



Yearly Status Report - 2018-2019

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://mahendracollege.com/AOAR/AOAR%202017-%2018.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.php?activities&iqac																		
5. Accrediation Details																			
<table border="1"> <thead> <tr> <th rowspan="2">Cycle</th> <th rowspan="2">Grade</th> <th rowspan="2">CGPA</th> <th rowspan="2">Year of Accrediation</th> <th colspan="2">Validity</th> </tr> <tr> <th>Period From</th> <th>Period To</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B</td> <td>2.71</td> <td>2016</td> <td>19-Jan-2016</td> <td>18-Jan-2021</td> </tr> </tbody> </table>						Cycle	Grade	CGPA	Year of Accrediation	Validity		Period From	Period To	1	B	2.71	2016	19-Jan-2016	18-Jan-2021
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!!!																			

[View File](#)

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	Prerana	AICTE	2019 730	300000
Institution	Entrepreneurship Awareness Camp (EAC)	Entrepreneurship Development Institute of India , Ahmedabad, (Under DST-NIMAT Projects)	2018 6	40000
Institution	PMKVY	AICTE	2019 60	220500
Department	Workshop	ICMR	2018 2	50000
Department	Workshop	TNSCST	2018 1	20000
Department	Workshop	BMESI	2019 1	7500
Department	Seminar	IE(I)	2018 1	4500
Department	Seminar	IE(I)	2018 1	4500
No Files Uploaded !!!				

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)

? Participation in AISHE, NIRF, Chhattra Viswakarma Award Program ? Applied for Grants from FIST and AQIS ? Receipt of Grants from TNSCST , ICMR and PMKVY Scheme , ? Receipt of Grants from EDII, Ahamadabad for Training the students on Entrepreneurship. ? External and Internal Academic audits for all programmes. ? Training the students in emerging areas as per Industry requirements. ? Induction programme for the First year students ? Establishment of Institute Innovation Cell to promote innovation and startup culture.

No Files Uploaded !!!

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 Publish patents	Five Patents published
To get Grants from Govt Agencies on RD	Received Rs.2,77,500 from AICTE, TNSTC and ICMR
To encourage the Teachers for more number of research publications	Published 40 Research articles
To generate additional revenue through consultancy	Received Rs.8,43,400 through Consultancy works
To enhance the reading area in the library	Library reading area enhanced as per the norms
To enhance Institute and Industries interaction	Additional MoUs signed with Ten industries and 64 Industry and Institute activities organized.
View File	

14. Whether AQAR was placed before statutory body ?

Yes

Name of Statutory Body	Meeting Date
Governing Council	25-Mar-2019

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

Yes

Date of Visit

28-Dec-2018

16. Whether institutional data submitted to AISHE:

Yes

Year of Submission

2018

Date of Submission	27-Dec-2018
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief description and a list of modules currently operational (maximum 500 words)	<p>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</p>

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 (POs) • 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 Counseling Particulars includes the following details: o (Date of Counseling, 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/entrepreneurship	Skill Development
CCNA	00	21/07/2018	4	Entrepreneurship	YES
Anaconda Python for IoT	00	07/07/2018	4	Employability	YES
STAAD Pro	00	21/07/2018	4	Employability	YES
Bio sensors	00	11/08/2018	5	Employability	YES
Bio medical lab diagnosis	00	08/09/2018	5	Employability	YES
Embedded	00	21/07/2018	4	Employability	YES

System					ity	
VLSI system design	00	11/08/2018	4	Employability	YES	
PLC Programming	00	21/07/2018	4	Employability	YES	
Graphic design	00	21/07/2018	4	Employability	YES	
Android applications	00	19/01/2019	4	Employability	YES	
CNC operations and Programming	00	19/01/2019	4	Employability	YES	
Solar Energy Basics	00	19/01/2019	4	Employability	YES	
Project Management	00	19/01/2019	4	Employability	YES	
Bigdata Analysis using R Programming	00	08/09/2018	4	Employability	YES	
PCB Designing	00	08/09/2018	4	Employability	YES	
Java Programming	00	21/07/2018	4	Entrepreneurship	YES	
Relational Database Management Systems	00	02/02/2019	4	Entrepreneurship	YES	
Basics Concepts of Python Programming	00	02/02/2019	4	Entrepreneurship	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	Mechanical Engineering	02/07/2018
BE	Mechatronics Engineering	02/07/2018
BE	Biomedical Engineering	02/07/2018
BE	Civil Engineering	02/07/2018
BE	Computer Science and Engineering	02/07/2018
BE	Electrical and Electronics Engineering	02/07/2018
BE	Electronics and Communication Engineering	02/07/2018
BTech	Information Technology	02/07/2018
ME	Power Electronics and Drives	02/07/2018
ME	Engineering Design	02/07/2018
ME	Communication Systems	02/07/2018
ME	Computer Science and Engineering	02/07/2018
Mtech	Information Technology	02/07/2018
MBA	Master of Business Administration	02/07/2018
MCA	Master of Computer Application	02/07/2018

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

	Certificate	Diploma Course
Number of Students	1302	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
English Mannerism	20/08/2018	343
Corporate skills	21/01/2019	343
Rhetorical skills I II	07/08/2018	371
Interview Skills	19/12/2018	371
Quants	07/08/2018	326
Body Language	19/12/2018	326
Emotional Intelligence	07/08/2018	484
Logical Thinking	19/12/2018	484
Yoga and Meditation	19/12/2018	455
Japanese Language Training	02/07/2018	365

No file uploaded.

1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
No Data Entered/Not Applicable !!!		
View File		

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 every time a new regulation is introduced by the University, from different stakeholders such as students, alumni, faculty, employers and parents. Once the feedback is collected, it is analyzed and the valuable suggestions given by the stakeholders are sent to Anna University for necessary action. 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 2018-2019, students' feedback is obtained from around 1200 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 specialisation 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 INFOSYS, LT, Sharda Motors, TCS 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. 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.

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 !!!				
View File				

2.2 – Catering to Student Diversity

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

Year	Number of students enrolled in the institution (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
2018	1566	83	229	32	Nil

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	Number of smart classrooms	E-resources and techniques used
261	261	74	50	15	392
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 in the case of P.G. students often need mentoring, guidance and counselling from a senior person, who will be a great guide and friend with in 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 benefitted 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 behavioural 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
1649	120	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
261	261	Nil	34	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
2018	Dr.N.Malmurugan (International Level)	Principal	Award for best Research
2018	Mr.P.N.Palanisamy (International)	Assistant Professor	Award for Best Teacher
2018	Dr.S.Balamurugan	Professor	Appreciation Award for Best Consultant
2018	Dr.N.Mohanasundar araju	Dean	Appreciation Award for Best contribution in Manufacturing Sector
2018	Dr.S.Rajalaxmi	Professor	Appreciation Award for Science awareness among the young rural Girls
2018	Dr.H. Lilly Beulah	Professor	Appreciation Award for creating awareness in Cyber Security
2019	Dr.R.Nandhakumar	Professor	Appreciation Award for Best industrial Collaboration
2019	Prof. K.Prasadbabu	Associate Professor	Appreciation award for Best Motivator
2018	Dr.M.Suganthi	Professor	NPTEL-Elite-Digital Image Processing
2019	Dr.M.Suganthi	Professor	NPTEL-Elite-Teaching and Learning in Engineering (TALE)

No file uploaded.

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 students 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
104	BE	Computer Science and Engineering	60	35	58.33
105	BE	Electrical and Electronics Engineering	55	30	54.55
106	BE	Electronics and Communication Engineering	71	43	60.56
205	BTech	Information Technology	25	13	52.00
121	BE	Biomedical Engineering	45	38	84.44
114	BE	Mechanical Engineering	129	65	50.38
103	BE	Civil Engineering	68	32	47.05
115	BE	Mechatronics Engineering	28	15	53.57
405	ME	Computer Science and Engineering	5	3	60.00
415	ME	Power Electronics and Drives	16	10	62.50

[View File](#)

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/igac.php?activities&igac>

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 !!!				
View File				

3.2 – Innovation Ecosystem

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

Title of workshop/seminar	Name of the Dept.	Date
One day Seminar on Patents and Intellectual Property Rights	Biomedical Engineering	18/08/2018
One day Seminar on Procedures for Getting Research Funds	Biomedical Engineering	18/02/2019
One day seminar on Geographical indication of various Indian cities	Civil Engineering	24/08/2018
One day workshop on Obtaining Trademark for a company	Civil Engineering	05/02/2019
Swayam Orientation Program	Computer Science Engineering	14/08/2018
Trends and Developments of Intellectual Property Rights	Computer Science Engineering	12/09/2018
Workshop on How to Write a Research paper in LaTeX	Information Technology	16/08/2018
One day Seminar on Research Methodology and Data Analysis	Information Technology	30/01/2019
One day Seminar on A Road Map for Innovation and IPR filing	Mechanical Engineering	11/02/2019
One day Seminar on IPR and Patent Filing Procedure	Mechanical Engineering	04/03/2019
One day seminar on Avoiding Plagiarism in Research Papers	Mechatronics Engineering	12/12/2018
One day seminar on Patent Searching and Analysis	Electrical and Electronics Engineering	20/04/2019
One day Seminar on Issues and Challenges in IPR	Electrical and Electronics Engineering	22/05/2019
One day Seminar on Research Methodology	Electronics and Communication Engineering	27/12/2018
Workshop on Patent drafting for Beginners	Electronics and Communication Engineering	27/04/2019

One day Seminar on IPR and their Importance	Electronics and Communication Engineering	22/06/2019
---	---	------------

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 !!!				
View File				

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 !!!					
View File					

3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
6	00	2

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	2
Computer Science and Engineering	2

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	2
Electronics and Communication Engineering	5
Electrical and Electronics Engineering	2
Computer Science and Engineering	2
No file uploaded.	

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 !!!

[View File](#)

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

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	14	21	19	20

[View File](#)

3.4 – Extension Activities

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

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
-------------------------	--	--	--

No Data Entered/Not Applicable !!!

[View File](#)

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

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Cleaning of Temple Premises at Poomalai Nagar	Recognition certificate	Village Panchayat , Minnampalli	20
Awariness Program for Rain water harvesting at Selliampalayam Village	Recognition certificate	Village Panchayat , Minnampalli	15
Awariness Program on Bio-waste Management at Minnampalli Village	Recognition certificate	Village Panchayat , Minnampalli	25

No file uploaded.

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 activities	Number of students participated in such activities
--------------------	---	----------------------	--	--

No Data Entered/Not Applicable !!!

[View File](#)

3.5 – Collaborations

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

Nature of activity	Participant	Source of financial support	Duration
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
INFOSYS	19/12/2018	Campus Technical Partner	10
VI Microsystems, Chennai	04/10/2018	Training programs, Workshops, Placement	48
New Technologies, Coimbatore	06/10/2018	Training programs, Workshops	65
Bio Vision Medical Systems Chennai	06/09/2018	Academic Interaction, Research Activities, Internships, In-plant Training, Industrial Visit	10
Aaranya Biosciences Coimbatore	24/01/2019	Research Collaboration, Interships	15
Novel Patent Services Visakapattinam	08/03/2019	Intellectual Property Rights for research works and training programs	20
Kalam Institute of Health Technology, Visakhapattinam	06/09/2018	Technology Transfer	20
IPCS Automation, Salem	03/08/2018	Placement, hands on training	37

Odugaa Tech, Salem	23/01/2019	Placement, hands on training	44
View File			

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

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

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
110	112.27

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Laboratories	Newly Added
Seminar Halls	Newly Added
Others	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	33762	12232215	3000	1005000	36762	13237215
Journals	986	2031012	180	829415	1166	2860427
e-Journals	8125	1222546	675	955898	8800	2178444
e-Books	1946	Nill	260	Nill	2206	Nill
Digital Database	26000	Nill	2903	Nill	28903	Nill
CD & Video	2369	142140	210	12600	2579	154740
Weeding (hard & soft)	2	8095	Nill	Nill	2	8095
No file uploaded.						

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 !!!			
View File			

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/lms.php?facilities&lms

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 incurred on maintenance of physical facilities
30	31	50	54

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/bestpractices.php?facilities&bestpractices>

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	507	7396250
Financial Support from Other Sources			
a) National	Union and State Government Scholarship (SC/ST/BC/MBC and First Graduate Financial Support)	1130	56129650
b) International	00	Nil	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	Date of implementation	Number of students	Agencies involved
------------------------	------------------------	--------------------	-------------------

enhancement scheme		enrolled	
Personal Counselling	02/07/2018	530	Mahendra College of Engineering
Yoga, Meditation	19/12/2018	455	Manavalakalai Mandram, Salem
Bridge courses	01/06/2018	360	Department of Humanities Science, Mahendra College of Engineering
Japanese Language	02/07/2018	365	Mayz Academy, Krishnagiri
Remedial coaching	06/08/2018	605	Faculty, Mahendra college of Engineering, Salem
Soft skill development	02/07/2018	1514	M/s. Macro Miracles India Pvt.Ltd.
No file uploaded.			

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 passed in the comp. exam	Number of students placed
2019	MTRACE -Mahendra Training Academy for Competitive Examinations	871	466	5	5
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
Nil	Nil	Nil

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
No Data Entered/Not Applicable !!!					
View File					

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

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
No Data Entered/Not Applicable !!!					
View File					

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
GATE	Null
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 !!!		
View File		

5.3 – Student Participation and Activities

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

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	00	National	Null	Null	00	00
No file uploaded.						

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 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 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 lectures 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 Provide 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:

375

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

121000

5.4.4 – Meetings/activities organized by Alumni Association :

Two Alumni Meets are conducted during 2018-19.

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 the method of decentralized governance system. The heads of the department have been bestowed with the authority of deciding the activities and delegating the responsibilities to the staff members. The department decides 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. 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 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
Curriculum Development	<p>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 out 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 curriculum development committee meeting. Based on the recommendation of curriculum development committee, suggestions are submitted to affiliating university for considerations while revising the curriculum.</p>
Teaching and Learning	<p>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 .</p> <ul style="list-style-type: none">• Self-learning, peer learning, project based learning and group learning are practiced .• Outcome Based Education (OBE) has been incorporated in the process.
Examination and Evaluation	<p>An Examination cell comprises of Principal as chairperson, Examination Cell Coordinator as member secretary and one faculty member from each department as Examination coordinator.</p> <ul style="list-style-type: none">• 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 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, our faculty members have been assigned with chief

examinership, the key preparation for the questions, examinership for answer scripts evaluation of theory examinations and practical examinations by the Zone VIII Centre of Anna University consisting of 41 colleges.

Research and Development

- Recognition in the form of awards / incentives are given to those who guide research works and/or do research work.
- All eligible faculty are encouraged to pursue Ph.D. programmes either in the college or outside the college
- Funds provided for the purchase of equipment required for research works, 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 Courses in India. Grant of registration charge and travel to attend International Conferences abroad
- Institute has an innovation cell to nurture and foster young entrepreneurs to convert their ideas into a Product by the way of providing necessary facilities within the campus.

Library, ICT and Physical Infrastructure / Instrumentation

- Library is fully computerized and contains 36762 books, 1166 Journals and 8800 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 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.

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 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.

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 Industrial members. Through them, our students and faculty members are benefited in terms of guest lectures, Industrial visits and Students Project guidance.

Admission of Students

As an affiliated institution, admissions are carried out as per the norms of Anna University, Chennai and State Government. The Institution follows the procedure of 65 percentage of seats got admitted through Counselling conducted by TNEA, Government of Tamil Nadu and of 35 percentage seats got admitted 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 Tamilnadu. 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.

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

E-governance 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 !!!				
View File				

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

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
34	34	9	9

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
<p>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</p>	<p>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</p>	<p>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</p>

Retreat. Subsidized
canteen fares Group
Insurance

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 performed 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 done 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	200000	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. Manjappa D Hosamane, Professor of Economics, University of Mysore, Manasagangotri, Mysore-570 006	Yes	M/s.Q4 Sure Certifications Pvt. Ltd, #90/1, A BLOCK, PLATINUM CITY, HMT MAIN ROAD, PEENYA, BANGALORE 560022.
Administrative	Yes	Dr. S.S.Patagundi, Professor of Political Science, Karnatak University, Dharwad - 580 003	Yes	M/s.Q4 Sure Certifications Pvt. Ltd, #90/1, A BLOCK, PLATINUM CITY, HMT MAIN ROAD, PEENYA, BANGALORE 560022.

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 parent's teachers meeting feedback regarding curriculum

development, Placement opportunities, co-curricular and extracurricular aspects are collected from parents. Also discussed the performance of their wards in the Internal Tests and other activities. • Parents are invited during the NAAC and other committee visits to give their feedback and suggestions. • Awareness given to the parents about the importance of foreign languages in 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)

Stress Management program was organised for the support staff. A workshop on "Skill Development " has been conducted for the benefit of the support staff. Yoga classes are arranged for the support staff members to maintain their health. Basic computer training on MS office was conducted to improve the computer skills. Spoken English class is being conducted for the support staff to improve their communication skill.

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

Institution Innovation council with MHRD has been established to encourage, inspire and nurture young students by supporting them to work with new ideas and transforms them into prototype. Civil Services coaching centre is established in collaboration with SAI IAS Academy on 12th September 2018. Mr. S S Jawahar IAS, former Chief Secretary, Government of Tamilnadu, has inaugurated the centre. Entrepreneurship Awareness Camps have been initiated under the support of EDII, Ahmadabad . Institute Innovation Cell of MHRD is established and ranked with a Star Outcome based Education is fully implemented for both U.G. and P.G. courses. The Institute distinctiveness has been improved with SES- German initiative with an improved component of Industrial oriented hands on training practice

6.5.5 – Internal Quality Assurance System Details

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

6.5.6 – Number of Quality Initiatives undertaken during the year

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

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

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

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Yoga for Girls	21/07/2018	21/07/2018	550	Nil

Health Awareness Programme - ICMR sponsored 2 days national level workshop on recent advances in nanomaterial based stretchable Bio electronics devices and its applications in Health care	06/08/2018	07/08/2018	550	57
International Women's Day celebration	08/03/2019	08/03/2019	530	Nil
Pinkathon Rally 2018 - "Beti Pacho Beti Padho" Awareness programme of government of India was held in Gandhi stadium. Smt. Rohini Bhajibhakare, IAS, District Collector presided over the function.	14/09/2018	14/09/2018	200	Nil
Teachers Day Celebrations: Creating Gender equality at educational institutes among the students	05/09/2018	05/09/2018	60	73
Rangoli competition	10/01/2019	10/01/2019	74	Nil
Mother's Day Essay and Poetry contest with a theme of women's life	13/05/2019	13/05/2019	90	42

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) Total annual power requirement (in KWH): 580000 b) Connected load for Light sources (in Watts): 2900 c) The solar power connected to light (in Watts): 600
Percentage of solar power connected to light 20.69 Percentage

7.1.3 – Differently abled (Divyangjan) friendliness

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

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
No Data Entered/Not Applicable !!!							
View File							

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

Title	Date of publication	Follow up(max 100 words)
HR Policy Hand Book	01/06/2018	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	01/06/2018	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 !!!			
View File			

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

1. Title of the Practice KNOWLEDGE SHARING FORUM 2. Goal: Knowledge sharing is an activity through which knowledge (namely, information, skills, or expertise) is exchanged among faculty members in the institution. Faculty from a Department will be delivering a speech on any topic of their choice with the following guidelines. • Topic of presentation must be outside the curriculum. • It should be technology oriented, interesting and inducing the listener to interact. • Duration of presentation, preferably a power point presentation shall be a minimum of 60 minutes. Aim of the Practice: • To keep the faculty members updated on emerging technologies. • To facilitate knowledge transfer to the faculty members outside their domain. 3. The Context: Faculty members from different disciplines will be present in the Hall. Hence, the topic of the presentation should be chosen carefully in such a way that the presentation creates interest to every member of the audience. For example, a faculty from Civil Engineering choosing to present a topic on "Smart City mission" shall be able to explain various features of a Smart City not only focusing on Civil Engineering Point of view, but also the communication and automation also. If this topic is presented covering all the issues related to the above areas, it will attract the audience and they will tend to interact more. Challenges: • Choosing a topic for presentation to create interest for faculty members of different disciplines. • Finding suitable time and gathering all the faculty members of the Institution at one hall, because faculty members have different kinds of academic and administrative works. 4. The Practice: The event "KNOWLEDGE SHARING FORUM" is planned to be conducted on Saturday morning sessions in which faulty member from two different departments will be presenting their topics, each of one hour duration. In the beginning of the semester, a schedule is prepared which consists of the dates of the event and departments identified for presentation. Concerned Heads of Department will discuss with their faculty members and finalize the topic and the faculty going to present. The presenter starts preparing the power point presentation on the topic and keeps on fine-tuning till the day of presentation. The first presentation starts by 09.30 am and ends by 10.30 am. After a refreshments break for 15 minutes, the second presentation starts by 10.45 am and come to a close by 11.45 am. All the faculty members of the Institution will be present for the entire duration of the event. They are encouraged to interact actively with the presenter. The uniqueness of this event is that the topic selected will be beyond the curriculum of any discipline. At the same time, it will be

technology oriented backed with scientific principles, any process or product which is based on an emerging technology. Following are the benefits and strengths derived from the event for the faculty members. • Presenter provides lot of information about a process or product. • People focus on what interests them. • There is immediate interaction with the presenter. • Excellent for networking. Establishes contacts for the future. • strengthen their team spirit and ability to work together. • Recognizes best practices and people's achievements. • Lets people know each other's areas of knowledge. • Lets one to find specific expertise, or a specific person, quickly and easily. • Provides a highly focused environment for knowledge sharing. • Allows to seek knowledge outside their working group. • Promotes cooperation between teams.

1. Title of the Practice MENTORING JUNIOR STUDENTS BY SENIOR STUDENTS
2. Goal: The aim of this practice is to empower the advanced learners in senior classes and encourage their mentoring skills. It also helps senior students in bringing a sense of responsibility and developing their own personality. While mentoring, the senior students understand the reality of life and when they face the same situation in their life, it becomes easier for them to find a solution. It is not only mentoring, but also teaching the subjects in which the junior students have backlogs. By this, the subject knowledge of the mentor is also developing.
3. The Context: The first task before implementing this practice is to identify the advanced learners in the senior classes (those who are in the third and final year classes) and explaining to them about this practice. Selecting student mentors is a challenging task, because some students may be advanced learners, but they may not be good mentors. Other way, good learners (not advanced learners) may be good mentors. Hence, it is very important to identify among the senior students, who are good learners as well as good mentors. The role of Class Advisors (Class Counsellors) is very crucial in this preliminary task. Next task is to assigning junior students (selected based on their abnormal behavior, having many backlogs, having problems in personal life etc.,) to the mentors. Here also proper allocation of junior students to a particular mentor is very important. Preferably not more than 5 junior students to a mentor are ideal.
4. The Practice: After completing the preliminary tasks specified in the context, the implementation part includes allocating time for the mentor and mentee to discuss. This is normally done during the evening after class hours and Saturdays. If both mentor and mentee are from hostel, they may spend more time in mentoring. Initially, the Class Advisor and Head of the Department discuss with the Senior Students (one at a time) with the list of mentees in their hand. They give a introduction about the behavior, academic performance and other details of each mentee to the mentor and tell them the way of approaching each mentee. This introduction session gives a clear picture of mentee to the mentors. The mentors carry out the counseling of mentee one at a time, one mentee each day for about half an hour or more, if required. This arrangement facilitates an open discussion between the two. Depending upon the nature and gravity of the problem, the mentor may suggest some solutions for the problems faced by the mentee. If the problem is related to the backlog or lesser understanding ability of a particular subject in the academics, the mentor may teach the subject in a way the mentee can understand better. This process is continued for the entire duration (about 15 weeks) of the semester.

Proper implementation of this process is monitored by the Class Advisor and Faculty members assigned by the HoD. One faculty member for every two or three mentors is deputed by the HoD. The faculty members will be appraising the progress to the HoD during Department review meetings. Uniqueness of this Practice: When a student speaks to another student, the discussion will be more open and problems can be easily identified. This may not happen, in some cases, when a teacher speaks to a student. The intimacy created between both mentor and mentee is largely helpful in finding a solution to the problems faced by the mentee. When both are residing in hostels, it will still be more beneficial to both. They can spend more time together and the junior student feels

comfortable with the support provided by the senior student. Constraints or limitations: The system is totally dependent on the proper judgment regarding the mentoring skill of a student. A student may be an advanced learner, but not necessarily a good mentor and vice-versa. Hence, the Class Advisor and HoD must be well aware of the ability of senior students. Allocation of mentor and mentee is gender specific. Except in rare cases, allocation of Different gender of mentor and mentee may not be advisable.

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/igac.php?activities&igac>

8.Future Plans of Actions for Next Academic Year

1. To establish in-house Patent Guidance Cell: A patent provides its owner with the right to exclude others from exploiting the patented technology, including, for example, making, using, or selling the patented invention. This "exclusive right" enables the patent owner to recoup development costs and obtain a return of investment in the development of the patented technology. Effective patent protection stimulates research and is a key requirement for assessing the performance of an educational institution in the Accreditation process. All the Accreditation bodies expect the faculty members to involve actively in research and patent their findings. In view of the above, the Institution is planning to establish a centre where the faculty members are trained to understand the

process of filing a patent. 2. To establish at least one industry funded centre of excellence: Institution is maintaining a very good rapport with the Industries. They are showing their intent to help the Institution in establishing a facility, where the students will be trained in various skills. By this arrangement, the students get a feel of Industry environment and understand the expectations of the industry. 3. To attract more number of other state students: The Institution is putting efforts to increase the number of other state students. This approach will help the local students to interact with them in a better way, achieving mutual benefits to both sections of students. 4. To boost more green initiatives The Institution follows green initiatives with solar lighting, usage of Bio-Diesel, Oxygen rich zones, cultivation of medicinal plants etc., Few more initiatives like bio gas plant, Eco-friendly waste management systems will be taken up. 5. To achieve better NIRF ranking.