

# **Yearly Status Report - 2019-2020**

Part A			
Data of the Institution			
1. Name of the Institution	DR. MAHALINGAM COLLEGE OF ENGINEERING AND TECHNOLOGY		
Name of the head of the Institution	A.Rathinavelu		
Designation	Principal		
Does the Institution function from own campus	Yes		
Phone no/Alternate Phone no.	04259-236030		
Mobile no.	9842304211		
Registered Email	principal@drmcet.ac.in		
Alternate Email	starvee@mcet.in		
Address	Udumalai Road, M.K.Patti Post, Pollachi, Coimbatore, Tamilnadu 642003		
City/Town	Coimbatore		
State/UT	Tamil Nadu		
Pincode	642003		

2. Institutional Status	
Autonomous Status (Provide date of Conformant of Autonomous Status)	23-Mar-2011
Type of Institution	Co-education
Location	Rural
Financial Status	private
Name of the IQAC co-ordinator/Director	Dr.P.A.Periasamy
Phone no/Alternate Phone no.	04259236030
Mobile no.	7373227754
Registered Email	iqac@drmcet.ac.in
Alternate Email	pap@drmcet.ac.in
3. Website Address	
Web-link of the AQAR: (Previous Academic Year)	http://mcet.in/wp-content/uploads/IQ AC/2020/IQAC_AQAR_2018-19.pdf
4. Whether Academic Calendar prepared during the year	Yes
if yes,whether it is uploaded in the institutional website: Weblink:	http://mcet.in/wp-content/uploads/COE/2 019/2019-2020%20-%200DD%20&%20EVEN%20SE M%20%20ACADEMIC%20CALENDAR%20.pdf

#### 5. Accrediation Details

Cycle	Grade	CGPA	Year of	Vali	dity
			Accrediation	Period From	Period To
1	A	3.61	2013	05-Jan-2013	04-Jan-2018
2	A++	3.53	2018	16-Aug-2018	15-Aug-2023

# 6. Date of Establishment of IQAC 05-Jun-2012

# 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
External Peer Audit on Autonomous System - An External Audit was conducted as per the UGC norms by Dr.N.Alagumurthi - Professor, Mechanical Engineering Department, Puducherry Technological University	01-Nov-2019 1	3682
Course File Audit	04-Nov-2019 10	3682
Extension of NBA for UG Programmes	23-Feb-2020 1	1000
Participation in NIRF	05-Dec-2019 1	3682
Feedback Collection, Analysed and used for improvements	10-Jul-2019 5	3682
IQAC Meetings	28-Jun-2019 3	3682
AQAR Submission for the academic year 2018-19	06-Nov-2019 1	3682
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# 8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Departmen t/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
MCET	PARAMARSH	UGC	2020 365	3000000
Dr.K.N.VIJEYAKU MAR	RESEARESEARCH GRANT	ISRO	2019 770	2004000
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	<u>View File</u>
10. Number of IQAC meetings held during the year :	3
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	<u>View File</u>
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)

MCET is in the rank band of 251 to 300 in Engineering category in National Institutional Ranking Framework (NIRF) declared by MHRD for the year 2020.

MCET secured FOUR STARS based on performance in Innovation activities in southern region declared by Innovation Cell, MHRD.

MCET secured PLATINUM ranking in 2019 for the second consecutive year in AICTE-CII Survey of industry linked technical institutions.

Extension of NBA Status for three more years under TierI category was received for 3 UG Programmes - B.E. Automobile Engineering, B.E. Civil Engineering and B.E. Electronics Instrumentation Engineering

MCET is in the Band B (Rank Between 26th - 50th) in the ATAL Ranking of Institutions on Innovation Achievements (ARIIA) 2020.

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# 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
Submission of AQAR for the year 2018-19	AQAR for the academic year 2018-19 was submitted on 16.11.2019
Anna University Affiliation process	The details for Anna University affiliation were submitted and the affiliation order was received
AICTE Approval process	Extension of Approval was received from AICTE
Submission of Mandatory Disclosure	Mandatory disclosure of MCET was uploaded in college website as per the new format prescribed by AICTE
AICTE-CII Survey details	MCET obtained platinum ranking in AICTE-CII survey
Governing Council Meeting - planned - 2 per year	16th Governing Council Meeting was conducted on 08.07.2019.
Number of Class Committee Meetings per class per academic year - planned 6	Number of Class Committee Meetings per class per academic year - conducted 6
Number of Board of Studies Meetings per	Number of Board of Studies Meetings per

department per academic year - planned 2	department per academic year - conducted 2	
MHRD - AISHE	AISHE details were submitted on 3.2.2020	
NIRF 2020	MCET is in the rank band of 251 to 300 in Engineering category in National Institutional Ranking Framework (NIRF) declared by MHRD for the year 2020.	
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14. Whether AQAR was placed before statutory body ?	Yes	
Name of Statutory Body	Meeting Date	
GOVERNING COUNCIL	08-Jul-2019	
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	03-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)	Our institution is having a powerful Management Information System. The list of modules and their functionalities are given below: ADMINISTRATION 1.  Attendance Module • Class Attendance and Tablet attendance • Attendance pending report • Pending attendance mail alert 2. Course Exit Survey • Feedback from Student regarding the courses • Feedback form Student regarding the courses using web portal 3. Course Details Creation • Creating and Mapping Courses to Respective Batches PLANNING AND DEVELOPMENT 1. Apply job online Importing the data from web server to MCETedu server 2. Online Job Application Candidates can apply for job 3. Online Job Application using web portal STUDENT ADMISSION AND SUPPORT 1. Online Fee payment Import Bulk receipt who pay the fee through online 2. Student Bonafide Students can	

apply for Bonafide through this module Students can apply for Bonafide through this module using web portal Concerned Faculty, HOD can approve the Bonafide request using web portal 3. Student Contact Students address report 4. Student Subject Feedback Feedback submission by students Feedback submission by students using web portal FINANCE 1. Fee Module Students can pay their fees through this module. 2. GST Calculation 3. Scholarships Better tracking of scholarship beneficiaries 4. Applying Bank Acknowledgement Bonafide from Finance team 5. Caution Deposit module and reports. 6. Finance Report With GST options EXAMINATION 1. Subject Generation 2. TC Generation 3. Course Registration 4. Course Registration using Web portal 5. Student Reevaluation Fee payment 6. Internal Mark calculation 7. End Semester Results • Sending the End semester results to parents 8. Practical Exam • Practical Timetable Mapping Report • Course Registration • External Project Marks Report(Review wise) 9. Exam Hall • Exam Hall Seating details updated in MCETedu app 10. Result • End Semester Exam result publishing 11. Course Feedback 12. Course Feedback using web portal 13. Open Elective selection • Open Elective course selection • Open Elective course selection using web portal 14. Alumni Feedback 15. Alumni Feedback using Web portal List of Modules that are developed through Web Portal are 1. Online Job Application using web portal 2. Transcript generation using Web Portal. 3. Grade sheet generation using Web Portal. 4. Consolidated Mark sheet Generation using Web Portal. 5. Career Application using Web Portal. 6. Pay slip Generation using Web Portal. 7. Transport Module using Web Portal. 8. STUDENT'S GUILD OF SERVICE (SGS) applying and selection process. 9. Academics 1. Attendance for Lateral Entry Students 2. Course exit survey in MCETedu 3.Providing start and End Dates for marking Special class attendance. 4. Session Topics Covered Report. 10. OBE 1. Cumulative CO attainment report. 2. CO based mark entry for End semester exams 4. HR Staff leave module and Reports. 2.T.A and D.A Bill claim report in FDP Module. 3.Dynamic staff

leave report. 4. FDP Mail Notifications (8 types of Notification) 5.Staff
Biometric Punch Reports 6.Staff Joining
Report, ID Card Report. 7. Staff Auto
ID generation form. 8. Staff Clearance
Module and Reports. 9. Sending Salary
slip through mail. 8. Certificate
Acknowledge report. 9. FDP
Departmentwise Report.

#### Part B

#### **CRITERION I – CURRICULAR ASPECTS**

#### 1.1 - Curriculum Design and Development

1.1.1 - Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision	
BE	AU	AUTOMOBILE ENGINEERING	09/11/2019	
BE	CE	CIVIL ENGINEERING	19/10/2019	
BE	EC	ELECTRONICS AND COMMUNICATION ENGINEERING	23/11/2019	
BE	EI	ELECTRONICS AND INSTRUMENTATION ENGINEERING	02/11/2019	
BE	Cs	COMPUTER SCIENCE AND ENGINEERING	09/11/2019	
BE	MC	MECHATRONICS ENGINEERING	23/11/2019	
BTech	IT	INFORMATION TECHNOLOGY	16/11/2019	
BE	PR	PRODUCTION ENGINEERING	30/11/2019	
BE	ME	MECHANICAL ENGINEERING	30/11/2019	
BE	EE	ELECTRICAL AND ELECTRONICS ENGINEERING	02/11/2019	
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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
BE	AUTOMOBILE ENGINEERING	19/06/2019	16MEO55/ 16MEO65 - Lithium Ion Battery Technology for Electric Cars	19/06/2019

BE	CIVIL	19/06/2019		19/06/2019
BE	ENGINEERING	15/00/2015	16CEO34/16CEO54 - Advanced Wood Working Concepts	13/00/2013
BE	MECHANICAL ENGINEERING	19/06/2019	16MEE01 - Design for Manufacture, Assembly and Environment	19/06/2019
BE	MECHANICAL ENGINEERING	19/06/2019	16MEE11 - Design for Sheet Metal	19/06/2019
BE	ELECTRICAL AND ELECTRONICS ENGINEERING	19/06/2019	19EECN2202 - Electrical CAD	19/06/2019
BTech	INFORMATION TECHNOLOGY	19/06/2019	16ITO66 Web application development using Java	02/12/2019
BE	COMPUTER SCIENCE AND ENGINEERING	19/06/2019	16CSE09-Machine Learning Techniques	09/11/2019
BE	COMPUTER SCIENCE AND ENGINEERING	19/06/2019	19CSSN2201-Pr ogramming with C	09/11/2019
BE	COMPUTER SCIENCE AND ENGINEERING	19/06/2019	19CHMG6201-En vironmental Sciences	09/11/2019
BTech	INFORMATION TECHNOLOGY	19/06/2019	16ITT63-Mobile Application Development	02/12/2019
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# 1.2 - Academic Flexibility

# 1.2.1 - New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
BE	Computer Science and Engineering	19/06/2019
BE	Civil Engineering	19/06/2019
BE	Electronics and Communication Engineering	19/06/2019
BE	Electrical and Electronics Engineering	19/06/2019
BE	Electronics and Instrumentation Engineering	19/06/2019
BE	Mechatronics	19/06/2019

	Engineering			
BE	Production Engineering	19/06/2019		
BE	Mechanical Engineering	19/06/2019		
BTech	Information Technology	19/06/2019		
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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	Information Technology	19/06/2019
ME	Computer Science and Engineering	19/06/2019
ME	Structural Engineering	19/06/2019
ME	Communication Systems	19/06/2019
ME	CAD/CAM	19/06/2019
PhD or DPhil	Mechanical Engineering	19/06/2019
PhD or DPhil	Computer Science and Engineering	19/06/2019
PhD or DPhil	Electronics and Communication Engineering	19/06/2019
PhD or DPhil	Civil Engineering	19/06/2019
BE	Automobile Engineering	19/06/2019
BE	Computer Science and Engineering	19/06/2019
BE	Civil Engineering	19/06/2019
BE	Electronics and Communication Engineering	19/06/2019
BE	Electrical and Electronics Engineering	19/06/2019
ВЕ	Electronics and Instrumentation Engineering	19/06/2019
BE	Mechatronics Engineering	19/06/2019
BE	Production Engineering	19/06/2019
BE	Mechanical Engineering	19/06/2019
ME	Applied Electronics	19/06/2019
PhD or DPhil	Physics	29/10/2019

## 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
Graphics using C	19/06/2019	35
Devops Technologies	19/06/2019	30

R Programming	19/06/2019	32	
IoT using Raspberry-pi	19/06/2019	31	
Advanced Java Script	19/06/2019	33	
Java Servlet Programming	02/12/2019	66	
Advanced C	02/12/2019	34	
Data Science using python	02/12/2019	14	
Web programming using python	02/12/2019	35	
Web Development using Java	02/12/2019	61	
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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	Automobile Engineering	298
BE	Computer Science and Engineering	185
BE	Civil Engineering	234
BE	Electronics and Communication Engineering	124
BE	Electrical and Electronics Engineering	298
BE	Electronics and Instrumentation Engineering	112
BE	Mechatronics Engineering	120
BE	Mechanical Engineering	327
MCA	Computer Application	88
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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 college follows a systematic approach in collecting (surveys, committee reports and minutes of statutory meetings) and analysing feedback on various

collection and analysis process are as follows Students The students give feedback about teaching of each faculty member using an in-house developed app called MCET-Edu. This is obtained, analysed and discussed with faculty members in order to improve the faculty teaching performance. Students also give response to course exit survey for course outcome (CO) indirect attainment calculation purposes. The students also give response to the Programme exit survey at the end of the programme. This is collected to calculate the programme outcome (PO) indirect attainment and to get feedback about facilities and amenities in the departments and institution. Faculty The faculty members of the institution give feedback about various curricular aspects. The feedback is collected using various modes such as Google forms, hard copies etc. Faculty members from other academic institutions also provide feedback when taking part in various statutory meetings. Employers The current and prospective employers (representatives) give feedback about various curricular aspects. The feedback is collected using various modes such as Google forms, hard copies etc. Employers also provide feedback when taking part in various statutory meetings. Alumni The alumni give feedback about various aspects such as curriculum, programme educational objectives and others using an in-house developed app called MCET-Edu. This is obtained, analysed and discussed in the departments in order to improve various aspects pertaining to quality of educational experience at college. Alumni also provide feedback when taking part in various statutory meetings. Parents The parents give feedback about general aspects of education. This is obtained, analysed and discussed in the departments in order to improve various aspects pertaining to quality of educational experience at college. Total number of feedback responses received and analysed this academic year is 2811. The department-wise number of feedback respondents during the academic year 2019-20 are Mechanical Engineering 282, Electrical and Electronics Engineering 394, Electronics and Instrumentation Engineering 216, Electronics and Communication Engineering 131, Computer Science and Engineering 569, Information Technology 397, Automobile Engineering 276, Civil Engineering 234, Production Engineering 74, Mechatronics Engineering 172 and Computer Applications 66. The analysis of responses is carried out and statistical reports generated criteria-wise using all the feedback. The reports are used for future development of infrastructure/ curriculum/ courses by the concerned departments. The statutory bodies of the institution have all the key stakeholders and their meetings also record various inputs from these stakeholders. Actions as deemed fit are carried out based on the inputs from these meetings as well. Period meeting with stakeholders also capture various inputs for the further growth of the institution, which is used appropriately.

aspects of education from all key stakeholders. Based on the analysis suitable actions are carried out periodically. The scope and methodology of feedback

#### **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
BE	Automobile Engineering	120	Nill	56
BE	Mechanical Engineering	120	Nill	87
BE	Civil Engineering	60	Nill	35
BE	Mechatronics Engineering	60	Nill	45

ВЕ	Electrical and Electronics Engineering	120	Nill	86
BE	Electronics and Communication Engineering	120	Nill	106
BE	Electronics and Instrumentation Engineering	60	Nill	43
BE	Computer Science and Engineering	120	Nill	109
BTech	Information Technology	120	Nill	101
ME	Structural Engineering	18	Nill	8
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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	Number of fulltime teachers available in the institution	Number of teachers teaching both UG and PG courses
	(00)	` '	teaching only UG courses		and 1 C courses
2019	3350	130	158	7	37

#### 2.3 - Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning 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
202	202	331	76	1	30

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)

MCET has a student mentoring system. It ensures that the students adapt to the dynamic learning environment and lead their ways into highly successful careers. The role of a mentor was originally called as faculty advisor. Faculty advisors help the students in planning their courses of study and for general advice on the academic programme. The Head of the Department will attach a certain number of students to a faculty from the same Department, who shall function as Faculty Advisor for those students throughout their period of study. The Faculty Advisor shall advise the students in registering and reappearance registering of courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress / performance of the students concerned. The responsibilities of a faculty advisor are, inform the students about the various facilities and activities available to enhance the students' curricular and co-curricular activities, guide the students on enrolment and registration for the courses, authorize the final registration of the courses at the beginning of each semester, monitor the

academic and general performance of the students including attendance and counsel them accordingly. Recently the role of faculty advisors has been redefined as a class coordinators and mentors to improve the effectiveness of mentoring. Class coordinators help the students in planning their courses of study and offer general advice on the academic programme. The Head of the Department nominates a faculty member to each class, who shall function as Class Coordinator. Responsibilities of the Class Coordinator are to: act as the channel of communication between the Head of the Department and the students of the respective class, collect and maintain various statistical details of the students, help the chairperson of the class committee in planning and conducting class committee meetings and coordinate the students' scholarships, awards, medals, and industrial visits. In order to facilitate the students' progress and welfare, the Head of the Department will allocate maximum of 20 students to a faculty member of the department, who shall function as Mentor for them throughout their period of study. The responsibilities of the mentor include: maintaining the records of each of his/her mentees, which shall contain information about the students' attendance, grades obtained in the End Semester Examinations, marks of Continuous Comprehensive Evaluation Test (CCET), achievements if any in Curricular, Co-curricular and Extra-curricular activities and disciplinary proceedings if any, recommending the students leave request to the Head of the Department for approval, maintaining the students leave records, guiding the students in course registration, monitoring their academic performance and counselling them periodically, discussing with the parents about the progress of the student concerned in both academic and disciplinary issues and organizing the parents meeting in consultation with the class coordinator and Head of the Department.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
3480	202	1:17

#### 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
202	202	Nill	32	76

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
2019	Mr.P.Kathirvel	Assistant Professor	Mentorship award for project contest by Mitsubhsi Electric India Ltd.
2019	Dr. N. Senthil Madasamy	Associate Professor	Active SPOC / NPTEL Brand Ambassador by NPTEL SWAYAM
2019	Ms.M.DEEPARANI	Assistant Professor	Elite Gold (Topper of 2 percentage in the course) in NPTEL Online Course titled Educational Leadership
2019	Mr.P.E.KAMALAKKAN NAN	Assistant Professor	Elite Gold (Topper of 2 percentage in the course) in NPTEL Online Course

			titled Educational Leadership	
2019	Dr.P.A.Periasamy	Associate Professor	Elite Gold in NPTEL Online Course titled Accreditation and Outcome Based Learning	
2019	Dr. I. Rajendran	Professor	Outstanding Engineer Award by Institute of Engineers (India)	
2020	Mr.C.Kannan	Assistant Professor	Certification on Examination for Energy Managers Energy Auditors by National Productivity Council	
2019	Dr.R.Sudhakar	Professor	Outstanding Associate Editor by IEEE Access	
2019	Ms.A.Brunda	Assistant Professor	Best Teacher Award by IISc Awards	
2019	Dr. N. Senthil Madasamy	Associate Professor	IIC Innovation Ambassador by AICTE MHRD - MIC	
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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-endexamination
MCA	CA	EVEN SEM	28/09/2020	12/10/2020
ME	AE, CO, CP, ST, CC	EVEN SEM	28/09/2020	12/10/2020
BTech	IT	EVEN SEM	28/09/2020	12/10/2020
BE	AU, CE, ME, CS, EE, EC,EI, MC, PR	EVEN SEM	28/09/2020	12/10/2020
MCA	CA	ODD SEMESTER 2019 - 20	10/01/2020	01/02/2020
ME	AE, CO, CP, ST, CC	ODD SEMESTER 2019 - 20	10/01/2020	01/02/2020
BTech	IT	ODD SEMESTER 2019 - 20	10/01/2020	01/02/2020
BE	AU, CE, ME,	ODD SEMESTER	10/01/2020	01/02/2020

CS, EE, EC,EI, MC, PR	2019 - 20	
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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
Nill	3480	0

#### 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://mcet.in/wp-content/uploads/IQAC/2021/Student%20Performance%20and%20Learn ing%20Outcomes.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
CA	MCA	Master of Computer Applications	47	47	100
ST	ME	Structural Engineering	10	10	100
ME	BE	Mechanical Engineering	141	141	100
IT	BTech	Information Technology	106	106	100
EI	BE	Electronics and Instrume ntation Engineering	48	48	100
EE	BE	Electrical and Electronics Engineering	118	118	100
EC	BE	Electronics and Communic ation Engineering	108	108	100
CS	BE	Computer Science and Engineering	96	96	100
CE	BE	Civil Engineering	66	65	98.48
AU	BE	Automobile	138	138	100

Engineering 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://mcet.in/wp-content/uploads/IOAC/2021/Student%20Satisfaction%20Survey% 20AY2019-2020%20 V2.pdf

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

#### 3.1 - Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

Yes

Name of the teacher getting seed money

Mr.P.Kathirvel, Assistant Professor, Electronics and Instrumentation Engineering

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3.1.2 - Teachers awarded National/International fellowship for advanced studies/ research during the year

Туре	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
National	Dr. I. Rajendran, Senior Professor and Head / Mechanical Engineering	Out Standing Engineer Award	16/09/2019	The Institution of Engineers
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#### 3.2 - Resource Mobilization for Research

3.2.1 - 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
Major Projects	730	Science for Equity, Empowerment and Development (SEED) Division, DST, New Delhi	14.37	2.93
Major Projects	730	Indian Space Research Organization, Department of Space	20.04	11.52

		1		
Major Projects	365	EDII (Entrepr eneurship Development and Innovation Institute), Guindy, Chennai	5	1.25
Any Other (Specify)	365	University Grants Commission, New Delhi	30	15
Any Other (Specify)	730	EDII (Entrepr eneurship Development and Innovation Institute), Guindy, Chennai	2.82	1
Any Other (Specify)	730	AICTE, New Delhi	16.68	13.34
Any Other (Specify)	7	AICTE, New Delhi	3.16	3.16
Any Other (Specify)	7	AICTE, New Delhi	2.47	2.47
Any Other (Specify)	7	AICTE, New Delhi	3.57	3.57
Industry sponsored Projects	180	Sakthi Auto Components Ltd, Perundurai	2.39	0.8
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3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years

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#### 3.3 - Innovation Ecosystem

3.3.1 – 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
Matlab Portal demonstration for MCET	Mechanical Engineering	29/05/2020
National Level webinar on Simulation driven for e- mobility	Mechanical Engineering	10/06/2020
Guest Lecture on Contribution of Mechanical Engineering in the growth of Civilization	Mechanical Engineering	22/07/2019
Guest Lecture onAdvanced Welding Technologies	Mechanical Engineering	26/07/2019
Guest Lecture on	Mechanical Engineering	27/07/2019

Failure Analysis on Welded structures		
Guest Lecture on Design of Welding Fixtures	Mechanical Engineering	27/07/2019
Guest Lecture onAutomotive materials	Mechanical Engineering	28/09/2019
Guest Lecture onFlux cored Welding and resistance welding	Mechanical Engineering	14/10/2019
Guest Lecture on Solid State Welding processes	Mechanical Engineering	14/10/2019
Guest Lecture on Welding defects and welding of Chromium molybdenum steel and duplex stainless steel	Mechanical Engineering	15/10/2019
Guest Lecture on Innovations for the technological progress	Mechanical Engineering	15/10/2019
AICTE spnsored 2 Week  FDP- Design for  Manufacture, Assembly,  Environment for Product  innovation and  Optimization	Automobile Engineering	25/11/2019
Lean Six Sigma Green Belt Course	Automobile Engineering	19/08/2019
(STEP-1) For I Year Core stream students	Mechanical Engineering, Autombile Engineering, Civil Engineering	02/01/2020
Intellectual Property Rights and Indian Patent Act	Institution Innovation Council	22/07/2019
Deep Learning for Computer vision with MATLAB	Electronics and Communication Engineering	14/05/2020
IoT hardware design	Electronics and Communication Engineering	25/05/2020
Two days work shop on Network simulation tools	Electronics and Communication Engineering	18/02/2020
Workshop on Internet of Things and Augmented Reality	Computer Science and Engineering	21/09/2019
Automotive system safety and Security- Overview	Mechanical Engineering	07/06/2020
Student Talent Enhancement Programme(STEP-1)	Electronics and Communication Engineering, Electrical and Electronics	08/02/2020

	Engineering, Electronics and Instrumentation Engineering	
Student Talent Enhancement Programme(STEP-2)	Electronics and Communication Engineering, Electrical and Electronics Engineering, Electronics and Instrumentation Engineering	25/01/2020
Faculty Development Programme on Data Science with Python - Train the Trainer	Computer Science and Engineering	05/12/2019
Guest Lecture on Flux cored welding and resistance welding	Mechanical Engineering	16/10/2019
2 Days workshop on "Mobile Application Development"	Computer Science and Engineering	18/07/2019
Student Talent Enhancement Programme(STEP-2)	Computer Science and Engineering, Information Technology, Master of Computer Applications	11/01/2020
Student Talent Enhancement Programme(STEP-1)	Computer Science and Engineering, Information Technology, Master of Computer Applications	22/02/2020
Workshop on "Development of Real Time Applications using IoT-A hands on Approach"	Information Technology	27/02/2020
Workshop on "Machine Learning and its Applications"	Information Technology	13/09/2019
IPR Patent Writing	Institutions Innovation Council	10/02/2020
Industrial Practices inProduct development using Teamcenter 10.1.5	Mechanical Engineering	31/01/2020
Latest trends in Li-Ion Batteries	Mechanical Engineering	10/03/2020
Welding for Automobile applications	Mechanical Engineering	08/05/2020
Current Manufacturing Technologies	Mechanical Engineering	12/05/2020
Webinar on Data Science	Mechanical Engineering	11/05/2020
Robotics for Manufacturing	Mechanical Engineering	13/05/2020
CFD and its	Mechanical Engineering	16/05/2020

applications How to develop successful career			
Webinar on Covid 19 Pneumatics in critical health care	Mechanical Engineering	28/05/2020	
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 $3.3.2-{\small Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year}\\$ 

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Automatic coconut Tree climber and Harvester	Rishikeshan S(16BME014), Harshavardhaan D(16BME020), Ranjith Kumar K(16BME047)	Agastya International Foundation, Bangalore.	09/12/2019	Participated
Smart Cooler	Shakthi Sree GM(16BME048)	Agastya International Foundation, Bangalore.	09/12/2019	Won First Prize wit cash of Rs 3000/-
Automatic coconut Tree climber and Harvester	Rishikeshan S(16BME014), Harshavardhaan D(16BME020), Ranjith Kumar K(16BME047)	National Science Technology Fair 2019-CODDISIA	29/08/2019	Participated
Smart Cooler	Shakthi Sree GM(16BME048)	National Science Technology Fair 2019-CODDISIA	29/08/2019	Participated
Design and Development of Sensor based Tiller for Farm Machinery	Mr.THIRUMALAI SAMY T(16BME110), Mr.SIVAPRAKASH K(16BME117), Mr.NISHANTH B(17BME327), Mr.Saurabh Kumar(17BME113)	New Generation Innovation and Entrepreneurshi p Development Centre	31/07/2019	Participated
E-Kart Vehicle Building	Mr.Viswarjun( 16BME010) S Mr. Manoranjan(18BM E306) Ms.Suruth i(18BME302)	Bharat Formula E- Karting Competition (Redmist Riders)-SAE	10/09/2019	Virtual round - 3rd, Best Innovation,Best Female Participant [Mehala.S, Production Engineering Department], Driv ers Championships - 1st, Constructors Championship-3rd
BIZLAB SIMULATION	Mr.N.Muthusan kar(16BME305)	Firebird Institute of	21/09/2019	Won First Prize wit cash

		Research in Management Coimbatore		of Rs 3000/-
Recycling Techniques for Lithium Ion Batteries	S.Harish Chan dhar(16BME013), R. Bharathiraja (16BME057)	IIITDM, Kancheepuram	28/12/2019	Participated
Smart and Innovative Glove Box Design	Karhikeyan S(17BME306), Rathinakumar L(17BME309), Siddharthan A(17BME304), Prashanthi N(17BME301)	IIITDM, Kancheepuram	28/12/2019	Participated
Magnetic regenerative suspension system	Venkata prashath H(17BME308), Goutham B (16BME007), Dharun Eshwar K S(16BME040)	Stamford International University, Thailand.	07/09/2019	Participated
	-	View File		

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

CIBIE Centre for MCET Innovation Management Business Incubation and Entrepre neurship	Mayon	Manufacturer of IPA Sanitizer and Hands free Sanitizer	08/08/2019
		Machine	
	IronmanTec hnologies	AI and IOT based solution provider for process industries.	17/09/2019
CIBIE Centre for MCET Innovation Management An Business Incubation and Entrepre neurship	Hash Automation	Home automation application through patented device.	17/09/2019

## 3.4 - Research Publications and Awards

# 3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded	
Automobile Engineering	2	

Civil Engineering	2
Computer Science Engineering	3
Electrical and Electronics Engineering	1
Electronics and Communication Engineering	2
Information Technology	3
Mechanical Engineering	1
Production Engineering	2
Master of Computer Applications	1
Science and Humanities	2

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

Туре	Department	Number of Publication	Average Impact Factor (if any)
International	Mechanical Engineering	13	1.75
National	Automobile Engineering	4	0.48
International	Automobile Engineering	8	1.76
International	Civil Engineering	6	0.36
International	Production Engineering	1	0.38
International	Electronics and Communication Engineerin	12	1.3
International	Electrical and Electronics Engineering	22	3.94
International	Electronics and Instrumentation Engineering	2	6.57
International	Computer Science and Engineering	18	0.89
International	Information Technology	12	1.61
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# 3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication	
Science and Humanities	9	
Information Technology	30	
Computer Science and Engineering	11	
Electronics and Instrumentation Engineering	1	

Electrical and Electronics Engineering	4	
Electronics and Communication Engineering	10	
Civil Engineering	1	
Automobile Engineering	2	
Mechanical Engineering	4	
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# 3.4.4 – Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
An interactive Assistive deviceSystem for Visually impaired people , Inventors: Dr. K.Mohaideen abdul kadhar, AP(SG)-ECE Selvan L.Gowtham, Student(16BEC031) - ECE	Published	202041007646	24/02/2020
AN APPLICATION PROGRAM INTERFACE FOR GENE EXPRESSION DATA CLUSTERING, Inventors: Dr. M Pandi, Dr. N Senthil Madasamy, Dr.T Sivakumar, Dr. S Veeramani, Mr.K.Srinivasan, Mr.P. Boopathirajan	Published	202041000403	06/03/2020
Switching Device Inventors :Dr.B.Vinothkumar ,Associate Professor/EEE, Dr.K.N.Vijeyakumar, Associate Professor/ECE Dr.R.Sudhakar, Professor and Head/ECE Dr.N.Saravanakumar, Associate Professor Ms.S.Kalaiselvi, Assistant Professor	Published	20204100747	21/02/2020
Flour Extruder Inventors: Dr. I. Rajendran, Prof Head - Mech, Dr. Rama. Thirumurugan, Prof - Mech Mr. E.	Published	201841040120	01/05/2020

Baskaran, AP-Mech , Mr. M. Padmanaban, AP-Mech Mr. Sreejith S. Nair, AP-Mech			
Induction water heater Inventors:     Dr. Rama. Thirumurugan, Prof     Mech Dr. R. Gnanaguru, Asso Prof - Mech, Mr. S. Gnanakumar, AP - Mech, and Mr. T. Vigneshkumar, AP - Mech	Published	201841040121	01/05/2020
Fail-Safe Mechanical latching system for three- way tipper Inventors: Dr. I. Rajendran, Prof Head - Mech, Dr. Rama. Thirumurugan, Prof - Mech Mr. N. Santhosh, AP - Mech, Mr. K. Prabu , AP - Mech and Mr. C. Selvasenthil Prabhu, AP - Mech	Published	201841040122	01/05/2020
Handheld Weed Plucker Inventors: Dr. I. Rajendran, Prof Head - Mech, Dr. Rama. Thirumurugan, Prof - Mech	Filed	TEMP/E-1/6401/2	12/02/2020
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3.4.5 – 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
Characte ristics of bio-oil from continuous fast pyrolysis of prosopies juliflora	Mr.Radha krishnan	Energy	2020	1	MCET	Nill

Characte rization of New Natural Cellulosic Fiber from Coconut Tree Primary Flower Leaf Stalk Fiber (CPFLSF)	Dr.D.Sha nmugam	Journal of Natural Fibers	2019	1	MCET	Nill
Effect of TiB Addition on Corrosion Behavior of Titanium Composites under Neutral Chloride Solution	Dr.M.Sel vakumar	Transact ions of the Indian Ceramic Society	2019	1	MCET	2
Experime ntal inves tigation of dry turning of AISI 1040 steel with TiN coated insert	Dr.M.Sel vakumar	Engineer ing Research Express	2019	1	MCET	Nill
Experime ntal inves tigations of recipro cating wear behavior of metal matrix (Ti/TiB) composites	Dr.M.Sel vakumar	Archives of Civil and Mechanical Engineerin g	2020	1	MCET	1
Material stability investigat ion of pol yamide mat erial before and after laser sintering	Dr.M.Sel vakumar	Internat ional Journal of Polymer Analysis and Charac terization (IJPAC)	2020	1	MCET	Nill

Exergy Analysis of Ideal Otto Cycle with Oxy- Fuel and Exhaust Gas Recirc ulation	Mr. Yazharasu A	Research Journal of Chemistry and Enviro nment	2020	1	MCET	Nill
Characte rization of mechanical, elect rical and thermal properties of Ag nanoparticle-reinforced Al6061 alloy	Dr.M.Sel vakumar	Journal of Thermal Analysis and Calori metry	2020	1	MCET	Nill
Experime ntal inves tigations of recipro cating wear behavior of metal matrix (Ti/TiB) composites	T. Ramkumar	Archives of Civil and Mechanical Engineerin g	2020	1	MCET	1
Influence of finite element model, loa d-sharing and load d istributio n on crack propagatio n path in spur gear drive	Rama Thi rumurugan	Engineer ing Failure Analysis	2020	1	MCET	1
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3.4.6 - 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
Material stability investigat ion of	Dr. K. Hariharan	Internat ional Journal of Polymer	2020	2	Nill	MCET

polyamide material before and after laser sintering		Analysis and Charac terization				
Experime ntal inves tigation of bioceramic (Hydroxyap atite and Yttrium stabilized zirconia) composite on Ti6Al7Nb alloy for medical implants	Dr. K. Hariharan	Materials and Manufa cturing Processes	2020	2	Nill	MCET
Experime ntal inves tigations of recipro cating wear behavior of metal matrix (Ti/TiB) composites	Dr. T. Ramkumar	Archives of Civil and Mechanical Engineerin g	2020	9	1	MCET
Surface structural features and wear analysis of a multilayer Ti6Al4V- B4C thin film coated AISI 1040 steel	Dr. T. Ramkumar	Materials Research Express	2020	9	Nill	MCET
Experime ntal inves tigation of dry turning of AISI 1040 steel with TiN coated insert	Dr. T. Ramkumar	Engineer ing Research Express	2019	9	Nill	MCET
A New	Dr. T.	Journal	2019	9	Nill	MCET

Natural Cellulosic Pigeon Pea (Cajanusca jan) Pod Fiber Char acterizati on for Bio -degradabl e Polymeric Composites	Ramkumar	of Natural Fibers				
Study on the quality and tooth root load carrying capacity of the high contact ratio asym metrical gear tooth machined using WCEDM process	Dr. Rama Thirumurug an	Materials and Manufa cturing Processes	2020	6	Nill	MCET
Influence of finite element model, Loa d-sharing and load d istributio n on crack propagatio n path in spur gear drive	Dr. Rama Thirumurug an	Engineer ing Failure Analysis	2020	6	1	MCET
Characte rization of New Natural Cellulosic Fiber from Coconut Tree Primary Flower Leaf Stalk Fiber (CPFLSF)	Dr. Rama Thirumurug an	Journal of Natural Fibers	2019	6	Nill	MCET
Effect	Dr. I	Archives	2020	16	Nill	MCET

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# 3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local	
Attended/Semi nars/Workshops	8	98	13	46	
Presented papers	39	4	Nill	Nill	
Resource persons	3	5	11	Nill	
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## 3.5 - Consultancy

# 3.5.1 – Revenue generated from Consultancy during the year

	Revenue generated from consultancy during the year						
Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)				
Mechanical Engineering	Fatigue and static test of steering knuckle	Sakthi Auto Components -Tirupur	2308351				
Automobile Engineering	Training in NXCAD and AutoCAD platform	M/S, LT, Coimbatore	87500				
Civil Engineering	Land survey	M/S. Vaibhavan Constructions, Edappadi	11400				
Civil Engineering	Brick Test	M/S. Krishna brick chambers, Kottathurai, Dharapuram	1200				
Civil Engineering	Rapid chloride permeabilty test apparatus rent	Ms, S. Viwetha, Karpagam College of engineering and technology, Coimbatore	1250				
Electronics and Communication	Implementation of Image smoothening	Embdes Engineering	48000				

Engineering	and scaling HDL model on Spartan-6 FPGA	Solutions (E2-S) Pvt.Ltd., Bangalore				
Electronics and Communication Engineering	Design, Development and Commissioning of Machine Vision based Fault Detection system in fly wheel Machining line	Sakthi Auto Component Limited	40000			
Electrical and Electronics Engineering	Harmonic audit	KATERRA INDIA LTD, KRISHNAGIRI	4000			
Electrical and Electronics Engineering	Safety Audit	Indian Oil Corporation, Coimbatore	8000			
Electrical and Electronics Engineering	Energy Audit	Club mahindra, Madikeri, Karnataka	20000			
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3.5.2 - Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees			
Mechanical Engineering	Training on 2D Drafting using AutoCAD and NX 11.0 CAD Essentials Advanced	LT Defence, Coimbatore	100000	7			
Automobile Engineering	Training in NXCAD and AutoCAD platform	M/S, LT, Coimbatore	87500	12			
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#### 3.6 - Extension Activities

3.6.1 – 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
National Voter's day- Awareness Programme	NIA	3	100
Mini Marathon on behalf of the Police Commemoration day.	Tamilnadu Police Department, Pollachi Division	2	30
Rally on	RTO Pollachi	2	40

Awareness of Disaster Safety measures.					
Awareness about Renewable Energy with Enviro Truck	CIBIE, NIA	3	80		
Blood donation camp	Sakthi pura and RRC - MCET	3	150		
Free medical campy by team of doctors	Makkinampatti village	2	100		
CORONA awareness rally	Makkinampatti village	2	100		
Lecture on conversation of electric energy	Government Middle school, Unjavelampatti	3	50		
Sports events	Government Middle school, Unjavelampatti	3	30		
Yoga practice	Makkinampatti Panchayat Union School	3	30		
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3.6.2 – 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	
Bharat Formula Karting Championship	Cash Price of Rs. 5000/- in the category of Best Innovation -160CC	CADD Technologies	1	
Bharat Formula Karting Championship	Cash Price of Rs. 20,000/- in the category of second runner-160CC	CADD Technologies	1	
Jal Shakthi Abhiyan award for Rain water conservation activities	Certificate of Appreciation	AICTE, New Delhi	16	
Project Contest - Life Saving Mobility - conducted by Mitsubhsi Electric India Ltd.	8th Position in national level with cash award of Rs.20000	Mitsubhsi Electric India Ltd.	2	
Bharat Formula Karting Championship	Cash Price of Rs. 10,000/- in the category of Endurance 1- 160CC	CADD Technologies	1	
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3.6.3 – 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/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Republic Day Celebrations	<pre>¾ TN (BN) NCC, Dr. Mahalingam College of Engineering and Technology,Poll achi-642003 Natchimuthu Polytechnic College, Pollachi -642003</pre>	Republic Day Celebrations 2020	25	400
Independence Day Celebrations	% TN (BN) NCC, Dr. Mahalingam College of Engineering and Technology,Poll achi-642003 Natchimuthu Polytechnic College, Pollachi -642003	Independence Day Celebrations 2019	20	500
International Yoga Day celebrations	<pre>% TN (BN) NCC, Dr. Mahalingam College of Engineering and Technology,Poll achi-642003</pre>	International Yoga day 2019	25	200
Unnat bharat abhiyan	NSS	Household survey was conducted at Unjavelampatti village on 18.02.2020	2	30
Unnat bharat abhiyan	NSS	Household survey was conducted at Unjavelampatti village on 17.02.2020	2	30
Swachh Bharat -Cleaning activity was done at Arutchelvar Nagar, Unjavelampatti.	NSS	Cleaning Activity on 14.02.2020	3	50

One students one tree plantation on15/8/2019  JalShakthiAbh iyan Development office Pollachi South.  JalShakthiAbh iyan Conservation office Pollachi South.  South Seminar on Water Conservation on and public distribution and Central board for	Swachh Bharat Abhiyan-Poster Presentation on Plastic free in India.	NSS	Poster Presentation on Plastic free in India on 26/09/2019 and 27/09/2019	3	50
iyan Development conservation meeting on 22.07.2019  JalShakthiAbh Ministry of Consumer Affairs, Food and public distribution and Central board for Conservation on Conservati	one tree	NSS	Tree plantation	3	50
iyan Consumer Water Affairs, Food conservation on and public distribution and Central board for		Development office Pollachi	conservation meeting on	3	60
3   1   1   1   1   1   1   1   1   1		Consumer Affairs, Food and public distribution and Central	Water conservation on	3	30

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3.7 - Collaborations

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

Nature of activity	Participant	Source of financial support	Duration
Research	Faculty Members	Indian Space Research Organization, Department of Space, Bengaluru	730
Student exchange	Students	Embdes Engineering solutions	180
Reviewing of ongoing collaborative activities on supercapcitors applications	Dr. Allen J Britten & Dr. Martin Mkandawire, Professor of Chemistry, Cape Breton University, Canada visited India during 13 & 14 Dec 2019 and reviewed the collaborative research activities between MCET & Cape Breton University.	Cape Breton University, Canada	7
Sharing of Anlytical Instumntation Facilities	Mr. Stephen Selvamani, Research Scholar, Dearment of Chemistry, Loyola College, Chennai	NIL	365

Sharing of Anlytical Instumntation Facilities	Mr. Stephen Selvamani, Research Scholar, Dearment of Chemistry, Loyola College, Chennai	NIL	7		
Sharing of Anlytical Instumntation Facilities	Ms. Radhika Nair, Research Scholar, Dearment of Chemistry, Loyola College, Chennai	NIL	7		
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3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Notine of links	Title of the	Nome of the	Duration From	Duration To	Double's surf
Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
MoU	Consultancy works, Student Projects	Inda Pistons Ltd., Chennai	15/12/2019	10/03/2020	Dr.Rama.Th irumurugan, S.Prabu, 16BME081 Praveen.S, 16BME086 Nan dhakumar.S, 16BME075 Mohamed Marzuk.S
MoU	Consultancy works	Larsen Toubro, Coimbatore	10/07/2019	03/08/2019	M.Saravana kumar, N.Santhosh, M.Deepak Chandra Sekaran
MoU	Consultancy works	Larsen Toubro, Coimbatore	05/07/2019	09/07/2019	M.Saravana kumar, N.Santhosh, M.Deepak Chandra Sekaran
MoU	Industrial visit, Internship, On-the-job training, project work, sharing of r esearchwork, consultancy works	Janatics India Pvt.Ltd., Coimbatore	18/12/2019	20/12/2019	Mr.M.Selva Senthil Prabu, 17BME329 Karthik Raghav K.B., 17BME010 Kiran.M, 18BME005 Aakash.S, 19BME330

					Theeban.S
MoU	Industrial visit, Internship, On-the-job training, project work, sharing of r esearchwork, consultancy works	Janatics India Pvt.Ltd., Coimbatore	03/02/2020	18/03/2020	Mr.M.Selva Senthil Prabu, 17BME329 Karthik Raghav K.B., 17BME010 Kiran.M, 18BME005 Aakash.S, 19BME330 Theeban.S
MoU	Industrial visit, Internship, On-the-job training, project work, sharing of r esearchwork, consultancy works	Janatics India Pvt.Ltd., Coimbatore	06/01/2020	11/01/2020	Mr.M.Selva Senthil Prabu, 17BME329 Karthik Raghav K.B., 17BME010 Kiran.M, 18BME005 Aakash.S, 19BME330 Theeban.S
MoU	Industrial visit, Internship, On-the-job training, project work, Faculty and students training, consultancy works	Roots Group of Industries, Coimbatore	24/01/2020	25/01/2020	17BME020 A runprasad.D, 17BME077 Sac hithanandam. S, 17BME019, Dharaneess A.K., 17BME028 Gokul.S, 17BME050 Nav aneethakrish nan.S, 17BME052 Mur ugaperumal.P , 17BME082 Athithyan.R, 17BME Raguram K.S., 18BME079 Nivas.S, 18BME030 Mohamed Kalith.M, 18BME027 Ka
MoU	Industrial visit, Internship, On-the-job training, project	Roots Group of Industries, Coimbatore	09/01/2020	11/01/2020	17BME020 A runprasad.D, 17BME077 Sac hithanandam. S, 17BME019, Dharaneess

	work, Faculty and students training, consultancy works				A.K., 17BME028 Gokul.S, 17BME050 Nav aneethakrish nan.S, 17BME052 Mur ugaperumal.P , 17BME082 Athithyan.R,
					17BME Raguram K.S., 18BME079 Nivas.S, 18BME030 Mohamed Kalith.M, 18BME027 Ka
MoU	Collaborat ive Education Program, Industrial visit, Internship, On-the-job training, project work, sharing of r esearchwork, consultancy works	Sakthi Auto Coponents Ltd. (SACL), Tiruppur	28/09/2019	28/09/2019	17BME064 Dhayanandh S.B., 17BME066 Vai kkaldurai.A, 17BME034 Gowtham M.S., 17BME038 Abinesh.J, 17BME056 Eniyan.D, 17BME011 Kis horekumar.S, 17BME037 Mat hankumar.A, 17BME067 Mah endiran.K, 18BME016 Aswin Beni.M, 18BME040 Dhanagseya Pandiyan.P, 18BME043 R
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3.7.3 – MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Builders Association of India (BAI), Udumalpet Centre	23/10/2019	To enhance the employabilty skills of Engineering Students and Labourers (Skilled,Semi	215

		Skilled Unskilled)	
Alagappa Engineering	25/06/2020	Training, Industrial Visit , Research , Internship	413
Geometrics Space Structures Private Limited, Coimbatore	08/02/2020	Enhancement Program , Consultancy , Exchange and Collaborative research project, Guest lecture	210

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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		
250	209.5		

## 4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added		
Classrooms with Wi-Fi OR LAN	Existing		
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Existing		
Value of the equipment purchased during the year (rs. in lakhs)	Existing		
Seminar halls with ICT facilities	Existing		
Classrooms with LCD facilities	Existing		
Seminar Halls	Existing		
Laboratories	Existing		
Class rooms	Existing		
Campus Area	Existing		
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## 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
AUTOLIB- Advanced Integrated Library Automation Management Software	Fully	7.2 Version- Advanced-Webbase Software	2000

# 4.2.2 - Library Services

Library	Existing	Newly Added	Total
Service Type			

Text Books	58770	9489907	998	184185	59768	9674092
Reference Books	3372	5861274	48	35758	3420	5897032
e-Books	1340	Nill	204	Nill	1544	Nill
Journals	225	595250	212	491076	437	1086326
Digital Database	2	19470	2	19470	4	38940
CD & Video	5292	64641	31	450	5323	65091
Library Automation	1	123900	Nill	Nill	1	123900
Weeding (hard & soft)	920	237293	2	217	922	237510
Others(s pecify)	3796	Nill	Nill	Nill	3796	Nill
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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		
Ms.C.Latha	Highway Engineering	MCET Connect- Tablet based	24/06/2019		
Mr.N.Gobi	Web Technologies	MCET Connect- Tablet Based	24/06/2019		
Mr.V.Gurunathan	Electronic Circuits - I	MCET Connect- Tablet Based	19/06/2019		
Dr.A.Senthil Kumar	Digital Electronics	MCET Connect- Tablet Based	19/06/2019		
Dr.K.Vijayakumar	Process Control	MCET Connect- Tablet Based	17/12/2019		
Dr.S.Ramakrishnan	Cryptography and Network Security	MCET Connect- Tablet Based	19/06/2019		
Dr.M.Elenchezhiyan	Control Systems	MCET Connect- Tablet Based	19/06/2019		
Dr.Calvin Sophistus king	Engineering Thermodynamics	MCET Connect- Tablet Based	24/06/2019		
Mr.T.Kasirajan	Strength of Materials	MCET Connect- Tablet Based	19/06/2019		
Dr.G.V.Sriramacha	ODE and Complex variables	MCET Connect Tablet based	05/04/2020		
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## 4.3 - IT Infrastructure

### 4.3.1 – Technology Upgradation (overall)

Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	1862	1366	1035	123	107	46	100	200	120
Added	2	0	0	0	0	0	0	100	2
Total	1864	1366	1035	123	107	46	100	300	122

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

300 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
Media Centre	http://mcet.in/?page_id=8294
MCET Lecture Hour	https://www.youtube.com/watch?vYdf0BNFk
MCET Tutorial Hour	https://www.youtube.com/watch?v=dh7DZPQ RPC4

### 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
900	871	300	286

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)

The college has separate maintenance wing for civil, electrical and IT exclusive for maintenance. Some of the maintenance work carried out is as follows, Laboratory Maintenance All the equipments and machinery of the laboratories are periodically maintained by the lab technicians. If the equipment/machinery is to be serviced during the warrantee period, the supplier of the equipment/machinery will be intimated about the repair and it will be serviced either inhouse or in the supplier premises based on the nature of defect. After warrantee period if the equipment/machinery demands service, the technical staff attached to the respective laboratories service the equipment/machinery to the extent possible. When they become non serviceable, they report the matter to the faculty incharge of the laboratory and he in turn refers the same to the HoD, who arranges to get them repaired. Computer and Accessories Maintenance Due to the large number of computers and networking, a separate team ITES (Information Technology Enabled Services) look after the maintenance of computers and the networking. With this team, breakdown calls related to systems are quickly resolved. They maintain the computers and other associated accessories periodically and update the OS (operating system) whenever it is demanded by the department. A separate networking team, ITeS is

also functioning effectively to attend the network related problems. Campus Maintenance The people appointed for maintenance of infrastructure, on daily basis would report to the civil engineer of maintenance wing, any breakages and other maintenance requirements, and civil engineer arranges to get them rectified. Cleanliness daily maintenance of the interior facility (classrooms, laboratories, library, hallway, and staircase) is done by housekeeping team of the institute under the supervision of the college maintenance engineer. Fire extinguisher is outsourced since refilling of the cylinder is done once in a year. The drinking water facility to the entire campus is done through RO plant with capacity of 3000 liters/hour. Further there are about 35Nos of water doctor to supply drinking water at various service points. The RO plant and water doctor are maintained by AMC. Electrical Maintenance Power supply, Generators and Electrical Repairs are looked after by the electrical engineer supported by electricians to facilitate the campus with reliable electric power. The power is supplied by the Tamil Nadu Electricity Board with a peak load of 750 kVA, and it is augmented by six diesel generators capable of giving a backup power of 1377.5 kVA. The generators are meticulously maintained by the technical team. There are 21 UPS systems of 650 KVA capacity in the campus, for server rooms and the lab equipment needing uninterrupted power supply. They are normally maintained by an AMC. In case of maintenance of electrical fittings, department infrastructure coordinator communicates the maintenance issue to the electrical maintenance wing and they solve the issue and it is recorded by them in their maintenance register. Solar power plant of 78kWP capacity is also maintained by Electrical Maintenance wing. Library Maintenance and Utilization The cleanliness of the library is maintained by the campus maintenance team.

http://mcet.in/?page\_id=4480

### **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	NIA SCHOLARSHIP, ArutchelvarVidyasak thi Scholarship (AVS), Scholarship through YuvaSakthi Forum ,Campus Day Scholarship, Annual Day Scholarship	454	8376300
Financial Support from Other Sources			
a) National	Prime ministers (Jammu Kashmir) Special scholarship Scheme, Tamil Nadu Government First Graduation Scholarship, BC/MBC/DNC Welfare Scholarship-2019-20 , SC/ST Welfare Sch olarship-2019-20, Kongu Vellalar Gounder Trust, Chennai, Private	2050	35258605

	Scholarship				
b)International	Nil	Nill	0		
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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		
Soft skill development	06/06/2019	1595	Six Phrase MySlate, Coimbatore., CPG Faculty, IIT, BOMBAY		
Remedial coaching	03/06/2019	1021	MCET Faculty		
Language lab	21/08/2019	977	Department of Science Humanities, British Council		
Bridge courses	03/06/2019	754	MCET Faculty		
Yoga, Meditation	07/08/2019	995	MCET Faculty		
Mentoring	19/06/2019	3480	MCET Faculty		
Personal Counselling	19/07/2019	2778	MCET Faculty		
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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	Orientation Program and Training Class	309	3480	16	463		
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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	
6	6	3	

## 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	

30	584	274	58	584	189	
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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
2019	1	B.E. Electronics and Instrume ntation Engineering	Electronics and Instrume ntation Engineering	SASTRA University	M.Tech (Embedded Systems)
2019	1	B.E Electronics and Instrume ntation Engineering	Electronics and Instrume ntation Engineering	Northumbria University,U K	M.S(Safety, Health and E nvironmental Management
2019	1	B.E Electronics and Instrume ntation Engineering	Electronics and Instrume ntation Engineering	University of Twente, New Zealand	M.S (Envir onmental and Energy Management)
2019	1	B.E. Automobile Engineering	Automobile Engineering	PSG College of Technology	M.E.Produc tion
2019	9	B.E. Mechanical Engineering	Mechanical Engineering	University of Michigan, Dearborn, USA	Mechanical Engineering (MSE)
2019	1	B.E. Electronics and Communic ation Engineering	Electronics and Communic ation Engineering	Chandigarh University	MBA
2019	1	B.E. Electronics and Communic ation Engineering	Electronics and Communic ation Engineering	PSG College of Technology	M.E Wireless Com munication
2019	1	B.E. Electronics and Communic ation Engineering	PSG Electronics College of and Communic ation Engineering		M.E Commun ication System
2019	1	B.E. Electronics and Communic ation Engineering	Electronics and Communic ation Engineering	Illinois Institute of Technology	Master's in Electrical and Computer Engieering
2019	1	B.E. Electronics and Communic	Electronics and Communic	Friedrich- Alexander- Universität	M.S Commun ication and Multimedia

	ation Engineering	ation Engineering	Erlangen- Nürnberg (FAU)	Engineering			
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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			
GATE	1			
GMAT	3			
CAT	1			
GRE	3			
TOFEL	5			
Any Other	6			
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5.2.4 - Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Sepak Takraw	Zonal (All India)	75
Hockey (Men)	Zonal	162
Chess (Men Women)	Zonal	105
Athletic (Men Women)	Zonal	907
Road Cycling	Zonal	12
Takewando	Zonal	15
Cricket(W)	Inter zonal	208
Volleyball(M)	Inter Collegiate	96
Basketball(M)	Inter Collegiate	96
Kho-Kho(M)	Inter Collegiate	96
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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	second prize in I ntrospecti on Course conducted by The World Community Service Centre, Aliyar	National	Nill	1	18BEE301	S.Yuvaraj

2019	Gold medal in high jump in Zonal tournament conducted by Anna University	National	1	Nill	19BME020	Y. Shalom Shawag
2019	Silver medal in Discus in Zonal tournament conducted by Anna University	National	1	Nill	17BME059	T. Siva Prakash
2019	Gold medal in 4x100m relay in Zonal tournament conducted by Anna University	National	1	Nill	17BME106	D. Praveen Sagar
2019	Bronze medal in 4x400m relay in Zonal tournament conducted by Anna University	National	1	Nill	17BME106	D. Praveen Sagar
2019	Silver medal in Half Marathon in Zonal tournament conducted by Anna University	National	1	Nill	19BME301	K. Swetha
2019	Bronze medal in 5000m relay in Zonal tournament conducted by Anna University	National	1	Nill	19BME301	K. Swetha
2019	Gold medal in Taekwondo	National	1	Nill	17BME007	S. Ajay

in Zonal					
tournament					
conducted					
by Anna					
by Anna University					
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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

SGS is a student body, exclusively made up of students from II to IV years. It is a body of students, for the students and works to ensure that every student gets the best possible college experience. Every year, a new team consisting of a President, Secretary and about a dozen members to represent areas such as, sports and other curricular and co-curricular activities, is selected from a pool of applicants who wish to serve. SGS selects a team of about 100 Event Management Team volunteers to assist them and all positions are voluntary. Every student is given equal opportunity to apply for various positions. The members are selected by a committee constituted with faculty members from all the Departments. SGS acts as a messenger between the student body and the management. All the members are responsible to ensure that every student's thoughts, opinions and beliefs are heard by the management. This representation of students to the management is done by conducting periodic general body meetings where the class representatives of all the classes are present to understand the issues related to student life at MCET. They meet the management as and when necessary to inform, discuss and identify possible solutions to issues and relay them back to the students. In short, it encourages students' feedback and shares the College initiatives resulting from student feedback. It provides input to the development of policies and services that support students and advance the quality of learning activities at MCET. SGS actively contributes to the College decision making in relation to the student experience.

### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

No

5.4.2 - No. of registered Alumni:

12832

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

890000

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

Automobile - "Bos" - 06 - 06 - 2019 - Mr. Aravind Krishna (2016 - batch) Engineer, Renault-Nissan Technology and Business

Centre, Chennai. Students-2.. STEP"-01-02-2020-Mr. FaradayRam(2016-batch) Design Engineer, Ford Global Technology and Business Centre, Chennai. Students-180. "MCET Virtual Alumni meet: Real life

Experience"-09-05-2020-Mr.Vansanthsankar(2018-batch)M.S Automotive Engineering Student, Politecnico Di Torino, Italy.Mr.Balaram(2019-batch)GET Roots Industries,Coimbatore.Mr.VenkateshPrabhu(2019-batch)GET Harita Techserv Limited,Chennai,Students-38."MCET Virtual Alumni meet:Personal and Career Development"-11-05-2020-Mr.JeevaKarthickPandian(2014-batch)Assistant anager,LTValves,Coimbatore.VishnuramPalanisamy(2016-batch)Design Engineer,

Alten Limited, Chennai, Students-45. Civil -

"BoS"-19.10.2019-Mr.Gowtham(2012-batch)Proprietor,AG

Constructions, Palani... "STEP2"-11.01.2020- Mohanaprabhu(2011-batch) STS
Engineering Works, Nilakottai and Mr. Praveen(2014-batch) Project Engineer, Rhythm
Constructions, Pollachi. Students-62.

"STEP1"-07.02.2020-MohamedTariq(2012-batch)Chief Engineer,Shajahan Construction,Coimbatore and Mr.Duraikumar(2016-batch),Golden Key Builders, Pollachi.Students-27. Mechanical- "14th

BoS"30-11-2019-Mr.Gunasekar(2008-batch), Country Manager-Sales International business division TVSM, Hosur. Students-2. "Technical Talk on Industrial Practices in Product Development using Teamcenter-10.1.5

PLM"31-01-2020-Mr.BalamuruganRajamanickam(2005-batch), Solution
Architect, Siemens Digital Industries Software, Denmark. Students-34. "STEP-2"01-0
2-2020-Mr.BalamuruganRajamanickam(2005-batch), Solution Architect, Siemens
Digital Industries Software, Denmark. Mr. Kannan. V(2003-batch), Senior Business
Manager, Veeder Gilbargo, Coimbatore. Students-180. "15th Bos"03-04-2020 through
Zoom Conference Call. Mr. PrakashRaja(2018-batch), Design Testing Engineer, Diamler
India Commercial Vehicle, Students-2. "Webinar-Date

Science"11-05-2020-Mr.Suresh(2002-batch), Data Scientist/AI Enthusiast, Ford Motor Company, Detroit, Students-16. "MCET Virtual Alumni meet: Higher Studies in Abroad"14-05-2020-KalimuthuSelvam(2012-batch), PhD Scholar University of Tokyo Japan, Mr.RamaniSankarRajendran(2017-batch), MS-Sustainable Systems Engineering, Albert Ludwig University of

Freidburg, Germany, Padmakumar Dasanur (2018-batch), Automotive System Engineering, University of Michigan-Dearborn, Students-33. "Webinar-CFD and its applications" 16-05-2020-Mahesh Babu (2011-batch), Team Lead-CFD Power train System. Students-38. "Webinar-How to develop a successful career in Manufacturing Industry" 16-05-2020-Vijay Vel Prakash (2008-batch), Principal Manufacturing Engineer Rolls Royce. Students-38.

EEE-"BoS"-2.11.2019-Ms.SreedeviSundararajan(2008-batch)Project Lead,Arrow Group
Pvt.,Ltd,Bangalore

students:20. "STEP"25.01.2020-Mr.ManojPrabhakar(2010-batch)Sales and Marketing in charge Bajaj Auto Limited, Andhra

Pradesh.students-200."STEP"8.02.2020-Mr.Dheeraj (2010-batch)Senior Consultant,Thrive Digital,Chennai,Students-200."BoS.

### 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)
  - Decentralized management is practiced by following an organizational structure wherein the administration team consists of the Secretary and Principal and the Heads of departments are vested with authority to make decisions with respect to most of their department matters. The HoD is responsible for all the academic affairs of the Department and looks after day to day activities related to teaching and aspects related to Curriculum development, R D, Consultancy and Infrastructure planning. Within each academic department, the tasks are decentralized and are taken care of by the Programme Coordinator who supports the HoD for the routine activities of the department, Industry Academic Partnership Coordinator who is responsible for enhancing and sustaining the network with industries for mutual benefit. Other Departmentlevel coordinators include OBE Coordinator, Infrastructure Coordinator, Exam cell Coordinator and Project Coordinator. All matters with regard to the academics and administration of the department are discussed with the Principal in the HoDs meeting that is convened periodically for upward discussion with admin team. • Recommending the faculty and staff members for training / staff development programmes, higher studies, conferences is done by the department

head and the recommendation is then considered and approved by the administration team. Sanctioning of requests for on-duty works and leave application of faculty and staff members is done based on the recommendations done by the head of the department. The department meeting is convened by the HoD once at least a month or as and when required. The faculty members' view and suggestions are discussed and noted in the meeting. Regarding the purchase of new equipment / software for the laboratory, the suggestions are put forward by the staff in charge of the laboratories and these are further discussed by faculty in-charge of infrastructure development of the department with the head of department for further processing. • MCET has adopted participative

of department for further processing. • MCET has adopted participative management by establishing the Student body - Student Guild of Service (SGS). SGS is a student body, exclusively made up of students from II to Final years. It is a body of students, for the students and works to ensure that each and every student gets the best possible college experience. Every year a new team consisting of a President, Secretary and about a dozen members represent such areas as sports and other curricular and co-curricular activities, is selected

from the applicants who wish to serve. SGS selects a team of assisting volunteers and forms an Event Management Team (EMT). Every student is given equal opportunity to apply for the various positions. SGS acts as an interface between the student body and the management. SGS conducts periodic general body meetings, consisting of the class representatives of all classes, to understand the issues related to student life in MCET. They meet with the management as necessary to inform, discuss and identify possible solutions to the student identified issues and relay them back to the students. Most of the college functions and the annual technical symposium are planned, organized and managed by SGS.

#### 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
Research and Development	1. Five Departments (Mechanical, electrical, Electronics, Computer Science and Civil engineering) of our College have been recognized and declared as Ph.D research centres by Anna University. 2. The college has a research committee to facilitate, monitor and encourage the research activities. It meets regularly to discuss various plans to promote research and motivate the faculty for academic advancement. 3. The committee keeps track of the schemes of the UGC and other agencies like CSIR, DST, MNRE, AICTE, DRDO, ICSSR, ICMR etc. 4. The teaching faculty members are informed about the various fellowships available and they are encouraged to apply for the same. 5. Institution has received grants from various external
	funding agencies. 6. To motivate staff and students to take-up research internal funding provisions is made available. 7. Sponsoring staff and

	students for presentation/participation in national and international conferences, seminars, workshops, paper presentations and faculty exchange programmes. 8. Staff members are being given necessary training to apply for their project into patent. 9. Consultancy and testing activities are encouraged so as to acquire knowledge in their domain.
Teaching and Learning	The quality improvement strategies adopted by the institution for teaching and learning are as follows 1. Using ICT enabled tools for delivery and assessment of courses 2. Using learning management system to keep track and report progress of students 3. Enabling digital learning through tablets 4. Conducting spoken tutorials 5. Peer reviewing and reflecting on teaching 6. Cocreating question papers for end semester examinations with experts from other institutions 7. Calculating and analysing course outcome and programme outcome attainments for course corrections and improvements 8. Auditing course portfolios and disseminating best practices
Curriculum Development	The quality improvement strategies adopted by the institution for curriculum development are as follows 1. Continual and systematic modification of curriculum of programmes 2. Continuous introduction of new courses under various categories 3. Continual design and development of new courses 4. Continuous redesign of existing courses to meet emerging demands 5. Involving subject matter experts in the design and development of courses and programme 6. Offering of courses in emerging areas as one credit courses and electives 7. Customization of programmes such as student induction programme and internship programmes to meet the requirement of key stakeholders
Library, ICT and Physical Infrastructure / Instrumentation	Library, ICT and Physical Infrastructure / Instrumentation: Library resources such as Books, Journals and E-Resources are updated through the budgetary recommendations of the Library advisory committee. AUTOLIB -Advanced Integrated Library Management Software has been installed during with WEBOPAC and MOBILE APP facility. E-books access facility is

	provided to users through INFLIBNET-NLIST membership.
Human Resource Management	Human Resource Management: Various processes related to Human Resource management have been automated. Faculty database is maintained in digital format and facilitates quick generation of various reports. Faculty can submit applications for attending Faculty Development Programmes / Skill Development workshops through the Campus automation software - MCETEdu. These applications are approved through online mode by HoD and Principal. After completion of the event the respective faculty can submit the event report through MCETEdu.
Industry Interaction / Collaboration	Industry Interaction / Collaboration: Active Industry collaboration has been adopted for Curriculum development, Course delivery (especially One Credit courses), student projects and consultancy. Several Centres of Excellence have been established in association with Industries for training both faculty and students in latest Industry technologies. The Institution is running a Collaborative Education Programme with TVS Motors and Work Integrated Learning Programme with Sakthi Auto Component Limited to develop role-ready engineers.
Examination and Evaluation	Online courses registration process for examinations. Online Examination fee payment Online registration for photo copy and revaluation of End semester examinations. Seating arrangement for Internal assessment and End semester Examinations through Mobile Application. Publishing the Results through Mobile Application in addition with Web based. System base Random Dummy no. generation for End semester Answer scripts. Evaluation pattern for practical courses were modified and implemented. Evaluation pattern for Professional skill courses and One Credit Courses were modified and done during the end of the semester. Industrial Experts are involved in One Credit Course Evaluation system.
Admission of Students	Admission of Students: The Campus Automation software - MCETEdu includes the Student Admission module, through which the actual admission process is

completed quickly and efficiently.

Newly admitted students and their parents participate in the first year Inauguration programme organized by the Student Guild of Service. A three-week Induction programme is conducted to familiarize the students to the college environment, discover and grow their skills, there-by ensuring their allround development.

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

E-governace area	Details
Planning and Development	The following are the list of modules used for planning and development: 1.  eLMS • Migration of eLMS application to MCETedu 2. NIA eLMS • Customization in NIA eLMS Application as per user needs 3. Apply job online 4. Leave Module 5.  FDP Application Module • Faculties can apply FDP through this module 6. FDP Report Module • Faculties can submit their report for attended FDP 7. Online Job Application 8. Online Job Application using web portal 9. Staff Dynamic Report • Choosing the required fields from staff details and generate it as a report 10. MCET - Edu Migration to Web Portal. 11. Transcript generation using Web Portal. 12. Grade sheet generation using Web Portal. 13.  Consolidated Mark sheet Generation using Web Portal. 14. Career Application using Web Portal. 15. Pay slip Generation using Web Portal. 16.  Transport Module using Web Portal. 17.  Alumni Feed Back collection using Web Portal. 18. Academics 19. OBE 20. HR
Administration	The following are the list of modules used for Administration: 1. Attendance Module • Class Attendance and Tablet attendance • Pending Attendance mail alert 2. Student OCC Mapping • Course OCC List • Course Priority List 3.  ETimetrack • Daily AttendanceLoginLogout • Timing details by biometrics 4. Mess • Menu Calendar Setup • Calendar based Item list • Strength based stock issuance • New purchase/Issue/return based stock update • Minimum quantity alert • Supplier, stock and issue Management • Bills Management 5. Hostel • Admission • Room AllocationVacation • Biometrics based Attendance, Permission, inout tracking • Leave Management 6. CO Based

	Mark Entry 7. Course Exit Survey • Feedback from Student regarding the courses • Feedback form Student regarding the courses using web portal 8. Course Details Creation
Finance and Accounts	The following are the list of modules used for finance and accounts: 1. Fee Module • Students can pay their fees through this module. 2. GST Calculation 3. Scholarships • Better tracking of scholarship beneficiaries 4. Applying Bank Acknowledgement Bonafide from Finance team 5. Caution Deposit module and reports. 6. Finance Report With GST options
Student Admission and Support	The following are the list of modules used for student admission and support:  1. Online Fee payment • Import Bulk receipt who pay the fee through online  2. Student Bonafide • Students can apply for bonafide through this module  • Students can apply for bonafide through this module using web portal • Concerned Faculty , HOD can approve the Bonafide request using web portal 3.  Student Contact • Students address report 4. Student Subject Feedback • Feedback submission by students • Feedback submission by students using web portal 5. Student Conduct •  Faculties Mapping Conduct and character of the student STUDENT'S GUILD OF SERVICE (SGS) SGS module is been newly developed in Web portal for applying and selection of SGS members.  Academics: 1.Attendance for Lateral Entry Students 2.Course exit survey in MCETedu 3.Providing start and End Dates for marking Special class attendance.  4. Session Topics Covered Report. OBE:  1. Cummulative CO attainment report. 2.  CO based mark entry for End semester exams HR: Staff leave module and Reports. 2.T.A and D.A Bill claim report in FDP Module. 3.Dynamic staff leave report. 4.FDP Mail  Notifications(8 types of Notification)  5.Staff Biometric Punch Reports 6.Staff Joining Report, ID Card Report. 7.Staff Auto ID generation form. 8.Staff Clearance Module and Reports. 9.Sending Salaryslip through mail. 8.Certificate Acknowledge report. 9.FDP Departmentwise Report. 10.Staff Resignation Module and reports.
Examination	Resignation Module and reports.  The following are the list of modules
	used for examination: 1. Subject

Generation 2. TC Generation 3. Course Registration 4. Student Re-evaluation Fee payment 5. Student course preferred report 6. Mark entry 7. ESE Result Server 8. End Semester Results 9. Practical Exam • Practical Timetable Mapping Report • Course Registration • External Project Marks Report(Review wise) 10. Cycle wise Practical Report 11. Exam Hall • Exam Hall Seating details updated in MCETedu app 12. Result • End Semester Exam result publishing 13. Course Registration 14. Course Registration using web portal 15. Course Feedback 16. Course Feedback using web portal 17. Open Elective selection • Open Elective course selection 18. Open Elective course selection using web portal 19. Alumni Feedback 20. Alumni Feedback using web portal 21. End semester Result report to parents

## 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
2019	Mr.K.Prabhu	Artificial Intelligence Technique for vibration signal processing	NIT Rourkela	3500
2019	Dr.S.Ayyappan, Mr.M.Arun	Workshop on Battery Technology for E-Vehicle	Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram	6000
2019	Dr.N.Senthil Madasamy	5 days certificate course on effective patent search and drafting between 18.11.2019 and 22.11.2019 at Anna University regional campus, Coimbatore.	Anna University	6000

2019	Dr.A.Rathinav	5 days	NIT, Bhopal	23066
	elu Mr.D.Hari	Program on		
		Augmented		
		Reality/Virtual		
		Reality at		
		Maulana Azad		
		National		
		Institute of		
		Technology,		
		Bhopal between		
		21.11.2019		
		25.11.2019.		
2019	Dr.M.Pandi	5 days AICTE	National	4759
		Sponsered FDP	Power Training	
		on Data Science	Institute	
		between	1115010400	
		18.11.2019 and		
		22.11.2019 at		
		National Power		
		Training Instit		
		ute, Neyveli.		
2019	Dr.K.Umamahes	Training on	TVS Motors RD	10761
	wari,	Vehicle Wiring	Division	
	Mr.K.M.Manu,	Harness at TVS		
	Mr.S.Dinesh, Mr	Motors RD		
	.Y,Christopher	Division		
	Michael Raj			
2020	Mr. A.	Technology	Anna	20500
	Venkatesh	Exhibition cum	University, CEG	
		Training -2020	Campus, Chennai	
2019	Dr.P.A.Perias	2nd	VIT	24066
	amy, Dr.B.Sarav	International	University,	
	anakumar	Conference on	Vellore	
		Nanoscience and		
		Nanotechnology		
		2019		
2019	Ms D.	Training	Cambridge	8382
	Nivetha, Ms. B.	Program	Assesment	
	Nithya	-Business	English, Chennai	
		English		
		Certification		
2019		2 days	IIT Bombay	8878
	Dr.K.Thirukumar	workshop on		•
		Smart Classroom		
		at IIT Bombay		
		during		
		24.06.2019		
	I	21.00.2017	1	
		25.06.2019.		
		25.06.2019. <u>View File</u>		

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

Year	Title of the	Title of the	From date	To Date	Number of	Number of
	professional	administrative			participants	participants
	development	training			(Teaching	(non-teaching

	programme organised for teaching staff	programme organised for non-teaching staff			staff)	staff)
2019	Lean Six Sigma	Nill	22/08/2019	30/08/2019	2	Nill
2019	AICTE spnsored 2 Week FDP- Design for Manufactur e, Assembly, Environmen t for Product innovation and Optimi zation	Nill	25/11/2019	07/12/2019	4	Nill
2019	Course on Pump Ap plication Engineerin g for the Practicing Engineer- EKKI-MCET Internal Water Technology Centre	Course on Pump Ap plication Engineerin g for the Practicing Engineer- EKKI-MCET Internal Water Technology Centre	21/10/2019	21/10/2019	5	2
2019	Two days workshop on Mobile Applicatio n Developm ent	Two days workshop on Mobile Applicatio n Developm ent	18/07/2019	18/07/2019	1	1
2019	One day Workshop on Linux	Nill	23/10/2019	23/10/2019	16	Nill
2019	Workshop on Internet of Things and Augmen ted Reality	Nill	21/09/2019	21/09/2019	35	Nill
2019	Faculty Developmen t Programme on Data Science with Python -	Nill	05/12/2019	06/12/2019	10	Nill

	Train the Trainer Phase I					
2020	Faculty Developmen t Programme on Data Science with Python - Train the Trainer Phase II	Nill	08/01/2020	09/01/2020	10	Nill
2019	Deep Learning for Computer vision with MATLAB	Nill	14/05/2020	14/05/2020	30	Nill
			<u>View File</u>			

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
Bodhi tree and SMART	1	01/06/2020	05/06/2020	5
Advances in Mechanical Engineering	1	06/05/2020	10/10/2020	5
Advances in material science and technology	2	27/06/2020	02/07/2020	5
Advanced NDT techniques and application in Industry	2	11/05/2020	16/05/2020	5
Advanced Materials Research	1	22/06/2019	26/06/2019	4
Accredation and Out Come Based Learning- NPTEL	1	25/11/2019	07/12/2019	14
6National Level Five Day faculty development program on	1	15/06/2020	19/06/2020	6

"Scilab" in Association With IIT Bombay (Remote Learning Through Spoken Tutorial), from				
5 Days FDP onNovel Materials and ItsIndustrial Applications	1	24/05/2020	29/05/2020	5
Design for Manufacture, Assembly, Environment for Product Innovation and Optimization	4	25/11/2019	07/12/2019	14
Multi objective optimization for mechanical Engineering applications	1	22/06/2020	07/07/2020	14
		<u>View File</u>		

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

Teac	hing	Non-te	aching
Permanent	Full Time	Permanent Full Time	
32	32	15	15

## 6.3.5 - Welfare schemes for

Teaching	Non-teaching	Students
• Family Pension Scheme • Medi Guard Policy •	• Superannuation benefits of EPF • Family	• Tamil Nadu State Government Scholarship
<ul> <li>Employees Group Insurance</li> <li>Staff Family Benefit</li> <li>Fund • Blazer - 50</li> <li>percentage of cost will</li> </ul>	Pension Scheme • Medi Guard Policy • Employees Group Insurance • Staff Family Benefit Fund •	for BC / MBC Welfare • Tamil Nadu State Government Scholarship for SC / ST Welfare •
borne by the institution • Provide overcoat to all female staff. 50 percentage of cost will borne by the institution • Provide shoe once in 2 year. 50 percentage cost of shoe or maximum Rs.500/- whichever is less. • 50 percentage	Blazer - 50 percentage of cost will borne by the institution • Provide overcoat to all female staff. 50 percentage of cost will borne by the institution. • Provide shoe once in 2 year. 50 percentage of cost of shoe or maximum Rs.500/-	Minority Scholarship (Merit Cum Means Based Scholarship) for Minority welfare • Students Safety Insurance Scheme (Group Insurance in United India Insurance) • Travel Desk - Train, flight and bus tickets can be booked • Book Depot - Stationary
Tuition fees shall be reimbursed in respect of those who have been permitted to undergo Regular Higher studies •	whichever is less. • 50 percentage of Tuition fees shall be reimbursed in respect of those who have been permitted to	<ul><li>and general commodities</li><li>are sold at cheaper rate</li><li>Medical facilities</li><li>provided to the students.</li></ul>

Provide Bus Facilities to our Staff who are coming from various places to our institution • Hygienic canteens are available for Staff / Student • Provide Medical facilities to our Staff / Student and doctor is available in our institution • Faculty Deputation - Training provided within and outside the country / Industry FDP Program • sponsorship provided to Teaching / Non-Teaching staff • Leave: CL, EL, Medical Leave • Maternity Leave • Vacation Leave (Summer, Winter) • EL Encashment 9 days per year • On Duty 21 days per Year for teaching staff • Ph.D OD 7 days per year • Travel Desk -Ticket arrangements • Internet Browsing • Gratuity Scheme • Superannuation benefits of EPF

undergo Regular Higher studies • Provide Bus Facilities to our Staff who are coming from various places to our institution • Hygienic canteens are available for Staff / Student • Provide Medical facilities to our Staff / Student and doctor is available in our institution • Faculty Deputation - Training provided within and outside the country / Industry • FDP Program sponsorship provided to Non-Teaching staff • Leave: CL, EL, Medical Leave • Maternity Leave • Vacation Leave (Summer, Winter) • EL Encashment 9 days per year • Travel Desk - Ticket arrangements • Internet Browsing • Gratuity Scheme • Superannuation benefits of EPF

## 6.4 - Financial Management and Resource Mobilization

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

The institution accounts are audited at regular intervals. The college has been following annual external auditing system. The accounts and other related documents have been audited by an external auditor every year. Auditing of the Accounts for the financial year 2018-19 was conducted from 09.09.19 to 14.09.19.

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
Nachimuthu Industrial Association (our trust)	6600000	To meet out the shortfall due to expenses over the income.
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#### 6.4.3 - Total corpus fund generated

35113499

#### 6.5 – Internal Quality Assurance System

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

А	udit Type	External	Internal
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	Yes/No	Agency	Agency Yes/No	
Academic	Yes	External Peer Audit was conducted as per UGC norms by Dr.N.Alagumu rthi, Professor- Mechanical Engineering, Puducherry Technological University on 1.11.2019	Yes	IQAC/OBE
Administrative	No	Nill	Yes	IQAC/OBE

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

- 1. The communication was sent to the parents regarding Academic performance of the students/wards at the end of every CCET. 2.Department wise Parents meetings are conducted to discuss the academic performance of the students/wards.
  - 3.Feedback is received from parents regarding infrastructure and curriculum design.

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

1. FDP Program sponsorship provided to NonTeaching staff 2. NonTeaching Staff are encouraged to undergo Higher studies(ie Part Time B.E. 3. Talent training provided to NonTeaching staff

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

1. Timely submission of AQAR 2. Academic and Administrative Audit 3. Extension of Accreditation from NBA

### 6.5.5 - Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	No
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
2019	Faculty Induction Programme to the newly joined faculty members	11/06/2019	11/06/2019	22/06/2019	27
2019	A orientation meeting on Product Based Learning	30/06/2019	30/06/2019	30/06/2019	15

	(PBL)				
2019	A training on Industrial Automation T echnologies.	23/07/2019	23/07/2019	27/07/2019	18
2019	A training course on Lean six sigma Greenbelt	19/08/2019	19/08/2019	27/08/2019	31
2019	Series of Lectures on Quality Aspects to the faculty members having less than 5 years of teaching experience	20/07/2019	20/07/2019	24/10/2019	41
2019	Student So lar Ambassad or Workshop 2019	02/10/2019	02/10/2019	02/10/2019	76
2020	Students Talent Enhancement Programme - Unleashing Potential (STEP UP) for II Year UG Students	11/01/2020	11/01/2020	01/02/2020	928
2020	Two days workshop on IPR and Patenting	10/02/2020	10/02/2020	11/02/2020	20
2020	Students Talent Enhancement Programme (STEP) for I Year UG Students	08/02/2020	08/02/2020	29/02/2020	668
		<u>View</u>	7 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	Period from	Period To	Number of Participants
programme			

			Female	Male
Sepcial Talk	07/03/2019	07/03/2019	740	626
on Sustainable				
Ecological				
Approaches				
through Nature				
and Science- by				
Tmt.M.Revathi,				
Founder,				
INSPIRE,				
Coimbatore on				
the occasion of				
International				
Womens Day				
Celebrations				

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

• Power requirement met by renewable energy sources: 50.44 kWp • Total power requirement: 307 kW (611280.7 kWhr) • Renewable energy generated and used: 10.37 (45073 kWhr) • Renewable energy source: Solar power plant

## 7.1.3 – Differently abled (Divyangjan) friendliness

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

### 7.1.4 - Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadva ntages	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
2019	Nill	1	06/07/2 019	1	Sewing Machine repair	A training session was conducted for the benefit of local community	3
2019	1	Nill	10/07/2 019	1	Organic Farming	A traing programme was organized for the benefit	3

						of local	
						farmers	
2019	Nill	1	15/07/2 019	1	Rainwater Harvestin g	A programme on rainwater harvestin g was conducted to create awareness among the local community	3
2019	1	Nill	06/09/2 019	1	Mushroom Cultivati on Training	The Mushroom cultivati on techni ques were demonstra ted to the rural people under app ropriate technical support	3
2019	Nill	1	14/09/2 019	1	Yoga for health	Awareness programme on Yoga to the local community	3
2019	1	Nill	11/11/2 019	1	Coconut tree climbing	Skill training for farmers community	8
2019	Nill	1	16/10/2 019	1	Consumer rights awareness	Awareness was given to the rural com munity, students and staff	30
2020	1	Nill	13/03/2 020	1	Vinegar, Virgin Coconut oil Vegetable Processin g	Technical skill training to the rural people	3

2019	Nill	1	26/10/2	1	Health		7
			019		Sanitatio	Awareness	
					n	was	
						created	
						to the	
						rural	
						people	
						regarding	
						health	
						condition	
2020	1	Nill	14/03/2	1	Solar		2
			020		Coconut	Training	
					Dryer Dem	and	
					onstratio	awareness	
					n	to rural	
						women and	
						farmers	
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## 7.1.5 - Human Values and Professional Ethics

Title	Date of publication	Follow up(max 100 words)
Students handbook Staff handbook	16/09/2019	The student handbook has been distributed as hardcopy for all the students. The students are oriented towards the content of the handbook and the code of conduct during the class committee meeting. Also the students are monitored for proper dress code and grooming by team of staff members. Students who default are counselled for appropriate grooming. However the number of such defaulters is very less. The staff handbook is also given to the staff of the departments through the HR department. The code, service rules and other details pertaining to staff members are spelt out in the handbook. Any staff having queries can
		approach the HR manager for clarification.

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

Activity	Duration From	Duration To	Number of participants	
During induction programme for first	07/08/2019	20/08/2019	668	

year students (2019-20 batch),				
the orientation on				
Universal Human				
Values was offered				
to all first year				
students. Each				
section of students				
was given four				
modules and				
learning had been				
made reflective.				
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#### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

• Plastic free campus. • To reduce the use of plastic water bottles, RO water outlet is fixed in sufficient number of points. • Use of steel water bottle is encouraged inside the campus. • Battery operated car for internal transportation. • Electric vehicles for goods transportation • There are clearly marked pedestrian pathways and stanchion kept where ever needed. • The solar power plant is installed and operated. • Usage of LED Bulbs for street lamps . • The campus serves as the homage for over 27 types of the tree which include a few rare species.

#### 7.2 - Best Practices

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

Best Practice 1: "Co-creation of end semester examination question paper" • Objective: To create question papers of good quality addressing all the essential criteria of effective summative assessments. • Context: MCET being an autonomous institution was practicing, collecting end semester examination question papers from external subject matter experts from other institutions. This existing practice was time consuming and at times not yielding the expected quality of the question papers. Assessment being the key driver of the learning paradigm, end semester examination with higher weightage necessitated more attention from the institution. The learning results were directly being assessed directly using this important assessment component. Hence, in order to make the process faster and at the same time meeting all the quality criteria "co-creation of end semester examination question paper" was introduced. • The Practice: The new practice involves "co-creation". Faculty experts from within the institution and experts from other institutions are invited to jointly set the question paper. The work together in a prescribed place, and time. They are provided with all the resources and facilities required for the process. The experts co-create multiple question papers and one of these is used directly in the end semester examination. • Evidence of success: 1. Timely collection of multiple question papers for all the courses in which end semester examination is to be conducted. 2. All the quality criteria of the question papers being met without further reviews of question papers • The following are the problems encountered: Bringing together the experts at a designated time and place for the process • The following are the resources required: 1. Infrastructural facilities such as desktops/laptops, internet connectivity etc, 2. Text and reference books, previous year question papers and question banks • Best Practice 2: "On boarding programme for first year engineering students" • Objective: Offer a customized induction programme for first year engineering students • Context: AICTE has prescribed "Student Induction Programme (SIP)" for first year students. Also ever since its inception MCET has been organizing a structured orientation programme for all the new entrants to the institution with the active involvement of its students body "Student's Guild of Service".

It was found that all the aspects of SIP as well as the orientation programme of MCET were essential for students of first year when they enter the institution. Hence a customization of the programme was carried out. • The Practice: The students were formed into groups. A well-defined schedule was prepared covering all the aspects of SIP and additional customized activities for MCET. Each group was allotted senior student coordinators and faculty coordinators. All the activities planned in the schedule are implemented. The effectiveness of the activities are studied and modifications proposed for the next upcoming batches. • Evidence of success: 1. Active participation of students in the entire programme 2. High attendance percentage in the programme 3. High grades being scored in the assessments 4. Enrolment in the extracurricular and co-curricular activities • Problems Encountered: Maintaining schedules of the activities • Resources Required: 1. Good number of high seating capacity halls 2. Student and faculty volunteers as coordinators 3. Enthusiastic felicitators (Internal and External) 4. Travel logistics for visits and trips Best Practice 3: "Faculty competency development in mentoring" • Objective: Improve the mentoring competency of faculty members of the institution. • Context: Mentoring was introduced in the institution several years ago and faculty members continue to mentor students. However many faculty members were unaware of the fundamental concepts of mentoring and used only their past experiences to mentor. Mentoring was a challenge to new faculty members who just started their teaching careers. Hence a training programme to elucidate the importance of mentoring among the mentors was felt essential. A training module on "mentoring" was introduced for all the faculty members of the institution. • The Practice: Apart from other training modules offered on various aspects of teaching and learning, mentoring was also offered as a training module to the faculty members. The module was custom designed by the training team of outcome based education division of the institute. The module was offered across two consecutive days, like many other training programme in the institution. • Evidence of success: 1. Students meet their mentors regularly during their mentor hour. 2. Students interact during their final year regarding career guidance. 3. Few students going for higher studies have contact regarding their career with mentors even after passing out from college. • Problems Encountered: Conducting programme for all the faculty members in one go • Resources Required: 1. Training module 2. Training facility 3. Trained facilitators

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

http://mcet.in/wp-content/uploads/IQAC/2021/Best%20Practices.pdf

#### 7.3 – Institutional Distinctiveness

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

The college endeavours to impart high quality, competency based technical education in Engineering and Technology to the younger generation with the required skills and abilities to face the challenging needs of the industry around the globe. This institution is also striving hard to attain a unique status in the international level by means of infrastructure, state-of-the-art computer facilities and techniques. As part of realizing this, the institute is focusing on improving ICT enabled teaching and learning process. Students experience the tablet-based learning as part of their educational process. This tablet is used for augmenting the effectiveness of teaching learning process. Teaching learning materials are shared with students through tablets. Different types of assessments are conducted in courses using tablets. Feedback on teaching is also collected using tablets. The tablets also enable automatic capturing and reporting of attendance of the students to the learning

management system and portal. Active learning methods are practiced using tablets as well. In in-house developed Academic Management System is interfaced with the tablets and it maintains the details of staff members and students. It also enables the inclusion of courses, course mapping and registration, timetable maintenance, session details etc., Course attainments, exit survey and feedback by the students are collected and analyzed using this interface. The institution also ensures the provision of state-of-the-art hardware and software infrastructure required for the effective operation of ICT tools. The entire campus and all the learning environments are sufficiently equipped with resources for smooth operation of the system. The institution has enough computers, laptops, projectors, routers etc. It also has connectivity with enough bandwidth in the entire campus. All these provide access to students and faculty to not only the ICT enabled learning environment of the institution but access to global resources, content and knowledge repository. Students and faculty members are encouraged to learn through MOOC in SWAYAM, NPTEL and other online learning platforms as well. The labs and centers of excellence provide exposure to latest software available in the market and used by industry. Many CoEs set up jointly with industry provide direct exposure to the students and faculty to educational versions of many commercial software used in these industries. The institution has started data analytics on the various teaching learning initiatives as well gaining deeper insights into teaching learning process in the digital era. This will be further leveraged to enhance the teaching learning experience in the campus.

#### Provide the weblink of the institution

http://mcet.in/wp-content/uploads/IOAC/2021/Institutional%20Distinctiveness.pdf

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

• 1 board of studies meeting per department per semester (2 BoS meetings per department per academic year) • 3 class committee meetings per class per semester. (6 class committee meetings per class per academic year) ● 5 department staff meeting per semester (10 meetings per department per academic year). • Minimum 2 online-courses / faculty (Minimum 4 weeks per course) - (12-16 weeks course can be considered as 2 online courses) • 15 of students from Final and Prefinal years are planned to register for online course. • Other Funding (Conferences/ FDP/ STTP/ Workshops/ Seminars etc): 1 for Department with Single intake in UG programme (60) 2 for Department with Double intake in UG programme (120). • Research Funding: 2 Grants (10 Lakhs to 20 Lakhs) per department. • Submission of papers in journals: 20 for Department with Single intake in UG programme (60) 40 for Department with Double intake in UG programme (120). • Publications - Accepted/ Published (SCI/SCOPUS/UGC-CARE): 10 for Department with Single intake in UG programme (60) 20 for Department with Double intake in UG programme (120). • Patents: 2 for Department with Single intake in UG programme (60) 4 for Department with Double intake in UG programme (120). • Consultancy: 2 Activities (1 Lakh to 3 Lakhs) Per Department per Academic Year • Faculty Development Programmes: Minimum One FDP is to be attended by faculty member per academic year. • 2 special programs per class per semester for slow learners (4 Special programs per class per academic year). • 2 mentor periods per week per class have to be allotted to address academic and stress related issues. • All faculty members must use ICT tools for teaching learning process. • Around 2 Lakh rupees per semester are to be given as seed money to the faculty members. • 25 value added courses have been planned by various academic departments. • It has been planned to enroll around 600 students in Value Added Courses. • All eligible students must be undergone internship/field projects. • Around 80 Seminars/workshops/conferences will be conducted by various academic departments. Around 20 books and chapters in edited volumes / books are to be published. Industry Attachment Programme (IAP) coordinators will visit around 40 nearby industries to popularize the expertize available in the institution. • Around 20

collaborative activities have been planned with industries for research, faculty exchange, student exchange. • Around 30 events will be conducted through various department associations. • Around 30 guest lectures have been planned jointly with Alumni association. • Around 15 extension and outreach activities have been planned. • Around 60 papers are to be published in national/international conference proceedings by the faculty members of various academic departments. The following are the feedbacks to be received from various stakeholders for teaching learning/ curriculum redesign process . • No of feedback forms from Students: Around 1500, Teachers: Around 300, Employers: Around 200, Alumni: Around 500 Parents: Around 400