



## Yearly Status Report - 2016-2017

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>		MANGALAM COLLEGE OF ENGINEERING
Name of the head of the Institution		Dr M M Paulose
Designation		Principal
Does the Institution function from own campus		Yes
Phone no/Alternate Phone no.		04812533711
Mobile no.		9946807428
Registered Email		principal@mangalam.in
Alternate Email		info@mangalam.in
Address		Mangalam Campus, Mangalam Hills
City/Town		Kottayam
State/UT		Kerala
Pincode		686631
<b>2. Institutional Status</b>		

Affiliated / Constituent	Affiliated
Type of Institution	Co-education
Location	Urban
Financial Status	Self financed
Name of the IQAC co-ordinator/Director	AJIT JOSEPH
Phone no/Alternate Phone no.	04812533711
Mobile no.	9495108681
Registered Email	iqac@mangalam.in
Alternate Email	info@mangalam.in

### 3. Website Address

Web-link of the AQAR: (Previous Academic Year)	<a href="http://www.mangalam.edu.in">http://www.mangalam.edu.in</a>
<b>4. Whether Academic Calendar prepared during the year</b>	Yes
if yes,whether it is uploaded in the institutional website: Weblink :	<a href="http://www.mangalam.edu.in">http://www.mangalam.edu.in</a>

### 5. Accrediation Details

Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	B+	2.52	2017	22-Feb-2017	21-Feb-2022

<b>6. Date of Establishment of IQAC</b>	15-Jun-2015
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### 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
Woman Empowerment Programme by Dr .J Prameela Devi ,Member Women's Commission	29-Mar-2017 1	145
NBA Tier II Formats and	14-Jun-2016	138

Outcome based Education by Prof. R Mahadevan	1	
NAAC Mock Visit Schedule by Prof. Jacob Kurian Onattu, Principal, M.C. Varghese College of Arts and Science, (NAAC peer visit member) and Prof. Tommy Cherian Vadakkekunnel, Director, KISCO Career Heights, Pala	21-Nov-2016 1	123
<a href="#">View File</a>		

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

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
No Data Entered/Not Applicable!!!				
No Files Uploaded !!!				

<b>9. Whether composition of IQAC as per latest NAAC guidelines:</b>	Yes
Upload latest notification of formation of IQAC	<a href="#">View File</a>
<b>10. Number of IQAC meetings held during the year :</b>	2
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<a href="#">View File</a>
<b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	No
<b>12. Significant contributions made by IQAC during the current year(maximum five bullets)</b>	
<ul style="list-style-type: none"> <li>• Women Empowerment</li> <li>• Monitor KTU Academic Audit</li> <li>• ICT in teaching learning process</li> <li>• Institutionalized Course Diary</li> <li>• Implement Content beyond syllabus Gaps in the syllabus in course delivery</li> </ul>	

[View File](#)

**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
Women Empowerment	Conducted Woman Empowerment Programme "Jyothi 2k17" on 29/3/2017
Plan to take feedback from stakeholders	Students, parents, alumni, and other stakeholders are asked for feedback on quality-related matters for further improvement
Encourage faculty to take up research	New faculties have applied for PhD.
Remedial Class	Remedial class in the hostel under the supervision of faculty has started and results are improved
Mentoring System	Effective mentoring, more relations with students and their family, better monitoring
Monitor KTU Academic Audit	Unifying the activities within the college
ICT in teaching learning process	Promoting change and fostering the development of teachers and learners
Add on courses for Content beyond syllabus & Gaps in the syllabus	Advanced Syllabus Coverage
<a href="#">View File</a>	

**14. Whether AQAR was placed before statutory body ?**

Yes

Name of Statutory Body	Meeting Date
IQAC	18-Oct-2017

**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

2017

Date of Submission

15-Jun-2017

**17. Does the Institution have Management Information System ?**

No

Part B

## CRITERION I – CURRICULAR ASPECTS

### 1.1 – Curriculum Planning and Implementation

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

The Institution ensures effective curriculum delivery through a well-planned and documented process. We adopt the curriculum overview provided by the APJ Abdul Kalam University. The institution has developed an effective implementation of curriculum. HOD meetings are held once in a week to discuss the action plans of each department. The academic calendar is prepared with the reference of university academic schedule and the requirements at department levels. In addition to academic calendar, co-curricular and extracurricular calendar is prepared by each department which consists the department level programs like workshops, add-on courses and industrial visits to execute it. At the commencement of each academic semester, every faculty members prepare course plan which contains all plans like tutorial, assignments, content beyond etc.. In addition to traditional lectures and seminars, teachers use ICT in class rooms like online simulators, Secretive (Quiz). All departments bridge courses in order to make the delivery of curriculum more effective. Also all departments conduct remedial classes for slow learners. Minimum two internal assessments are done. The institution conducts minimum two academic audits which is monitored by IQAC. Each course in charges maintains course diary and course file. The course diary consists the course plan and course coverage, tutorial plan and coverage, assignment plan and its coverage, student's attendance and internal assessment marks. The course file includes the academic calendar, syllabus, previous year question papers, Question bank, Internal assessment questions, solutions and sample scripts of three students, assignment samples, ICT supported documents and course eligibility report generated from University portal. All departments conduct minimum two class committee and course committee in a semester to evaluate the academic status of all classes. The constitution of class committee is Head of the department, Committee convenor, Class teachers, all course in charges and student representatives. The constitution of course committee is senior subject expert, course in charges and student representatives. For an effective delivery of curriculum the faculty members have to attend faculty development programs and workshops in each semester. In addition, special guest lectures and seminars are conducted by the expert from leading industries to fill the curriculum gap. These all activities are monitored by heads of the department and give the report to higher level.

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
MATLAB TRAINING	Nil	11/07/2016	5	Employability	Software
ESTIMATION QUANTITY SURVEYING	Nil	04/07/2016	5	Employability	Designing
Course on Autocad 2D 3D	Nil	16/08/2016	5	Employability	Designing
Course on Revit Arch.	Nil	06/12/2016	5	Employability	Designing

HDL Design	Nil	01/04/2017	5	Employability	Software Designing
2D to 3D IC-change in trends in semiconductor IC design	Nil	06/06/2017	5	Employability	Software Designing
PROTEUS	Nil	06/08/2016	5	Employability	Designing
LATEX	Nil	06/08/2016	5	Employability	Software
CAD	Nil	06/08/2016	5	Employability	Designing
ETAP	Nil	28/01/2017	5	Employability	Designing
HVAC	Nil	27/10/2016	5	Employability	Heating, Ventilation and air conditioning
CAD	Nil	14/09/2016	5	Employability	Design And analysis
Certification of Java	Nil	01/02/2017	5	Employability	Guide through the concepts of Java
Certification of PHP	Nil	08/02/2017	5	Employability	Employability skills for the PHP certification

## 1.2 – Academic Flexibility

### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
<b>No Data Entered/Not Applicable !!!</b>		
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### 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	EEE	01/06/2010
Mtech	PSPE	01/06/2015
Mtech	PSPE	01/06/2015
Mtech	PSPE	01/06/2015

Mtech	PSPE	01/06/2015
Mtech	PSPE	01/06/2015
BTech	CSE	01/06/2017
BTech	CSE	01/06/2016
BTech	CSE	01/06/2017
BTech	CSE	01/06/2017

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

	Certificate	Diploma Course
Number of Students	94	Nil

### 1.3 – Curriculum Enrichment

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

Value Added Courses	Date of Introduction	Number of Students Enrolled
ECO CONGRESS	28/07/2016	101
COMMON MENTAL HEALTH PROBLEMS AMONG COLLEGE STUDENT	22/12/2016	51
<a href="#">View File</a>		

1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
<b>No Data Entered/Not Applicable !!!</b>		
<a href="#">View File</a>		

### 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
<p>The institution collects the feedback on curriculum aspects and courses from different stakeholders such as the students, alumni, Faculty and Employers. Institution established Academic Council in order to ensure and analyze the academic excellence at student and faculty levels. Periodical analysis is made by Academic Council from the following: student performance, faculty performance in every semester, utilization of infrastructure and requirements for quality enrichment. The college maintains an IQAC as a quality consistence and quality enhancement measure. In supervision of IQAC, various departments and committees like Career Guidance, Anti-Ragging and Sexual Harassment Committee, etc reinforce the curriculum by incorporating updated information and diurnal social issues. Institute collects the feedback physically from stockholders viz. Students, Parents and Teachers on Curriculum which is</p>

prescribed by the university, further college website invites stockholder to provide feedback through direct or online. Students provide two feedback each semester. Feedback is analyzed by HOD and then forwarded to IQAC for further analysis and action Parents are asked to provide feedback during open houses in each department. The college conducts annual Alumni Meet, in which suggestions and feedback is received from Alumni students. Feedback from industrial management, R D establishments and professionals is obtained through Placement department. The provided feedback data is presented to the Academic Council Meeting for necessary implementation in curriculum. Alumni surveys are conducted during alumni interaction at the alumni association meeting held every year Whenever any alumni visits the college, feedback is taken Further, college website invites alumni to provide feedback through online. Feedback from industry, R D establishments, professional bodies also are obtained.

## 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
<b>No Data Entered/Not Applicable !!!</b>				
<a href="#">View File</a>				

### 2.2 – Catering to Student Diversity

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

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2016	1877	33	127	17	36

### 2.3 – Teaching - Learning Process

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

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
180	163	25	44	Null	15
<a href="#">View File of ICT Tools and resources</a>					
<a href="#">View File of E-resources and techniques used</a>					

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

The students mentoring system is very much active in the institute in the view of overall development of an individual apart from imparting engineering knowledge. The system involves one tutor for 20 students and the issues of the students will be taken care of by the tutor in its best possible extent. There is timely counseling sessions in which personal problems and academic difficulties of students are encountered .The system provides immense mental support to students to cope up with academic pressure. Students are also equipped to face competitive exams like GATE,Civil Sevrvices,ESE etc..by the guidance and support of mentors they are assigned to. Students are also motivated to go for higher studies and research in various fields of engineering. Students personal and academic data's are available in the form of grade cards provided through which tutor is able to track the performance of students. There is an extended support from principal and higher officials of the

college in nonacademic issues and financial assistance. Regular meetings are conducted by the tutors and staff advisors in which students actively participate and all the issues are discussed in productive manner. The tutor keeps the record of each meeting and issues are forwarded to the concerned authorities based on the intensity and scope of solutions.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1910	180	1:11

## 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
180	159	21	21	11

### 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
2016	Dr.T.D.Subash	Professor	Smart India Hackathon 2018 oraganised by AICTE
2016	BNPHIL C MATHEW	Assistant Professor	SPOC appreciation from NPTEL

[View File](#)

## 2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
<b>No Data Entered/Not Applicable !!!</b>				

[View File](#)

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

Continuous Evaluation for theory courses, before the university final examinations a student has to appear for two class tests. Other than these each course in charge conduct examination for each module. Credit four course conduct tutorials every week and the marks for the same are taken for continuous internal evaluation. Continuous Evaluation for Practical courses University rules the practical courses to have a split up of 70 for continuous evaluation and 30 for final lab exam. Continuous evaluation is conducted for each experiment and the mark is entered in the course diary. Any student can view the marks at any point of time. Each experiment evaluates experimental setup, output obtained, results recorded and the viva. Continuous Evaluation for Project and Seminar The seminar and projects are conducted under the guidance and evaluation of a panel set up at each department. The panel conducts frequent presentations, evaluates them and records these marks which are finally added up to evaluate the course on seminar and project.

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

Every year or every semester follows an academic calendar which is prepared by the CAC. The calendar details each and every important occasion and exams which help the teachers, students and parents to properly plan their activities. Since all the departments in the college function according to this calendar every work is synchronized. This academic year we had floods in the month of August. This delayed the calendar by 12 working days. Thus the works got postponed. The effect of the floods had not taken more than 1 month to set back into the original academic Calendar. The first series examination got delayed by a week but the second series examination was on schedule. Due to the floods the university exams were postponed for a few days. Other than the issues related to flood, the college had adhered to the academic calendar completely.

## 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)

<https://engineering.mangalam.edu.in/>

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
Nill	BTech	CSE	88	76	86
Nill	Mtech	CSE	3	3	100
Nill	BTech	ECE	84	61	73
Nill	BTech	EEE	49	28	57
Nill	Mtech	PEPS	6	6	100
Nill	BTech	CE	118	96	81
Nill	Mtech	IEM	1	1	100
Nill	BTech	ME	125	63	50
Nill	MBA	MBA	83	74	89

[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)

<https://engineering.mangalam.edu.in/>

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Resource Mobilization for Research

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

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

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

Title of workshop/seminar	Name of the Dept.	Date
Workshop on Implementation aspects in Web technologies	CSE	11/07/2016
Seminar on Latest trend in technologies	CSE	23/09/2016
Webinar on A peek into Apriori algorithm and Weka technologies	CSE	04/11/2016
Seminar on Embracing the future: Innovations and Discoveries	CSE	26/07/2016
Workshop on Skill Development Android	CSE	07/11/2016
Environmental acts and rules in india and their implementation	CSE	28/07/2016

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

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
No Data Entered/Not Applicable !!!				
No file uploaded.				

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

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
MLMCE	Kottayam Technolodge - Mangalam IT Park	Govt. of Kerala	Kottayam Technolodge - Mangalam IT Park	Development	24/03/2017
No file uploaded.					

### 3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
20		

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

Name of the Department	Number of PhD's Awarded
No Data Entered/Not Applicable !!!	

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

Type	Department	Number of Publication	Average Impact Factor (if any)
International	CSE	7	Null
International	ECE	10	Null

International	ME	17	Nil
International	CE	6	Nil
<a href="#">View File</a>			

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

Department	Number of Publication
ECE	10
ME	2
CSE	7
<a href="#">View File</a>	

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

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
<b>No Data Entered/Not Applicable !!!</b>						
<a href="#">View File</a>						

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

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
<b>No Data Entered/Not Applicable !!!</b>						
No file uploaded.						

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

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	Nil	1	Nil	Nil
Resource persons	Nil	18	Nil	Nil
<a href="#">View File</a>				

### 3.4 – Extension Activities

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

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
<b>No Data Entered/Not Applicable !!!</b>			
<a href="#">View File</a>			

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

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

No file uploaded.

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

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

[View File](#)

### 3.5 – Collaborations

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

Nature of activity	Participant	Source of financial support	Duration
Training in drafting Design and Analysis	Mr.Ajayakumar	MLMCE	1
Set up RISC Lab Installation and testing of softwares	Mr.Deepesh Divakaran ,Gattik Technologies	MLMCE	1

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

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

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

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
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No Data Entered/Not Applicable !!!

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## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

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

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
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No Data Entered/Not Applicable !!!

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
<b>No Data Entered/Not Applicable !!!</b>	
<a href="#">View File</a>	

#### 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 partially)	Version	Year of automation
KOHA	Partially	Nil	2016

##### 4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	28581	1508592	479	126000	29060	1634592
Reference Books	2998	7055022	65	24850	3063	7079872
e-Books	35	Nil	Nil	Nil	35	Nil
Journals	104	318115	10	29000	114	347115
e-Journals	1	506000	Nil	Nil	1	506000
CD & Video	50	Nil	Nil	Nil	50	Nil

[View File](#)

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

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
<b>No Data Entered/Not Applicable !!!</b>			
<a href="#">View File</a>			

#### 4.3 – IT Infrastructure

##### 4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/GBPS)	Others
Existing	846	18	64	1	1	2	7	5	0
Added	0	0	0	0	0	0	0	0	0
Total	846	18	64	1	1	2	7	5	0

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

64 MBPS/ GBPS
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##### 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
Mangalam Repository	<a href="http://www.mangalamcse.in">http://www.mangalamcse.in</a>

#### 4.4 – Maintenance of Campus Infrastructure

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

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
520	516.75	63	62.68

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

The college has a Maintenance Cell that oversees the buildings, classrooms, laboratories, wash, common rooms and Green Cover of the campus with adequate staff for maintaining the cleanliness to provide a congenial learning environment. The maintenance of e-resource team for maintenance and manage repair of CCTV security, internet, Computers, Printers, and all computer peripheral. Civil Maintenance cell maintains looks after the regular maintenance of civil works such as masonry and plaster works, painting, carpentry, plumbing and general house-keeping etc. Electrical maintenance team maintains and looks after the continuous power supply, Generator, UPS, Batteries, LCD, AC, Water cooler, fire extinguishers and lighting etc. along with regular checking. In case of major fault and replacement, the quotation is called purchased as per centralized purchase procedure. The repair issue is identified by concern Laboratory staff, a request will be raised through a maintenance requisition note. The Department Head receives the maintenance requisition note and reviews the request. Maintains requests are attended and fulfilled on the Priority basis. Laboratories All laboratories are effectively used by the students even after the college hours. Each Lab Attendance, stock register, Invoice and purchase bills are maintained. Lab Assistants and supporting faculties take care of utilization and maintaining of equipments. Library Librarian collects the requirements of books, journals and other resources from all HODs during the commencement of academic year in turn which will be approved by the Principal. A suggestion box is installed to collect the opinion and suggestion from users to enrich the library resources. Entry register for students and staff is maintained. Sports Facility Maintenance Physical Director maintains the sports facilities available in the institution. Stock and Issue Register are maintained to ensure the proper handling of the sports equipment. The playground is maintained regularly by Physical Department with the supporting staff.

<https://engineering.mangalam.edu.in>

#### 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	M.C Varghese Memorial Scholarship	223	5240450
Financial Support from Other Sources			

a) National	SC/ST/OEC Grant	6	450000
b) International	Nil	Nil	Nil
<a href="#">View File</a>			

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 implementation	Number of students enrolled	Agencies involved
<b>No Data Entered/Not Applicable !!!</b>			
<a href="#">View File</a>			

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

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
<b>No Data Entered/Not Applicable !!!</b>					
<a href="#">View File</a>					

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
18	18	45

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
<b>No Data Entered/Not Applicable !!!</b>					
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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	Department graduated from	Name of institution joined	Name of programme admitted to
2017	4	B.Tech	CSE	Mangalam College of Engineering	M.Tech
2017	2	B.Tech	ECE	RIT	M.Tech
2017	5	B.Tech	ECE	Mangalam College of Engineering	M.Tech
2017	1	B.Tech	ECE	Kancheepuram	ME

2017	1	B.Tech	ECE	Germany	MS
2017	3	B.Tech	CE	Mangalam College of Engineering	M.Tech
2017	2	B.Tech	CE	Saintgits College of Engineering	M.Tech
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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	2
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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
MAHASANGRAM MANAGEMENT FEST	Institution	150
SPORTS	Institution	21
SAPTARANG ART FEST	Institution	273
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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
<b>No Data Entered/Not Applicable !!!</b>						
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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)

The institution selects two representatives from the classes through class election and nominates them to the student council of the college. The chairman, secretary and other positions are elected among the council members .The council is responsible for all co-curricular and extra-curricular activities and grievances associated with students. The functioning of the council is monitored by the head of the institution through senior faculty member. The student council coordinates various activities such as arts fest and tech fest. In addition the council take initiatives to impart social responsibility among the students. After all the council acts as a structure to build a strong student group having good knowledge and commitment towards society. Mr. Nikhil Johnson, third year student of EEE dept. was selected as the chairman of IEEE student branch, Mangalam college of engineering in 2016-2017 and Mr. Sree Sankar.S, second year student of EEE dept. was selected as the treasurer of IEEE student branch, Mangalam college of engineering in 2016-2017.

### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

• The Students Union is the most important body representing all the students of the College. • The Students' Council of the College was formed as per the guidelines of the University. • The College has a dynamic Student Council and Student Representatives that serve on different Committees of the College. • The Student Council is an elected body, governed by a constitution that defines its functions and role. The two Hostels of the College have a separate Student Council elected exclusively by the students of the Hostels. • In addition, there is an elected body of Student Representatives for all Extra-Curricular Activity, Co-Curricular Activity . • The College Student Council in consultation with its Faculty Advisor and Faculty Advisory Committee organizes major events in the College, such as, Orientation Day for the New Entrants in the beginning of the Academic Session, National Events like, Republic Day, Independence Day. • College Festival - Saptarang Art Fest. The Student Representatives in consultation with their respective Faculty Advisors organize activities. • Student Representatives also help to organize co-curricular and extension activities on platforms like Discussion Forum, ECO Club, Gender Sensitization and Women's Development Cell, Sports, NSS Units .

5.4.2 – No. of enrolled Alumni:

223

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

0

5.4.4 – Meetings/activities organized by Alumni Association :

College wise meetings were organised every year

## **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)

The College is headed by the Principal, who is assisted by the IQAC coordinator, DQAC Members and HoDs of various departments to develop curricular matters and college calendar. The Department Quality Assurance Committee (DQAC) is an active body in the department to decide on important academic and disciplinary matters. Each laboratory is managed by one faculty who function as the lab-in-charge and. Technical staff is also allotted to each lab to ensure proper functioning and maintenance of laboratories. Each batch of students has a Senior staff Advisor and Junior Staff advisors, to support the curricular and personal matters. The Senior Advisor, through Class Committee Meetings, also ensures that the classes are conducted well. Feedback from staff and students are collected through various forums to decide electives to be offered, to improve the quality of the classes, industrial interactions etc. and corrective actions are taken, if needed. Co-curricular and extra-curricular activities function through clubs/ committees/ cells/ chapters and enjoy autonomy in their operations.

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

Yes

### **6.2 – Strategy Development and Deployment**

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

Strategy Type	Details
Curriculum Development	<p>a) Conduct of additional value added courses. b) Adopt time to time suggestions given by AICTE and KTU for curriculum enrichment. c) Provide more duty leave to students for attending competitions, cultural festivals and technical events of other institution. d) Promote more International student exchange program</p>
Teaching and Learning	<p>a) Incorporation of ICT tools in teaching learning process. b) Mandatory NPTEL courses for Faculty. c) Encourage faculty to participate FDPs and workshops that concentrate in the area of teaching and d) Remedy classes for the weak in studies.</p>
Examination and Evaluation	<p>a) Open book test in some courses. b) Question paper for internal exams for each course is now set by a team instead of the course-in-charge. c) CCTV infrastructure setup in Examination halls.</p>
Research and Development	<p>a) Conduct of more numbers of national and international conferences and workshop. b) Motivation to faculty to pursue Ph.D. c) Adopted the policy to accept the final year project of students only if accompanied with a Journal/Conference paper.</p>
Library, ICT and Physical Infrastructure / Instrumentation	<p>a) Strengthen the department library by increasing the number of books and improving the library attendance by allocating library hour. b) Spread the awareness of ICT among faculty members. c) Incorporate ICT in some selected courses.</p>
Human Resource Management	<p>a) HR Management is being done using Management Information system. b) HR office is moving towards a system which requires least paper usage. c) Following the norms given by the government and AICTE from time to time Faculty and Staff recruitment.</p>
Industry Interaction / Collaboration	<p>a) Approach major industries of each department to explore chances of MoUs. b) Invite faculty from National/International institutes for fostering a better collaboration. c) Strengthen the Alumni ties for better collaboration with the industries who have employed our students.</p>
Admission of Students	<p>a) Offered better and increased number of Scholarships. b) Undertaken</p>

programs to facilitate more campus visit by prospective students and their parents. c) Setting up academic/career counselling centres throughout the state. d) Faculty conducted school visits for giving motivational lectures.

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

E-governance area	Details
Administration	MLMCE using elive software for managing students and staff details and all administrative matters
Student Admission and Support	Vidya mangalam
Examination	KTU Exam cell Portal

### 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
2016	Neethu Maria John	Spoken Tutorial Expertise-An Insight	MLMCE	2000
2016	Jinu P Sainudeen	Workshop on Design Project	MLMCE	2000
2017	Aneesh K S	3 D Printing	MLMCE	1500
2017	Subin George	Automobile Automation	MLMCE	2000

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

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

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#### 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
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Spoken Tutorial Expertise -An Insight	1	16/07/2016	16/07/2016	1
Design Project workshop	1	04/01/2016	08/01/2016	5
FDP	12	18/02/2017	22/02/2017	5
Electrical Machine Design Using Ansysis	5	28/07/2017	30/07/2017	3
DESIGN, INSTALLATION AND COMMISSIONING OF GRID-TIED SOLAR POWER SYSTEMS	1	29/07/2016	29/07/2016	1
FDP on Rapid Prototyping	28	27/07/2016	27/07/2016	1
FDP on innovation and entrepreneurship development	28	02/07/2016	02/07/2016	1
FDP on "NAAC Accreditation Procedures"	18	06/08/2016	06/08/2016	1
FDP in Pedagogy	20	17/02/2017	17/02/2017	1
FDP on Possibilities and Techniques for the performance enhancement of the faculty	28	24/02/2017	25/02/2017	2
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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
21	21	Nil	Nil

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Staff Club, Group Insurance Policy	Group Insurance Policy	Academic Scholarship, Group Insurance Policy, Long Tour, Visit to IIM-B, Sustainable Development

**6.4 – Financial Management and Resource Mobilization**

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

The organization is undergoing internal audit on a regular basis by own staff. The internal auditors are reporting to the top management. If any irregularities noticed by the internal auditors are rectified by the instruction of top management and the internal auditors again verify the sport rectification. An analysis is report is submitting to the management on half yearly basis. The ultimate objective of internal audit of this organization is to safeguard the assets of the society by examining the transactions undertaken by the society with regard to its genuineness, effectiveness and utility. The Scope of the internal audit was checking the efficiency effectiveness of the internal controls and verification of related records. The internal audit was conducted in accordance with the generally accepted audit procedures. The internal audit was planned and performed to maintain whether the systems, processes and controls operate efficiently and effectively and financial information is free of material misstatement. The organisation is a charitable society registered under the Travancore Cochin Literary Scientific and Charitable Societies Registration Act. It' s income is exempted under the Income Tax Act 1961. The organization were appointed a firm of chartered accountant to conduct the statutuoy audit. It covers the whole incomes generated by the organization and its application . This audit was completed upto 31/3/2017. The auditors reported that the financial statemnts are in agreement of books of accounts maintained by the trust and the balancesheet gives true and fair view of the accounts of the organisation.The profit and loss account gives true and fair view of the profit of the organisation generated during the year. They also certified the particulars required by the Income Tax department to be submitted with the return of income .

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
MLMCE	7500	To attend Workshop and FDP
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6.4.3 – Total corpus fund generated

7500
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## 6.5 – Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	KTU	Yes	IQAC
Administrative	Yes	ISO	Nill	Nill

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

PTA is convened every year for effective participation of Parents in the college processes. Some of the activities under PTA are: • Admission Support. • PTA members are active in college council and Department advisory committee. • PTA members are supportive in building Industry-Institute interaction.

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

• SDPs and training programme • Staff Counselling • Online Course

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

Planned to organize national level Faculty development Programmes, Planned to organize excel workshop for students

#### 6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	No
c) ISO certification	Yes
d) NBA or any other quality audit	Yes

#### 6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2016	NBA Tier II Formats and Outcome based Education by Prof. R Mahadevan	Nil	14/06/2016	Nil	138
2017	Woman Empowerment Programme by Dr .J Prameela Devi ,Member Womens Commission	Nil	29/03/2017	Nil	145
2016	NAAC Mock Visit Schedule by Prof. Jacob Kurian Onattu, Principal, M.C. Varghese College of Arts and Science, (NAAC peer visit member) and Prof. Tommy Cherian Vada kkekunnel, Director, KISCO Career Heights, Pala	21/11/2016	21/11/2016	Nil	123

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### CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 – Institutional Values and Social Responsibilities

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

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
<b>No Data Entered/Not Applicable !!!</b>				

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
Installation of solar panel to meet the energy requirement of the college is initiated. Using energy saving LED lights in campus. Construction of building such that sufficient light and air will pass through the building thereby reducing the dependence on electricity. Use standard accessories and fitting to reduce water leakage thereby reducing the use of water. Methods are taken to disperse the waste materials. Regular vehicle maintenance to reduce pollution. Environment club named ENCON club -planting trees. Placing waste bins by Rotary club.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	1901
Provision for lift	Yes	1901
Ramp/Rails	Yes	1901
Rest Rooms	Yes	1901

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2017	1	1	14/03/2017	1	Energy Awareness Program	To create awareness among the students to utilize renewable sources and to reduce energy consumption	58
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7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
GENERAL INSTRUCTION	01/08/2016	GENERAL INSTRUCTIONS

		FOR NEWLY ADMITTED STUDENTS
HUMAN DISCIPLINE IN LIFE	01/11/2016	HANDBOOK SHARED WITH ALL STUDENTS

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

Activity	Duration From	Duration To	Number of participants
Universal Human values session during Induction program for 1st year students.	02/08/2016	04/08/2016	70
Orientation Programmes	15/07/2016	15/07/2016	90
Expert Talk On Ethics	03/09/2016	03/09/2016	143
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#### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

<p>Various initiatives by the management has been taken to make the campus ecofriendly. Some of them are: One plant in every class room and staff room. Declaring the campus plastic free. Reduce use of paper. Proper waste disposal system. Maintaining the greenery and planting trees every year. ECO CLUB for organic farming Planting plants in departments.</p>
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### 7.2 – Best Practices

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

<p>Sir Albert Howard Clava Club for organic farming. Organizing programs of social relevance through various student and management initiatives, which has led to a wide acceptance of the institution among masses. Most of these programs are done under NSS. Involvement of Parents, alumni and students in the admission process every year has guaranteed that even at such difficult times the college has still managed to get enough admissions.</p>
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<p>Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link</p> <p style="text-align: center;"><a href="http://www.mangalam.edu.in">http://www.mangalam.edu.in</a></p>
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### 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

<p>Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. There are several steps taken which have created a positive impact on the functioning of the institution. Restructuring of the IQAC in the NAAC guidelines. Extensive NPTEL courses attended by the faculty have resulted in an increased orientation towards research. The plan to go for NBA accreditation has given a confidence boost to the faculty and students. ? Open book test have given a new perspective to education for students. International conference has allowed the students and faculty to communicate with a global audience.</p>
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<p>Provide the weblink of the institution</p> <p style="text-align: center;"><a href="http://www.mangalam.edu.in">http://www.mangalam.edu.in</a></p>
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## **8.Future Plans of Actions for Next Academic Year**

To increase the usage of ICT tools Plan to install 100 kWp solar power plant  
Plan to Attain the NBA accreditation for all engineering branches Plan to conduct international conferences in various departments