resignation etc., It also includes the leave rules, guidelines for attending Conferences, Seminars etc.
Students Hand Book	01/06/2019	This Hand Book consists of various Guidelines regarding the conduct of students in the campus, Dress Code, Procedure for attending technical events in other Institutions, Attendance Rules, Students Council, Club activities etc.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
No Data Entered/Not Applicable !!!			
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7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

Green landscaping with trees and plants. An exclusive medicinal plant farm with oxygen rich zone is maintained. The college is a plastic-free campus Use of bicycles : Students and Staff are encouraged to use bicycles within and outside the campus. Emission test certificates are mandatory for allowing the vehicles inside the campus. Tobacco products are strictly banned within 2 kilometers around the campus. Paperless office - the established principle of 'Reduce – Reuse - Recycle' is very much in practice with regard to the use of paper. All Circulars are Online only. Use of solar energy : Roof Top Solar panel Installed. Drip Irrigation System used for watering Trees and lawns Rain water irrigation System installed- appreciated by the Jal shakthi Abiyan Officials visited the campus. Installation of good number of power saving LED lights in campus.

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

PRACTICE- I: MENTORING OF STUDENTS AND MENTORING OF MENTORS i. Objectives of the practice: • To Counsel students and to provide confidence to improve their quality of life. • To Guide students to choose a right career path for job, higher studies, entrepreneurship, etc. • To Improve teacher-student relationship • To improve the capability of mentors by inculcating students psychology and behavioral patterns • To enable the parents to know about the performance of their wards on a regular basis. ii. The context : During their four years of study in U.G as well as two years in the case of P.G., students often need mentoring, guidance and counseling from a senior person, who will be a great guide and friend within the campus above their level. Obviously, a student should have the same mentor all through his/her journey. The system practiced contributes immensely to the improvement of the overall academic quality. The students will be greatly benefited by continuous expert guidance. Number of students allotted to a mentor depends on the total number of students enrolled for different programs in a department. Each faculty member is given the role of mentor for a group of 15 to 25 students. iii. The Practice : The students are assigned to faculty mentors from their first year of study. Mentors create a better environment for their mentees and the mentees can approach their mentors for educational, personal guidance and knowledge enhancement. Department faculty members will continue to be mentors for the same group of students from the first year, till the completion of their programme. Mentor will have frequent discussions on various issues including their needs in the college and special guidance in the participation of Seminar / Conferences and technical event, any academic difficulty faced and career development. Mentors can call the Parents of poor attendee/performance students for corrective and preventive actions which are implemented for further improvement. Each mentor maintains the whole student database, which is examined by the HOD, the Dean – Academics and the Principal. The mentor uses Mahendra Equip – 360 Policy to segregate mentees into advanced and slow learners. Advanced learners are then grouped based on their technical skillset. Different industries are identified by the mentor in consultation with HoD, Subject experts and Placement Director for different groups of students. At every semester end, these group of students will be sent to industries with prior approval. The mentor will visit the industry at least one time during the period of industrial training to monitor the learning levels of the students. Upon return, the students are evaluated and regrouped based on the performance. Slow learners on other hand are given with more psychological and motivational counseling programs to improve their cognitive skills in order to cope up and grow upto the level of advanced learners. This is the unique component of our mentoring system at Mahendra College of Engineering, Salem. To assist the Head of the Department, a senior mentor is appointed to mentor the mentors. Tutor Ward meetings and other mentoring activities will be reviewed by the senior mentor and the report will be sent to the HoD. iv. Evidence of Success : The evidence of success is the percentage of students passed in five years from 2016 to 2020 academic result, number of students placed in the campus recruitment and number of students who scored Good CGPA in Anna University Examination for the last five years. After implementing the practice there is an increase in the Pass percentage and the number of Placement. And also increase in the number of students undergoing Industrial Training is noticed. v. Problem Encountered and Resources Required: In some circumstances, an introvert student might not be able to express. In the absence of a mentor for a brief period of time, the duties are handed over to another faculty and informed to the respective students. Opening up of the mentee to express and share their problems/issues with their respective mentors. Identifying the Industry and getting their permission for deputing students for Internship is difficult . Faculty members assigned as mentors find difficulty in balancing their time for academics, administrative works and mentoring. PRACTICE- II: KNOWLEDGE SHARING FORUM FOR IDEA TANK, INNOVATION AND PATENTS i. Objective: •

To keep the faculty members updated on current trends related to innovation, Research and patents in the field of Science , Engineering and Technology • To increase the interaction level of the faculty members of multiple-disciplinary nature under a common forum. • To keep the faculty members updated on emerging technologies and facilitate knowledge transfer to the faculty members outside their domain. • To enhance the presentation, teaching, learning and listening skills of the faculty members ii. The Context Knowledge sharing has been recognized as the most important factor in the success of Knowledge Management. Knowledge sharing means the exchange of faculty members' knowledge, skills, and experiences with fellow members related to the research , innovation, ideas and patents. Faculty members will be disseminating the knowledge in the above said areas to improve the research culture leading to publishing research articles and patents. It ensures that the knowledge within an organization is available for faculty members and its benefits include the art of getting published their patents and research articles in the emerging areas and peer reviewed journals . iii. The Practice On rotational basis, two faculty members are identified to give their technical presentations in every fortnight. • Topic should preferably be outside the curriculum . • Recent technological developments should be selected. • Topic may include journals of particular domain , patent laws, patent drafting for beginners, Road map for patent filing , Innovation by Design in Science , Engineering and Technology . • End of the session there will be a test to evaluate the understanding of the presentation. iv. Evidence of success • Through this event, the areas of interest of the faculty member who presented their topics are also well exhibited and their strengths can be well utilized. • Through the evaluation of the test conducted after the event , it was found that all the faculty members have been benefitted from the event. • As a result of discussion , many faculty members published their research findings in technical Journals and published Patents. • Created a Competitive Environment among the staff to make better Research findings. v. Problems Encountered and Resources required. • Inspite of constant efforts publishing patents is found to be difficult. • During the time of examination the faculty members are involved in the exam related activities . Hence conducting the sessions on these days are difficult Resources available: • Well-equipped and acoustically treated seminar hall of capacity to accommodate all the faculty members of the Institution. • Good quality LCD projector with high resolution. • Public address system with wireless microphones and pointers. • Comfortable seating arrangement.

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

http://www.mahendracollege.com/bestpractices.php?facilities&bestpractices

7.3 – Institutional Distinctiveness

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

MAHENDRA EQUIP 360° is a distinctive quality practice followed in the Institution to bring out 360° growth in every student. The slow learners will be given with additional coaching with the extra care to elevate as advanced learners. All the advanced learners will undergo a practical enriched training programmes in core Industries for 360 hours. The process for this program is as follows: • Department will have the panel of industries for this programme. A MoU will be signed by the Department with the Industries. • Students can also choose research organizations and Government laboratories for the training in addition to the industries. • Students will be allotted a Particular Industry for the training in every semester atleast for 60 hours to the maximum of 90 hours. • The students shall report the type and progress of the training to the guide in regular intervals and seek his/her advice. • Upon successful

completion of training in every semester, the student needs to submit a report to the HoD concerned. • HoD, in turn validates the report with the industry and give the feedback to the Principal. • This will be practiced from third semester to seventh semester to cover 360 hours of training. • Successful completion of training will yield certification from both Institute and Industry. • The students will get the opportunity to do their final year project in the industry where they trained. The Department shall nominate staff member(s) to facilitate, guide and supervise students under this scheme. The staff member has to visit the industry at least once during the students' training period. The outcome of this programme will create industry ready Engineers with appropriate skill set and will pave a path for job opportunities in the industry where they trained. Thus slow learners will be properly moulded to become advance learners by remedial classes and advanced learners will be groomed with the leadership qualities industrial exposures to become society inclined industry ready ethics oriented professionals.

Provide the weblink of the institution
http://www.mahendracollege.com/downloads/7.3%20Institutional%20Distinctiveness.pdf

8.Future Plans of Actions for Next Academic Year

• To achieve University Ranks at least within 50 ensuing Academic Year. • To include Universal Human Values in the content beyond syllabus for all the students of all the branches as directed by AICTE and Anna University. A separate evaluation will be conducted for this subject for developing Engineers with social inclination. • To undertake a minimum of two research projects from local Industries to exploit the technical requirements of the Salem based Textile, Sago, silver ornament, agro Industries. • To get patent grants in the emerging and cutting edge technologies by utilizing the talents of young minds and research aspirants. • To arrange visits to foreign universities and industries for technical collaborations. • To get accredited with industries like TCS, Infosys, Wipro for achieving bulk placements in Tier-I industries. • To involve more alumni for students mentoring and placement oriented training. • To adopt few more villages under Unnat Bharat Abhiyan Scheme. • To get permission for a new self-financed NCC unit in the campus. • To commission a community Radio with an indoor studio and broadcasting facilities.