YEARLY STATUS REPORT - 2020-2021

Part A	
Data of the Institution	
1.Name of the Institution	Mangalam College of Engineering
• Name of the Head of the institution	Dr. Manoj George
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	04812710120
• Mobile No:	9961687007
• Registered e-mail	principal@mangalam.in
• Alternate e-mail	info@mangalam.in
• Address	Mangalam College of Engineering, Mangalam Campus, Vettimukal P O, Ettumanoor
• City/Town	Kottayam
• State/UT	Kerala
• Pin Code	686631
2.Institutional status	
• Type of Institution	Co-education
• Location	Rural
• Financial Status	Self-financing

• Name of the Affiliating University	**APJ Abdul Kalam Technological University Kerala (B.Tech, M.Tech & Ph.D), State Board of Technical Education (Polytechnic)**
• Name of the IQAC Coordinator	**Dr. D Ramesh Kumar**
• Phone No.	**04812710120**
• Alternate phone No.	**7708848489**
• Mobile	**8883566645**
• IQAC e-mail address	**iqac@mangalam.in**
• Alternate e-mail address	**karthikumar.s@mangalam.in**
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.engineering.mangalam.in/iqac/AQAR/2020-2021.pdf
4.Whether Academic Calendar prepared during the year?	**Yes**
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.engineering.mangalam.in/iqac/academic calendar/2020-2021

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	**B+**	**2.52**	**2017**	**22/02/2017**	**21/02/2022**

6.Date of Establishment of IQAC	**15/06/2015**

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

Institutional/Depar tment /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Mangalam College of Engineering /Department of Electronics & Communicatio n Engineerin g/Dr. T D Subash	**Special Perennial Fund**	**Unnath Bharath Abhiyan (UBA)**	**2020 (1 Year)**	**1,75,000**
Mangalam College of Engineering /Department of Electronics & Communicatio n Engineerin g/Dr. T D Subash	**Scheme for promoting Interests, Creativity and Ethics among Students**	**AICTE -SPICES**	**2021 (1 Year)**	**1,00,000**
Mangalam College of Engineering /Department of Electronics & Communicatio n Engineerin g/Dr. T D Subash	**Grant for Organizing Conference**	**AICTE-GoC**	**2021 (6 months)**	**3,50,000 (Sanctioned) 1,75,000/- (Received)**

8.Whether composition of IQAC as per latest NAAC guidelines	**Yes**	
• Upload latest notification of formation of IQAC	[View File](#)	

9.No. of IQAC meetings held during the year	4	
• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?	Yes	
• If No, please upload the minutes of the meeting(s) and Action Taken Report	View File	
10.Whether IQAC received funding from any of the funding agency to support its activities during the year?	No	
• If yes, mention the amount		

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

? Ensuring the proper teaching and learning methodology in academic activities through virtual mode/online mode. ? Ensuring the co-curricular and extra curricular activities in the department and monitoring the same through IQAC department co-ordinators. ? Corrective feedback suggestions were given to all the departments based on their performance. ? Scrutiny of the question papers for the previous semesters as per the blooms-taxonomy. ? Scrutiny of the projects and reports of final year UG/PG as per the KTU norms.

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

Plan of Action	Achievements/Outcomes
Safety procedures and covid protocol	Imparting all safety procedures and covid protocol for students and faculties.
Academic administration and extension activities	Teaching faculties performances are verified based on teaching academic administration and extension activities
Students feedback	Students feedback were collected for the all the respective subjects for the semester and evaluated and necessary actions taken.
Co-curricular and extracurricular activities	Co-curricular and extracurricular activities are strictly monitored by the respective department iqac officers.
University exams	The university exams both theory and practical exams were scrutinized for the annual assessment

13.Whether the AQAR was placed before statutory body? — Yes

- Name of the statutory body

Name	Date of meeting(s)
Mangalam Educational Society	10/02/2022

14.Whether institutional data submitted to AISHE

Year	Date of Submission
2020-2021	23/02/2022

Extended Profile

1.Programme

1.1 Number of courses offered by the institution across all programs during the year	**12**

File Description	Documents
Data Template	[View File](#)

2.Student

2.1 Number of students during the year	**1696**

File Description	Documents
Data Template	[View File](#)

2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	**195**

File Description	Documents
Data Template	[View File](#)

2.3 Number of outgoing/ final year students during the year	**530**

File Description	Documents
Data Template	[View File](#)

3.Academic

3.1 Number of full time teachers during the year	**148**

File Description	Documents
Data Template	[View File](#)

3.2 Number of Sanctioned posts during the year	**116**

File Description	Documents
Data Template	[View File](#)

4.Institution

4.1 Total number of Classrooms and Seminar halls	**58**
4.2 Total expenditure excluding salary during the year (INR in lakhs)	**309.796**
4.3 Total number of computers on campus for academic purposes	**648**

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

Mangalam College of Engineering is affiliated to APJ Abdul Kalam Technological University, Kerala and follow the curriculum of university. Apart from the curriculum prescribed by university, we offer an induction programme for the first year students which aims at motivation, skill development and raising the level of human values and professional ethics. We also offer bridge courses for filling the gap between the curriculum, add on courses for additional skill development, remedial classes for slow learners etc., All these activities are planned and scheduled well in advance and published through the activity chart. College academic calendar is prepared based on the University academic calendar.

All subjects in charges are maintaining course diary and course file. Course Diary contains course plan, tutorial plan and assignment plan and also coverage of all these. Attendance is monitored for all subjects. The Course File consists of Academic Calendar of University and college, Question Papers for Internal Evaluation, their answer Key and Scheme, Sample Sheets of Answer Sheets and Assignment Questions and Answers, Sample Assignment Sheets and Tutorial Questions and Samples with Lecture notes.

The IQAC and their Department Quality Assurance Cell audit these documents frequently and the quality of the curriculum delivery is monitored throughout the academic year. The regular feedback of curriculum delivery and instructional methods is being done by Class Committee Meeting and Course Committee Meeting, Faculty Feedback Software system. Syllabus Coverage is monitored by class advisors and HoD.

Faculty Members are encouraged to attend the workshops, Faculty Development Programme, MOOC courses and conferences, there by upgrading their skills and knowledge.

File Description	Documents
Upload relevant supporting document	[View File](#)
Link for Additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

All the programmes of Mangalam College of Engineering is affiliated to APJ Abdul Kalam Technological Uiversity. The university issues an Academic Calendar for all the programmes before the commencement of the semester. It contains the date of commencement of classes, Semester registration, Class/Course Committee Meeting, Last date of Internal Exams to be Conducted, Date of Publishing exam marks, Date of Publish of Internal Marks, Date of forwarding Attendance and Internal Marks to University, Semester End Date, Number of Instructional Days, Date of Start and End of Semester University Exam etc.

Taking these as a reference, Academic Monitoring Committee of Mangalam College of Engineering issues the College Academic Calendar including the Add-on and Bridge Courses.

Department Modifies the calendar by adding remedial classes for weaker students, Skill Development Courses etc.

The academic calendar help the teachers to plan their course delivery, Assignment calendar etc., in an effective manner and DQAC verifies each course plan at the beginning of the semester.

Every Month DQAC reviews the subject coverage and quality of content

delivery and instructional methods and give the report to HoD. HoD suggest the action plan and reports the review report and follow up report to higher officials.

File Description	Documents
Upload relevant supporting documents	[View File](#)
Link for Additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University	**A. All of the above**

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	[View File](#)
Any additional information	[View File](#)

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

11

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

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

10

File Description	Documents
Any additional information	**No File Uploaded**
Brochure or any other document relating to Add on /Certificate programs	View File
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1346

1.2.3.1 - Number of students enrolled in subject related Certificate or Add-on programs during the year

1064

File Description	Documents
Any additional information	**No File Uploaded**
Details of the students enrolled in Subjects related to certificate/Add-on programs	View File

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

Mangalam College of Engineering have an effective mechanism for integrating cross cutting issues relevant to Professional Ethics,

Gender Equality, Human Values Environmental and Sustainability.

Professional Ethics:

While during the Student Induction Program, which is conducted for the first year students, the session on the human values and professional ethics and various activities related to professional ethics are being included to nurture and practice Human Values. In curriculum itself, the subject "Professional Ethics" is included.

Gender Equality:

The institution has a vibrant Women Cell and Grievance Redressal Cell to solve the issues, if any, related to security and safety of Female Students, Staff and Faculty Members. Also the institution has a separate Girls and Boys Hostel (In Campus) to provide the students a safe environment.

Environment and Sustainability

A subject named "Sustainable Engineering" is included in the curriculum to discuss about the social, environmental and economic sustainability

Also Various webinars and activities are conducted to create an awareness among the students about the importance of nature protection and sustainability.Some of these are mentioned in the table given below.

Curriculum:

Description of Critical Issue Title of the course wherein the issue is addressed Unit/Chapter No How the course helped the students to resolve the issue Ragging Anti Ragging Awarness Programme 4 To Get The Idea Of Their Individual Rights Research Ethics Professional Ethics 5 Methods To Improve Ethics In Research Were Discussed Sustainable Development Sustainable Engineering 1 Social, Environmental And Economic Sustainability Concepts Were Discussed Time Management Life Skill 2 Make Students Learn And Practice Time Management

Workshop/Activity addressing crosscutting issues:

Sl.No Name of the Program Nature of the program Date Duration No. of Participants 1 Corona Awareness and Mask Making Online 19/10/2020 3hrs 85 2 Plant a Tree Campaign Online 29/10/2020 3hrs 90 3 Anti

```
ragging awareness programme To create awareness about their
individual rights 01/08/2020 1 hour 77 4 Poster Making To create
awareness about the importance of ozone layer 16/09/2020 2 hour 20 5
Research Ethics Webinar 11/21/2020 2hrs 119 6 Sustainability Threats
Poster Presentation 8/22/2020 1hr 119
```

File Description	Documents
Any additional information	**No File Uploaded**
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

67

File Description	Documents
Any additional information	**No File Uploaded**
Programme / Curriculum/ Syllabus of the courses	**No File Uploaded**
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	**No File Uploaded**
MoU's with relevant organizations for these courses, if any	**No File Uploaded**
Number of courses that include experiential learning through project work/field work/internship (Data Template)	View File

1.3.3 - Number of students undertaking project work/field work/ internships

998

File Description	Documents
Any additional information	**No File Uploaded**
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	View File

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni	**A. All of the above**

File Description	Documents
URL for stakeholder feedback report	**No File Uploaded**
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View File
Any additional information(Upload)	**No File Uploaded**

1.4.2 - Feedback process of the Institution may be classified as follows	**A. Feedback collected, analyzed and action taken and feedback available on website**

File Description	Documents
Upload any additional information	View File
URL for feedback report	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of sanctioned seats during the year

582

File Description	Documents
Any additional information	**No File Uploaded**
Institutional data in prescribed format	View File

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

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

33

File Description	Documents
Any additional information	**No File Uploaded**
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

The Subject in Charge conducts Moduletest after the completion of each module.The college conducts two internal exams in a semester under the supervision of college exam cell. Module test and Internal Exams results are analysed and based on the results, students are categorized into advanced learners and slow learners. Special coaching is given to slow learners to reinforce the key topics and advanced learners are given the coaching for tackling different competitive exams and they are encouraged to participate in Seminars, Workshops, Hackathon and various other competetions. Also the students get a chance to do subject related projects based on their interests.

File Description	Documents
Link for additional Information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload any additional information	**No File Uploaded**

2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

Number of Students	Number of Teachers
1696	**148**

File Description	Documents
Any additional information	**No File Uploaded**

2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Mangalam College of Engineering offering some add on course and workshops to the student based on their area of interest. Along with the lab course, students are getting a chance to do project. For these, students are divided into different project groups. Students themselves can select a problem and based on that they have to undergo a case studyto understand the concepts and real time problems. From their case study results, they have to formulate the problem and find out the solution.

After the evaluation of the external committee and with the help of project Guide, they will develop a software /hardware based solution and later develop a prototype.

File Description	Documents
Upload any additional information	**No File Uploaded**
Link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

In the academic year, 2020-2021, mostly all the classes are being conducted in online mode. Most of the faculty members use Google Meet, Zoom , and Youtube platform for delivering classes and Google classroom, My haiku for sharing study materials.

Lab courses are being taken by using pre recorded videos and various online simulation platforms.

The faculty members are very keen in felicitating the best online resources available to students and making them to do assignments

based on the shared resources. The students got a chance to get extra knowledge by learning these resources

File Description	Documents
Upload any additional information	**No File Uploaded**
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

2.3.3.1 - Number of mentors

106

File Description	Documents
Upload, number of students enrolled and full time teachers on roll.	View File
Circulars pertaining to assigning mentors to mentees	**No File Uploaded**
mentor/mentee ratio	**No File Uploaded**

2.4 - Teacher Profile and Quality

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

148

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	**No File Uploaded**
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

25

File Description	Documents
Any additional information	**No File Uploaded**
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year(Data Template)	View File

2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

2.4.3.1 - Total experience of full-time teachers

477

File Description	Documents
Any additional information	**No File Uploaded**
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 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.

File Description	Documents
Any additional information	View File
Link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

Exam Cell of Mangalam College of Engineering is entrusted to conduct the internal exam and University Exam. The question paper for the internal exam is being prepared by subject in charge and is being thoroughly scrutinized by subject expert. There is a separate grievance committee for exam cell to deal with the grievance related to the exam related matters (both internal and external exam).

File Description	Documents
Any additional information	**No File Uploaded**
Link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

2.6 - Student Performance and Learning Outcomes

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

After the subject allocation, the subject in charges are instructed to write course outcomes for each course and to do CO-PO mapping. The subject experts verify each CO inaccordance with University syllabus and verify the justification of CO-PO mapping and will give necessary corrections, if any. The course in charges are introducing each CO before each topic in the class and are displaying the CO in internal exams question papers.

File Description	Documents
Upload any additional information	**No File Uploaded**
Paste link for Additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload COs for all courses (exemplars from Glossary)	**No File Uploaded**

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

The institution has a well defined procedure for the eveluation of teh attainment of Programme outcomes and course outcomes.The attached PDF gives the method of measuring the attainment level of PO,PSOs and Cos.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://www.mangalam.edu.in/engineering/iqac/attainment

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

445

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	**No File Uploaded**
Paste link for the annual report	**Nil**

2.7 - Student Satisfaction Survey

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

https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

13.925

File Description	Documents
Any additional information	View File
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File

3.1.2 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.2.1 - Number of departments having Research projects funded by government and non-government agencies during the year

2

File Description	Documents
List of research projects and funding details (Data Template)	View File
Any additional information	View File
Supporting document from Funding Agency	View File
Paste link to funding agency website	Nil

3.1.3 - Number of Seminars/conferences/workshops conducted by the institution during the year

3.1.3.1 - Total number of Seminars/conferences/workshops conducted by the institution during

the year

27

File Description	Documents
Report of the event	**No File Uploaded**
Any additional information	**No File Uploaded**
List of workshops/seminars during last 5 years (Data Template)	View File

3.2 - Research Publications and Awards

3.2.1 - Number of papers published per teacher in the Journals notified on UGC website during the year

3.2.1.1 - Number of research papers in the Journals notified on UGC website during the year

108

File Description	Documents
Any additional information	**No File Uploaded**
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.2.2 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

3.2.2.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings during the year

45

File Description	Documents
Any additional information	**No File Uploaded**
List books and chapters edited volumes/ books published (Data Template)	View File

3.3 - Extension Activities

3.3.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

The college conducted a number of extension activities to the neighbouring community in the midst of Covid 19 pandemic situation

In connection withRadio Mangalam, Mangalam College of Engineering conducted a Covid Vaccination Camp for neighborhood Locality. College also give the hostels as Covid treatment center and its open for the public.

As part of NSS, Mangalam college conducts several activities in online mode and it helps to reach out with its activities to a diastance.

Along with IEEE HAC/SIGHT, Mangalam college students and faculty members designed a Portable ventilator during the Covid Time

Along with IEEE HAC/SIGHT, the college conducted an LED Assembling Workshop to the Kudumbasree Women.

File Description	Documents
Paste link for additional information	https://www.mangalam.edu.in/engineering/iqac/extensionactivities
Upload any additional information	**No File Uploaded**

3.3.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

3.3.2.1 - Total number of awards and recognition received for extension activities from Government/ government recognized bodies during the year

30

File Description	Documents
Any additional information	**No File Uploaded**
Number of awards for extension activities in last 5 year(Data Template)	View File
e-copy of the award letters	**No File Uploaded**

3.3.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.3.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

41

File Description	Documents
Reports of the event organized	**No File Uploaded**
Any additional information	**No File Uploaded**
Number of extension and outreach Programmes conducted with industry, community etc for the last year (Data Template)	View File

3.3.4 - Number of students participating in extension activities at 3.3.3. above during the year

3.3.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

1271

File Description	Documents
Report of the event	**No File Uploaded**
Any additional information	**No File Uploaded**
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.4 - Collaboration

3.4.1 - The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research etc during the year

15

File Description	Documents
e-copies of linkage related Document	View File
Details of linkages with institutions/industries for internship (Data Template)	View File
Any additional information	View File

3.4.2 - Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the year

3.4.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. during the year

2

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	View File
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

The college is placed in a serene lush green campus. The institution ensures adequate infrastructure and physical facilities for teaching learning process. There is an infrastructure committee, which monitors and fulfills infrastructure norms of AICTE and university from time to time.

Class room facilities.

- There are 69 class rooms which are ventilated and spacious enough to accommodate all students
- Majority of the class rooms are equipped with LCD Projector facility and WiFi Connectivity
- Notice Boards are available in all classrooms
- Dustbins are there in all class rooms for waste disposal.
- Well sized chalk boards are provided in all class rooms
- Common announcement systems are provided in all floors
- All floors are connected by staircase, well spaced corridors and multiple exit points.

Laboratory Facilities

- Every department has domain specific laboratories with state of the art equipments.

Computing Facilities:

- Every department has adequate computing facilities for teaching learning process
- Students can access e-resources at anytime with in the camp
- Institution facilitates adequate accessibility to the e-resources and contents.
- Department computer labs are equipped with licensed and open source softwares.

Other Facilities:

- Apart from the facilities mentioned above, institution has digital theatre facility, seminar halls and tutorial rooms , conference rooms and telepresence lab facility .
- Common display boards are available in all departments for communication as well as showcasing creative works/articles for students.
- Each department have a separate department library with good collection of references

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://www.mangalam.edu.in/engineering/infrastructure

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

The Mangalam College of Engineering has state of the art sports facilities in the following areas of Fitness Center, Basket Ball Court, Vollleyball Court, Table Tennis, Football Field.A full time Physical Trainer trains the student to accomplish their aim in the field of interest..The college conducts SAARANG (Cultural Fest) every year to encourage the students to participate in various cultural and literary activities and make the students to excel in their field of interest.The college owns a student run FM Radio called "Radio Mangalam"

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

6

4.1.3.1 - Number of classrooms and seminar halls with ICT facilities

58

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

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

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

225.066

File Description	Documents
Upload any additional information	View File
Upload audited utilization statements	View File
Upload Details of budget allocation, excluding salary during the year (Data Template)	View File

4.2 - Library as a Learning Resource

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

`The Koha Software is used for library automation.It is an integrated multi-user management system that supports all in-house operations of the library.Bibliographiuc Records of books available in the library can be accessed therough the software`

`Library Automation Facilities:`

`1. Barcode based circulation system`

`2. Reservation of documents which are issued.`

`Bar-coding system:`

`1. All the books are barcoded in the library and barcode laser scanners are used in the circulation counter for book transaction`

File Description	Documents
Upload any additional information	View File
Paste link for Additional Information	https://www.mangalam.edu.in/engineering/infrastructure/library

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources	`C. Any 2 of the above`

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

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

4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

7.344

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

4.2.4.1 - Number of teachers and students using library per day over last one year

7

File Description	Documents
Any additional information	View File
Details of library usage by teachers and students	View File

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The institute provides well equipped computer laboratories with modern teaching aids to meet all the demands of teaching learning process.All computer lab consists of 1updated software configurations and networking peripherals.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/agar/20-21

4.3.2 - Number of Computers

648

File Description	Documents
Upload any additional information	[View File](#)
Student – computer ratio	[View File](#)

4.3.3 - Bandwidth of internet connection in the Institution	A. ? 50MBPS

File Description	Documents
Upload any additional Information	[View File](#)
Details of available bandwidth of internet connection in the Institution	[View File](#)

4.4 - Maintenance of Campus Infrastructure

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

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

173.574

File Description	Documents
Upload any additional information	[View File](#)
Audited statements of accounts.	[View File](#)
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	[View File](#)

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

The infrastructure is maintained by a team of skilled personals which include carpenters,electrician,mason,construction workers,plumber and painters.This team is generally available on the premises or they are readilily available on call

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	<u>https://mangalam.edu.in/documents/engineering/naac/aqar/20-21</u>

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

63

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	**No File Uploaded**
Upload any additional information	**No File Uploaded**
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

256

File Description	Documents
Upload any additional information	**No File Uploaded**
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills	**B. 3 of the above**

File Description	Documents
Link to institutional website	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Any additional information	**No File Uploaded**
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

139

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

139

File Description	Documents
Any additional information	**No File Uploaded**
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	**No File Uploaded**

5.1.5 - The Institution has a transparent	**A. All of the above**

mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	**No File Uploaded**
Upload any additional information	**No File Uploaded**
Details of student grievances including sexual harassment and ragging cases	**No File Uploaded**

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

153

File Description	Documents
Self-attested list of students placed	**No File Uploaded**
Upload any additional information	**No File Uploaded**

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

13

File Description	Documents
Upload supporting data for student/alumni	**No File Uploaded**
Any additional information	**No File Uploaded**
Details of student progression to higher education	**No File Uploaded**

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

1

File Description	Documents
Upload supporting data for the same	**No File Uploaded**
Any additional information	**No File Uploaded**

5.3 - Student Participation and Activities

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

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

0

File Description	Documents
e-copies of award letters and certificates	**No File Uploaded**
Any additional information	**No File Uploaded**
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	**No File Uploaded**

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

The college has a Students Union. It mainly aims to enhance the activities of students in various fields such as academics, co-curricular and extracurricular activities.

- Follows the parliamentary system of election as per the guidelines of the KTU to form the Student Council via online mode
- Actively participates in all endeavors of the College.
- Consists of a Chairman, Vice- Chairperson (Female), General Secretary, College Magazine Editor, Two University Union Councilors (MBA & B-Tech), Two Lady Representatives (MBA & B-Tech), Arts Club Secretary and Representatives from all years(B-Tech & M-Tech).
- Class Representatives serve as the voice of the students in various matters of student interest.
- Cultural, Literary and sports activities are organized under the leadership of the Union Chairman
- Monthly meetings were conducted to discuss about the upcoming events that can be conducted during the pandemic situations.

File Description	Documents
Paste link for additional information	https://www.mangalam.edu.in/engineeringactivities
Upload any additional information	No File Uploaded

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

3

File Description	Documents
Report of the event	**No File Uploaded**
Upload any additional information	**No File Uploaded**
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	**No File Uploaded**

5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

College has an active Alumni Association , which contribute significantly to the institution development both financially and academically. The college conducts alumni meet every year to regroup themselves and share their views and feedbacks.Also they give vlauab;e suggestions as what the employer is expected from the engineering ad management graduates sothat the IQAC can reframe their accademic policy based on these.

File Description	Documents
Paste link for additional information	https://www.mangalam.edu.in/engineering/alumni
Upload any additional information	**No File Uploaded**

5.4.2 - Alumni contribution during the year (INR in Lakhs)	**A. ? 5Lakhs**

File Description	Documents
Upload any additional information	**No File Uploaded**

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

The institute has various administrative and academic bodies, including the College council, Institute level Committees to implement strategies aligned with our vision and mission. Our vision and mission have been developed in response to feedback and suggestions from all stakeholders, including management representatives. Various administrative and academic committees have been established to help the institute to achieve its vision and mission. Faculty members are also encouraged to participate in decision-making by serving as Controllers or Coordinators of various committees drawn from all departments.

Centers such as the Alumni Association ,the Industry Institute Interaction Cell (IIIC), and Academic council (AC) and the Research and consultancy cell have been established to support practice-based activities, while the Centre for Academic Affairs (AC) and the Research and consultancy cell have been established to support academic and research activities. The institute's perspective/strategic plan includes Quality Assurance and the promotion of modern tools in the teaching-learning process, Initiatives for industry-institute interaction, improving research and development facilities, Human resource planning and development, Academic tie-ups, Mentoring system, and promotion of various activities for the students' overall development. Quality Assurance Report of the Year For decision-making at various levels, the institute has a well-defined organisational structure.

File Description	Documents
Paste link for additional information	https://www.mangalam.edu.in/engineering/
Upload any additional information	No File Uploaded

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and participative management.

Theinstitutehasasysteminplacefordelegatingauthorityforadministrative andacademictasks.

1.Academics,cocurricular,extracurricular,infrastructuredevelopment,and othercellshavebeenestablishedtoimproveeffectivenessandefficiency within departmentsandatthecampuslevel.

2.Theinstituteencouragesfacultyandstudentstoparticipateinavarietyofd iscussionanddecision-makingactivities. Decentralization and participatory management are two terms that are often used

interchangeably.

3. Deans, HoDs, Faculty, Students, and other stakeholders are invited to submit suggestions and opinions in order to develop policies and guidelines for the efficient operation of various administrative and academic tasks.

4. Management includes expert faculty members on the purchase committee for equipment and machinery, and expert faculty members' recommendations are taken seriously.

5. In the recruitment process, the principals/deans/HoDs/senior faculty members play an important role and follow a transparent procedure.

File Description	Documents
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload any additional information	No File Uploaded

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

A strategic plan/perspective plan is a document that lays out key areas of focus in the future. In terms of strategic areas of growth and improvement, the plan considers both the external and internal environments. IQAC decided on four key strategic growth areas in collaboration with various stakeholders.

1. TEACHING AND LEARNING INNOVATIONS

1. Use of innovative pedagogy

2. Use of ICT tools to improve learning

3. Establishment of cell for innovative teaching and learning

2. RESEARCH & DEVELOPMENT WITH IMPACT

1. Make it easier for faculty to publish in indexed research journals.

2. Assist with minor and major research grant applications

3. Encourage staff members to participate in FDPs such as refresher and orientation programmes.

4. Encourage participation in international conferences, seminars, workshops, and symposiums, among other things.

INDUSTRY-ACADEMIC LINKAGE

1. Strengthen industry-academic ties through a broad Memorandum of Understanding

2. Encourage student internships

4. Exploring joint projects by appointing industry faculty as visiting or adjunct faculty.

Human Resources Development

1. Faculty development programmes to improve both technical and soft skills

2. A structured annual review to ensure that goals are being met

3. Recreational activities

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload any additional information	No File Uploaded

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

MangalamCollegeofEngineering'sGeneralCouncil(GC),whichconsistsof45me
mbers(electedandnominatedfromamong500generalbodymembers),formulatesp
oliciesandoverseesallinstitutions.

TheGCchooseseightofficebearerstorunthetrustonaday-to-daybasis.

Aspartofitsdecentralisedmanagementprocess,GChasestablishedabout16dif
ferentboards,eachofwhichisledbyanExecutiveChairpersonandhasclusterso

fschools/colleges/institutions.

Thenextlevelcommittee,theExecutiveCouncil,ismadeupofallExecutiveChairpersonsandofficebearers.

TheBoardofGovernorshasthefollowingresponsibilities:

Theinstitute'sBoardofGovernorsismadeupofrepresentativesfromtheGeneralCouncil(GC),industry,academia,andothergroups.

TheBoardofGovernors(BoG)istheinstitute'sgoverningbody,guidingallfacultyandstafftowardacademic,administrative,andfinancialexcellence.

TheBoardofGovernorsshallhavethefollowingadditionalresponsibilitiesinadditiontobeingtheinstitution'ssupremeadministrativeauthority:

1.Tokeeptrackofthecollege'sacademic,research,andinnovationactivities.

2.Toencouragetheformationofnewbusinesses,entrepreneurship,incubation,andothersociallybeneficialactivities.

3.Totakeintoaccountimportantcommunications,GCpolicydecisions,andStaffSelection.

4.Committees,Universities,Governments,AICTE/PCI/COA,andsoforth.

5.Tokeeptrackofthestudents'andfaculty'sdevelopmentplans.

6.Toapprovethecollege'sannualbudget,andsoon

TheBOGwillmeetatleasttwiceayearandwillbemadeupoftheChairman(atechnicalexpertwhoiseitheranentrepreneur,anindustrialist,orawell-knowneducator);4membersnominatedbytheMLMCE.2eminentprofessionalsfromthefieldofEngineering&Technology;2academiciansofdistinction;aUniversityNominee;andanex-officioMemberSecretary.

TheExecutiveCouncilwillreviewandscrutinisethebudgetestimatesforwardedtoitbythevariousboardsbeforesubmittingthemtothegoverningcouncilforapproval.

Alloftheexecutivecouncil'smeetingswillberecordedinminutes,whichwillbeavailableforpublicinspection.

ServiceRules,RecruitmentProcedures,andPromotionalPolicies:

**Tohandlestudentandstaffgrievancesandissues,theinstituteestablishedth
eGrievanceandAppealRedressalCentre(GARC).**

**ThereisalsoanInternalComplaintsCommittee(ICC)todealwithcomplaintsfro
mfemaleemployeesandstudents.**

Thesecentresensurethatthecomplaintsareproperlyaddressed.

**TheinstitutehasalsointroducedanovelconceptcalledHRCARE(HumanResource
sCentreforAchievement,Reformation,andExcellence),inwhichmostunseengr
ievancesandissuesaresolvedthroughcounsellingandtraining.**

**HRCAREissupportedbycommitteessuchastheStudentCentreforGuidance,Couns
eling,andMentoring(SCGCM),theCentreforScholarshipsandFinancialSuppor
t(CSFS),andtheCentreforHRWelfareandDevelopment(CHWD).**

File Description	Documents
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Link to Organogram of the Institution webpage	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload any additional information	**No File Uploaded**

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination	**A. All of the above**

File Description	Documents
ERP (Enterprise Resource Planning)Document	**No File Uploaded**
Screen shots of user interfaces	View File
Any additional information	**No File Uploaded**
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	**No File Uploaded**

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff

Theinstituteaimstomotivateandempowerfacultyandstaffinordertofosteras enseofdirectionandpositiveawarenessacrossalldepartmentsandsectionsby :

Attendanceatvariousprogrammessuchasnationalandinternationalconferenc es,workshops,STTPs,andFDPscanbesponsored.

Gettingfacultymembersinvolvedinvariouscommitteestogivethemasenseofbe longing.

Facultydevelopmentprogrammes,workshops,andshort-termtraining programmesarealloffereedbytheinstitute forthepurposeofmotivatingand empoweringfacultyandstaff

FacultymembersareencouragedtopursueaPh.D.bygivingthemenough timetocompletetheircourseworkandresearch.

Facultymembersaregivenlaptopcomputerstoaidintheteaching- learningprocessaswellastheirownresearchandexpertise.

EmployeeProvidentFund,maternityleave,andmedicalleaveareallprovided

Non-teachingstaffisencouragedtopursuehighereducation.

File Description	Documents
Paste link for additional information	https://www.mangalam.edu.in/engineering/hrpo licies
Upload any additional information	**No File Uploaded**

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

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

1

File Description	Documents
Upload any additional information	**No File Uploaded**
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

15

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	**No File Uploaded**
Reports of Academic Staff College or similar centers	**No File Uploaded**
Upload any additional information	**No File Uploaded**
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

39

File Description	Documents
IQAC report summary	No File Uploaded
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	No File Uploaded
Details of teachers attending professional development programmes during the year (Data Template)	[View File](#)

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

TheInstitutestrictlyadherestoalloftheAICTE'sbasicrecruitmentand promotionpolicies.

Everyyear,everyfacultymemberandnon-teachingstaffmembercompletesthePerformanceBasedAppraisalSystem (PBAS)inthedevelopedformat,whichincludesteachingperformance,results,feedback,andsoon.

Self-evaluationofteachingstaffisbasedonthefollowingcriteria:

1.Evaluationoftheteaching-learningprocess:

Itcontainsclassroominstructions,laboratoryinstructions,andprojectguidanceforstudents.

Feedbackandoutcomesfromstudents

2.Learningresourcedevelopment:Learningresourcesincludecurriculumimplementationstrategy,learningresourcedevelopment,andlaboratorydevelopment,whichincludestheplanningofanewlaboratoryortheexpansionofanexistinglaboratory.

3.Facultyself-development: Thisincludespublications,consulting,IndustryInteraction,research,continuingeducationprogrammes,andextensionservices,amongotherthings.

4.Studentservices:Thiscategoryincludesservicessuchasstudentco-curricularactivitiesorganisation,participationinstudentcounselling,careerguidance,andsoon.

5.Internaladministration:Itentailscontributingtotheefficientoperatio
noflaboratories,aswellasdevelopmentalplanning,resourcemobilisation,a
nddevelopmentschemeimplementation,publicrelations,andinteraction.

6.Attitudesandethicsintheworkplace:

Mean- based performance
appraisalsystemwasaddedtotheappraisalsystemasitprogressed.

Inthisway,keyperformanceindicatorswerecreated,andindividualKPIscores
forallfacultyandstaffwerecalculated.

Thefollowingarethespecifics:

DAAppraisalSystemwithVariableMean:

Intheacademicyear2013-14,amean-
basedvaryingDAappraisalsystemwasimplemented.

FixedDA(FDA)andvaryingDA(VDA)aretwotypesofDA(VDA).

ThevaryingDAisdeterminedbythecalculatedmean,whichisbasedonanumberoff
actorsincludingteachingfeedback,resultscore,examduties,auditreport,i
nstitutionalresponsibilities,departmentalresponsibilities,confidenti
alreportparameters,andPBASscore.

.

Atthestartoftheacademicyear,alloftheseparametersareexplainedtoallfac
ultyandstaff.

In2018,theappraisalsystemwasupdatedtoincludeconfigurableweightsforva
riousparametersthatapplytovariousjobpositions.

File Description	Documents
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload any additional information	No File Uploaded

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit

objections within a maximum of 200 words

The organization is under going 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 31/3/2021. 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.

File Description	Documents
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload any additional information	No File Uploaded

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

6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

1.75

File Description	Documents
Annual statements of accounts	**No File Uploaded**
Any additional information	**No File Uploaded**
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	[View File](#)

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

Efficient finance management is taken care of by an exclusive finance section with duties executed through a full time Accounts Manager, Finance Manager and Finance Controller. The mechanism adopted to monitor effective and effficient use of available sources are:

Preparation of budget for effective utilization of resources

Monthly receiepts and payment evaluation b the accounts section in office

Cheif Account Manager of the management is also consulted whenever required

An authorized chartered accountant will carry out the internal and external audit.

File Description	Documents
Paste link for additional information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Upload any additional information	**No File Uploaded**

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

"InnovativeMethodsOfActiveLearningToEnhanceStudentsClassEngagementAndLearningOutcomes"isthetopicofavirtualworkshop.

Forstart-ups,therewillbeaworkshoponintellectualpropertyrights(IPRs)andIPmanagement.

"InteractivePresentation,VideoEditing,andLearningAssessmentTools"isthetopicofaone-dayworkshop.

Induction/refresherworkshopforacademicsandresearchersusingopeneducationalresources"drugdevelopmentthatismultidisciplinaryandtranslational

AllBEstudentswillreceiveon-campusrecruitmenttraining.

CO-POAssessmentandAttainmentintheNBA

Areal-lifeexample

OpenEducationaleResources:BasicsofResearchPaperWritingand Publishing

AcademicsandResearchersWillBenefit

Mendeleyisatoolformanagingreferences.

UseofInformationandCommunicationTechnology(ICT)toitsfullpotential:

TheneedtoincorporateInformationandCommunicationTechnologyintotheteaching-learningprocessisunavoidablebecausetoday'sgenerationisadigitalnative.

FacultymembersaregivencomputingresourcessuchaslaptopsanddesktopcomputersinordertoeffectivelyintegrateICTintoteachingandlearning.

Everyclassroomhasaprojector,Internetaccess,andamultipurposeinstructionalboardthatiswell-designed.

GoogleClassroomwasusedasalearningmanagementsystem.

FacultymemberswereencouragedandtrainedtouseLMSslikeGoogleClassroomandICTtoolslikeMentimetereffectively.

,Mindmap,andsoon.

Becauseitwasdiscoveredthatstudentsspendmoretimeontraditionalwrite-up-basedassignments,facultymemberswereencouragedtoconvertcourseassignmentsintoactivitiessuchaspresentations,posters,andotheractivitiestomakethemmoreproductiveandpractical.

Activelearningandinformationandcommunicationtechnology(ICT)toolsareused tofostercreativityinteachingandlearning.

Duringapandemic,differentfacultymembersusedvariousactivelearningtools forstudentlearningassessment,suchasquizzes,Mentimeter,andGooglequiz.

Toolsforactivelearninginclude:

Analogiestoreal-lifesituations:

Thestudentsaregivenanalogiesofthetopicsthatarebeingtaughttothemwithr eal-lifeapplications.

Afterthetopichasbeencoveredinclass,studentsareencouragedtowatchNPTEL videolecturesonspecifictopics.

Studentsareencouragedtointeractwithfacultyduringclassroominstruction ,whichincreasesstudentactiveparticipation.

Groupactivities:Toinstilteamworkandethicsinstudents,miniprojectsands imilartasksareassignedtothem.

Presentationsbystudents:Studentshavebeengivenassignmentsonavarietyof topics,andtheymustpresentanygiventopicinfrontofotherstudents.

Applicationofsimulationsoftware:

Simulationisusedtoteachstudentsaboutthebehaviourofareal-worldsystem.

Itisnecessarytousesoftware.

Brainstormingsessions:Studentsareencouragedtobrainstormideasinfronto fthefacultyonavarietyoftopics,whichimprovestheircriticalthinkingskil ls.

Fieldvisitsandinternships:Studentsaresentonfieldtripsaswellasindustr ialvisitstogainexposuretovariousindustries.

Eminentindustryfiguresandalumniparticipate:Severaltechnicalsessionsa redeliveredbyeminentindustryfigures,well- knownacademicians,andalumni.

Mini-projectandprojectexhibitions:Mini-projectandprojectexhibitionsa reheldattheendoftheterm/yeartoprovideaplatformforstudentstoshowcaset heirwork.

ChartsandModels:Insomecourses,suchasEngineeringDrawing,modelsareused todemonstratethecontentbeingdelivered.

Studentswereencouragedtoparticipateingroupmemberlearningactivitiesth atcouldbediscussedwiththerestoftheclass.

Teamwork,collaboration,andethicsareallinstilledintheseactivities.

Fastlearnerswereidentifiedandpairedwithslowlearnerstocreateawelcomin gmutuallearningenvironment.

FlippedlearningandABL:Studentsweregivene-
learningresourcesinadvance(videolecture,article,notes,etc.).

Thiscontentisreviewedbystudentsbeforetheybegin.

Theclassandclassroomtimearesetasidefordoubtclearing,quizzes,andpeerg roupdiscussions.

UseofICTtools:Eachacademicyear,theInstituteensuresthatincrementalpro gressismade.

FacultymembersuseICTtoolstoensurethatstudentshaveapositivelearningex perience.Thesetoolsinclude

GoogleClassroomisafreeonlineclassroomthatallowsstudentstolearn

ThroughtheuseofGoogleClassroom,students'interactionisincreased.

GoogleClassroomisusedtomanageassignments,studymaterials,quizzes,noti fications,announcements,evaluation,andgrading.

FacultymembersusemindmappingtechniqueslikeCoggletohelpglobalandvisua llearners.

GoogleQuizviaGoogleForms&Mentimeter:Theresponsesofthestudentsarereco rdedusingGoogleQuizzesandGoogleForms.

AMentimeterisusedtoadministeraquiztostudents.

Thisensuresthatstudentsreceivetheirevaluationimmediatelyaftercomplet ingtheirquiz.

MOODLE:Forassignments,studymaterials,quizzes,notifications,announcem ents,evaluation,andgrading,somefacultymemberspreferthMOODLEplatform .

MassiveOnlineOpenCourses(MOOC):StudentsareencouragedandmotivatedtoparticipateinonlineMassiveOnlineOpenCourses(MOOC).

Quizizzisafungametoplay(GamifiedQuiz)

Creatinge-content:

Facultymembersareencouragedtocreatee-learningresourcesforthebenefitofstudentsinordertocreatealearner-friendlyenvironmentforthem.

Toensurethatstudentscanaccesslearningcontentfromanywhereandatanytime,facultymembersuploadtheirE-learningcontenttotheSchool/DepartmentYouTubeChannel/Website.

OBEPhilosophyisputintopractiseinawaythatisbotheffectiveandefficient.

Theinstituteadherestoastudent-centrededucationsystemandensuresthatitisfollowedbyimplementingoutcome-basededucation(OBE).

Eachcourseownerdefinesorredefinesthecourseoutcomesforhisorhercourse(s)inaccordancewiththeUniversityofMumbai'soutcomes.

Theexpectedoutcomesofthecourse

aremappedtoProgramoutcomesand/orProgramspecificoutcomesthataredefinedinaccordancewiththeNBA'sgraduateattributesandthespecificProgram'srequirements.

Coursesareassignedbasedonspecialisation,experience,coursepreference,andpreviousyear'steachingperformance.

SkillDevelopmentsessionsareincludedinthetimetable.

Forbetterimplementation,teachingplansarecreatedbasedontheOBEphilosophy.

CourseownersdeliverpresentationstotherespectiveCourseDomaincommitteeinordertoeffectivelyplanthecourse(s)allottedtothem.

Creatingsufficientandeffectivelearningmaterials

andmaterialswellaheadoftime.

Untillastacademicyear,theInstitutesuccessfullydeliveredoutcome-basededucationusinganOBE-basedsoftwareplatformcalledIoncudos,whichwashostedonalocalserver.

**WitheffectfromBEbatch201-21andonwards,theOBEimplementationworkuptoCO
-POattainmenthasbeenshiftedfromIONCUDOStoCourseAttainmentGoogleSheet
s(CAGS).**

**TheCAGSstartswithCOdefinitions,CO-
PO/PSOmapping,andendswithCOandmappedPOattainmentcalculations.**

**TheCAGSforaparticularcoursearesharedwiththeCourseOwner,whohasEditorp
ermissiononafewsheetsandViewerpermissionontherest.**

**TheCOiscalculatedbasedonthestudents'marksinContinuousInternalAssessm
entorTermExams.
EndExam,CourseExitSurveyfeedback,andthedefinedlevelsforthesettarget**

**Finally,thePOattainmentsarecalculatedusingtheCO-
PO/PSOCorrelationMatrixandthecalculatedCOattainments.**

**POattainmentforeachsemester/termismadeupofindividualcoursePOattainme
nts.**

**ThePOattainmentoftherespectivebatch/curriculumiscalculatedbyaveragin
gthePOattainmentsofallsemesters/terms.**

File Description	Documents
Paste link for additional information	https://www.mangalam.edu.in/engineering/iqac
Upload any additional information	**No File Uploaded**

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

**Becausetoday'sgenerationisadigitalnative,theneedtoincorporateInforma
tionandCommunicationTechnology(ICT)intotheteaching-
learningprocessisunavoidable.**

**Facultymembersaregivencomputingresourcessuchaslaptopsanddesktopcompu
tersinordertoeffectivelyintegrateICTintoteachingandlearning.**

**Everyclassroomhasaprojector,Internetaccess,andamultipurposeinstructi
onalboardthatiswell-designed.**

GoogleClassroomwasusedasalearningmanagementsystem.

FacultymemberswereencouragedandtrainedtouseLMSssuchasGoogleClassroom andICTtoolssuchasMentimeterandMindMapseffectively.

Becauseitwasdiscoveredthatstudentsspendmoretimeontraditionalwriteup-basedassignments,facultymemberswereencouragedtoconvertcourseassignme ntsintoactivitiessuchaspresentations,posters,andotheractivitiestomak ethemmoreproductiveandpractical.

Activelearningandinformationandcommunicationtechnology(ICT)toolsareu sedtofostercreativityinteachingandlearning.

Duringapandemic,differentfacultymembersusedvariousactivelearningtool sforstudentlearningassessment,suchasquizzes,Mentimeter,andGooglequiz .

Active learning tools:

NPTELVideoLectures:Afteratopichasbeencoveredinclass,studentsareencou ragedtowatchNPTELvideolecturesonthattopic.

Studentsareencouragedtointeractwithfacultyduringclassroominstruction ,whichincreasesstudentactiveparticipation.

Groupactivities:Toinstilteamworkandethicsinstudents,miniprojectsands imilartasksareassignedtothem.

Presentationsbystudents:Studentshavebeengivenassignmentsonavarietyof topics,andtheymustpresentanygiventopicinfrontofotherstudents.

Simulationsoftwareisusedtomakethestudentawareofthebehaviourofareal-worldsystem.

Thefaculty'spresenceimprovestheirabilitytothinkcritically.

Fieldtripsandinternships:Togivestudentsexposuretodifferentindustries ,theuniversityoffersfieldtripsandinternships.

Studentsaretakenonbothfieldandindustrialvisits.

Severalsessionswitheminentindustryfiguresandalumni ontechnicaltopics aregivenbyeminentindustryfigures.academiciansandalumniwhoarewell-known

Exhibitionofmini-projectsandprojects:

Inordertoprovideaplatformfordiscussion,inorderforstudentstodisplayth

eir work,Mini-projectsandlargerprojectsAttheendoftheterm/year,theexhibitionsarekept.

hartsandModels:Insomecourses,suchasEngineeringDrawing,modelsareusedtodemonstratethecontentbeingdelivered.

Studentswereencouragedtoparticipateingroupmemberlearningactivitiesthatcouldbediscussedwiththerestoftheclass.

Teamwork,collaboration,andethicsareallinstilledintheseactivities.

Fastlearnerswereidentifiedandpairedwithslowlearnerstocreateafriendlymutuallearningenvironment.

environment.

FlippedlearningandABL:Studentsweregivene-learningresourcesinadvance(videolecture,article,notes,etc.).

Studentsreadthismaterialbeforeclass,andtheclassroomsessionisusedforquestionanswering,quizzes,andpeergroupdiscussions.

UseofICTtools:Eachacademicyear,theInstituteensuresthatincrementalprogressismade.

FacultymembersuseICTtoolstoensurethatstudentshaveapositivelearningexperience.Thesetoolsinclude

GoogleClassroom:ByusingGoogleClassroom,students'interactionisincreased.

GoogleClassroomisusedtomanageassignments,studymaterials,quizzes,notifications,announcements,evaluation,andgrading.

FacultymembersusemindmappingtechniqueslikeCoggletohelpglobalandvisuallearners.

GoogleQuizviaGoogleForms&Mentimeter:TheresponsesofthestudentsarerecordedusingGoogleQuizzesandGoogleForms.

AMentimeterisusedtoadministeraquiztostudents.

Thisensuresthatstudentsreceivetheirevaluationimmediatelyaftercompleting theirquiz.

MassiveOnlineOpenCourses(MOOC):StudentsareencouragedandmotivatedtoparticipateinonlineMassiveOnlineOpenCourses(MOOC).

Quizizzisafungametoplay(GamifiedQuiz)

Creatinge-content:

Facultymembersareencouragedtocreateelearningresourcesforthebenefitof studentsinordertocreatealearner-friendlyenvironmentforthem.

Toensurethatstudentscanaccesslearningcontentfromanywhereandatanytime ,facultymembersuploadtheirE-
learningcontenttotheSchool/DepartmentYouTubeChannel/Website.

Theinstituteadherestoastudent-centerededucationsystemandensuresthatit tisfollowedbyimplementingoutcome-basededucation.

(OBE).

Thecourseobjectivesaremappedtothecourseoutcomes.

Outcomesoftheprogrammeand/orprogram-specificoutcomesthataredefined

inaccordancewiththeNBA'sgraduateattributesandtheNBA'stheprogram'sspecificrequirements

Coursesareassignedbasedonspecialisation,experience,coursepreference, andpreviousyear'steachingperformance.

SkillDevelopmentsessionsareincludedinthetimetable.

Forbetterimplementation,teachingplansarecreatedbasedontheOBEphilosophy.

CourseownersdeliverpresentationstotherespectiveCourseDomaincommittee inordertoeffectivelyplanthecourse(s)allottedtothem. Earlyplanningand preparationofadequateandeffectivelearningresourcesandmaterials.

Untillastacademicyear,theInstitutesuccessfullydeliveredoutcome-based educationusinganOBEbasedsoftwareplatformcalledIoncudos,whichwashosted donalocalserver.

`WitheffectfromBEbatch201-21andonwards,theOBEimplementationworkuptoCO-POattainmenthasbeenshiftedfromIONCUDOStoCourseAttainmentGoogleSheets(CAGS).`

`TheCAGSstartswithCOdefinitions,CO-PO/PSOmapping,andendswithCOandmappedPOattainmentcalculations.`

`TheCAGSforaparticularcoursearesharedwiththeCourseOwner,whohasEditorpermissiononafewsheetsandViewerpermissionontherest.`

`TheCOattainmentisdeterminedbythestudents'scoresontheContinuousInternalAssessmentorTermEndExamination,feedbackfromtheCourseExitSurvey,andthedefinedlevelsforthesetgoal.`

`Finally,thePOattainmentsarecalculatedusingtheCO-PO/PSOCorrelationMatrixandthecalculatedCOattainments.`

`POattainmentforeachsemester/termismadeupofindividualcoursePOattainments.`

`ThePOattainmentoftherespectivebatch/curriculumiscalculatedbyaveragingthePOattainmentsofallsemesters/terms.`

File Description	Documents
Paste link for additional information	https://www.mangalam.edu.in/engineering/iqac
Upload any additional information	No File Uploaded

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)	A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://www.mangalam.edu.in/engineering/iqac
Upload e-copies of the accreditations and certifications	**No File Uploaded**
Upload any additional information	**No File Uploaded**
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

1.Institution shows gender sensitivity in providing facilities such as:

1. **Safety and Security**
2. **Counselling**
3. **Common Room**

As a supreme and leading institution in the realm of technical education with excellence and quality, our vision cornerstones in providing safe space for our students and staff, facilitating gender equity and empowerment. The institution holds zero tolerance to issues concerning gender, ragging and sexual harassment. Our initiatives are

Safety and Security

- **Fully Protected Campus: Campus is safeguarded well with compound walls and full-time service of security guards.**
- **CCTV Surveillance: The college has installed CCTV cameras inside entire classrooms, departments, office and corridors.**
- **ID Card: It's mandatory for all students and staff to wear ID cards issued by the college.**
- **Grievance Redressal Committee: The committee looks into the grievances lodged by any student and judges its merit to take necessary action. It also looks into any sort of harassments and disciplinary issues and anyone with a genuine grievance can approach any member of the committee. Complaint boxes are installed and the committee ensures follow up actions.**

- **Women's Forum:** Women's Forum promotes general well-being of female students, teaching and non-teaching staff of MLM. It also extends activities to include gender sensitization programmes inculcating values of equality. It fosters a culture of gender equity and respect.
- **Anti-Ragging Squad and Anti- Ragging Committee:** The committee constitutes members from the college, Kerala Police, Local media and Civil Administration.
- **Ethics Committee:** Ethics Committee instituted in the college acts as a check on issues related to misuse of social media and sexual assaults. It also stays alert all the time to prevent any sexual abuse to words students and female workers.

Counselling

- **Counselling Centre:** Students are facilitated with the service of a full time professionally qualified counsellor within the Campus. It aids students to straighten out their stresses and strains. The centre aims to facilitate Academic, Emotional, Social and cognitive development of the students hence to enhance their learning and personal development.
- **Staff Mentoring:** Apart from the counselling services offered by the counselling centre needy students are provided with staff counselling apart from mentoring sessions.

Common Room

- **Common rooms:** Common rooms are provided for boys and girls. Common restrooms are available for girl students. College has provided a sufficient number of toilets.
- **Incinerators and Sanitary Napkins:** Incinerators are inducted in toilets to burn used napkins. Sanitary napkins are kept for distribution in a separate counter in the common room for Girls and Lady Staff.
- **Special Toilets:** Special Toilets are available for differently abled.
- **Sick Room:** Facilities like bedding, first aid etc are provided.
- **Fitness Room:** Special timings are given for ladies in the physical fitness centre so as to keep them physically fit and motivated.

All these facilities are impeccably used by lady teaching staff, non-teaching staff and students.

File Description	Documents
Annual gender sensitization action plan	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment	**A. 4 or All of the above**

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	**No File Uploaded**

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

The college has entrenched a homogenized, sustainable and reliable, green energy approach that lessens waste production and provides economic benefits as the cost effective sources and thereby assures environmental sustainability.

The college has a sturdy waste management to steer various kinds of wastes generated from the academic buildings, hostels, canteen and stationary stores. Go Green initiatives aid our efforts for the same.

Solid Waste Management

- **Green Bin : Installed Green bins within the campus and corridors to ensure proper collection, segregation and disposal of solid waste.**
- **Bio Gas Plant: A well structured Bio Gas plant has been installed near the central Kitchen as part of the biological**

reprocessing.
- NSS as part of its Green initiative, organizes productive workshops on paper bag making. Paper Wastes within the campus are collected and sold to external agencies for recycling.
- As part of optimized use of papers the college has been effectively using technology as a proper aid for documentation.
- Avoid use of Fluorescent bulbs and adopted use of LEDs.

Liquid Waste Management

- Liquid Waste management has been given special care.
- Liquid Waste is drained through proper sewers.
- Liquid waste from laboratories has been channeled through pipes and collected in tanks.
- Water from the rainwater harvesting system is used in gardens and washrooms.

E Waste Management

- Optimum use of Electronic Equipment, computers and peripherals with proper periodic maintenance.
- Other E Wastes are handed over to external agencies for proper disposal.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded
Geo tagged photographs of the facilities	https://mangalam.edu.in/documents/engineering/naac/aqar/20-21
Any other relevant information	No File Uploaded

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus	A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Any other relevant information	**No File Uploaded**

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows: 1. **Restricted entry of automobiles** 2. **Use of Bicycles/ Battery powered vehicles** 3. **Pedestrian Friendly pathways** 4. **Ban on use of Plastic** 5. **landscaping with trees and plants**	**A. Any 4 or All of the above**

File Description	Documents
Geo tagged photos / videos of the facilities	View File
Any other relevant documents	**No File Uploaded**

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities	**B. Any 3 of the above**

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

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment	**C. Any 2 of the above**

with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment   5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen   reading

File Description	Documents
Geo tagged photographs / videos of the facilities	**No File Uploaded**
Policy documents and information brochures on the support to be provided	**No File Uploaded**
Details of the Software procured for providing the assistance	**No File Uploaded**
Any other relevant information	**No File Uploaded**

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

The college is a microcosm of cultural and social diversity where students and staff from various cultural realms mingle with utmost amity. The college stands out exclusively inclusive as it accepts students and staff from any communities. There is no privilege given to any particular community as all in brotherhood engage in academic and extracurricular activities. It also functions on perfect equality irrespective of class, caste, gender and place. The college is fully tolerant as the maximum number of students and staff belongs to the Minority Community.

Inclusiveness and Tolerance

- **The college accepts all sorts of diversities.**
- **Does not keep privilege for any class, caste, gender and place.**
- **The college designates staff from any cultural background prioritising their academic merit and teaching skill.**
- **The college celebrates oneness through all festivities like Onam,Ramadan, Christmas and Holi.**

Catering to the needs of the needed

- **The college initiates the needs of the immediate societies as it extends help during challenging days.**
- **NSS has organized various workshops and activities inculcating the immediate needs of the neighbourhood communities as they faced livelihood challenges.**

Linguistic Inclusiveness : There are no such linguistic barriers in achieving and being part of this institution.

Sexual Minorities: Follows perfect equity in case of gender.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	**No File Uploaded**
Any other relevant information	**No File Uploaded**

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

The college celebrates the Days of National Importance by conducting webinars ,students activities like Quizes and Poster Presentation.These helped the culture is being created among the students.

The college has an ethics committee which regularly meets and organised events.

In curriculum the Course "Constitution of India" is offered.

Blood donation camp, other charity activities are being conducted under the banner of NSS Unit of Mangalam College.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	**No File Uploaded**
Any other relevant information	**No File Uploaded**

7.1.10 - The Institution has a prescribed code of conduct for students, teachers,	**A. All of the above**

administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized

File Description	Documents
Code of ethics policy document	**No File Uploaded**
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	**No File Uploaded**
Any other relevant information	**No File Uploaded**

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

In 2020-2021, because of Covid 19 pandemic situation, we are restricted to physically reach out to the society. But through NSS and IEEE , the student volunteers celebrated the international and national commemorative daysdifferent programmes like webinars, poster making competitions, conducting surveys.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	**No File Uploaded**
Geo tagged photographs of some of the events	**No File Uploaded**
Any other relevant information	**No File Uploaded**

7.2 - Best Practices

7.2.1 - Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

In 2020-2021 academic year, as because of Covid 19 pandemic, most of the classes are in online mode. Therefore the students are residing

in their home and take their lessons. In these time the two best practices identified as successfully implemented by the institution are:

Best Ptactice I:Sir Albert Howard Clava: The Organic Farming Club

The objective of thisclub is to promote the organic farming practice among the young generation.

Best Practice II:Quality Mentoring Systems

The objective of this practice is to give counselling and mentoring to the students. The institution find this practice is very imortant and is the need of the hour, as the students are away from the campus.So it is important to have a quality mentoring system to connect students lively to the campus as well as to heal their problems if any.

File Description	Documents
Best practices in the Institutional web site	**No File Uploaded**
Any other relevant information	**No File Uploaded**

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

The vision of the college :

"To emerge as a center of excellence in technical education and research, creating employable and committed professionals."

The mission of the college:

"Inspire the learners to be globally competent engineers through innovative teaching and learning methods and imbibe a sense of social responsibility and creative inquiry in them that leads to higher learning and research."

To mould a committed and socally responsible professional, Mangalam Engineering College is not only offering the quality academic environment but also it gives the opportunity to its students to work and earn experience through its social outreach programs

The college has a variety of students club such as NSS, IEEE,

Department Association etc. Apart from it, college takes initiatives in adopting the rural villages, developing solutions to the needs of society .

2020-2021 academic year is a pandemic year so that the world is going through a crisis. In the midst of lockdown situation also, Mangalam College has conducted several social awakening programmes under the banner of IEEE and NSS, in both online and offline mode.

Students have developed several prototypes of the products that meets the needs of common people in the Covid 19 pandemic situation. The Portable Mechanical Ventilator is one among them. It is to be noted that many of our student project has got notable recognitions and awards in this aspect.

Radio Mangalam , an initiative of Mangalam College of Engineering, has also contribute a remarkable effort in reducing the stress among the common people during the Covid 19 pandemic period. It has conducted and telecast various programmes.

File Description	Documents
Appropriate web in the Institutional website	**No File Uploaded**
Any other relevant information	**No File Uploaded**

7.3.2 - Plan of action for the next academic year

The future plans are:

1. To increase the usage of ICT tools for online teaching and remedial as COVID 19 pandemic is affecting normal education process.

2. Plan of installation of another one number of 102.4kWp, 3 phase solar power plant and connected electrics at the premises of mangalam educational society, mangalam hills is going on.

3. Plan to Attain the NBA accreditation for all engineering branches

and paper work is going on.