Mangalam College of Engineering

Mangalam Hills, Vettimukal PO,Ettumanoor, Kottayam, Kerala-686631

Affiliated to Mahatma Gandhi University, Kottayam, and

APJ Abdul Kalam Technological University, Kerala

&

Approved By All India Council for Technical Education, New Delhi

NAAC Reference: Institution Track ID: KLCOGN25126

Updated Information in respect of

NAAC Self Study Report

Submitted in February, 2016

Submission to

January 2017

This document contains updated information related to Mangalam College of Engineering after submitting the SSR for NAAC accreditation in February 2016. Only updated information related to Year 2016-17(from March 01, 2016) are given.

16/01/2017   **Dr.M M Paulose**
                                                  Principal
                                                  Mangalam College of Engineering

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SECTION B: PREPARATION OF SELF-STUDY REPORT

1. Profile of the Affiliated /Constituent College

2. For Communication:

Designation	Name	Telephone With STD code	Mobile	Fax	Email
Principal	Dr.M M Paulose	0481 2533722	9946807428	0481-2533700	paulose.m@mangalam.in
Steering Committee Co-ordinator	Mr. Vinodh P Vijayan Assoc.Prof & HOD, Computer Science & Engineering		9961687007		vinodh.pvijayan@mangalam.in

3. Status of the Institution

d. Details of recognition/ approval by statutory / regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ clause	Recognition/Approval details Institution/Departmen	Day, Month andYear (dd-mm-yyyy)	Validity	Remarks
i. AICTE	F.No. South-West/1-2814409127/ 2016/EOA/ Corrigendum-1	11/05/2016	1	
ii.KTU	KTU/A/456/2015	14/05/2016	1	
iii.MGU	2995/2/2016/Ac AVII	28/05/2016	1	

10. Location of the campus and area in sq.mts:

Location*	Urban
Campus area insq.mts.	101171 m^2
Built up area in sq.mts.	19804 m^2

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or incase the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

- Hostel

∗Boys hostel

i. Number of hostels 1

ii. Number of inmates 132

∗Girls' hostel

i. Number of hostels 1

ii. Number of inmates 119

12. Details of programmes offered by the college (Give data for current academic year)

SI.No	Programme Level	Name of the Programme/ Course	Duration In semester	Entry Qualification	Medium of instruction	Sanctioned/approved Student Strength	No. of students admitted
	UG						
1	ECE	B.Tech	8	+2	English	120	68
2	CSE	B.Tech	8	+2	English	120	116
3	EEE	B.Tech	8	+2	English	60	43
4	CE	B.Tech	8	+2	English	120	112
5	ME	B.Tech	8	+2	English	120	114
	PG						
	M.Tech						
1	ECE	Communication Engineering	4	B.Tech	English	18	2

		VLSI & Embedded Systems	4	B.Tech	English	18	4
2	CSE	Computer Science Engineering	4	B.Tech	English	18	3
3	CE	Structural Engineering and Construction	4	B Tech	English	18	8
4	EEE	Power Electronics&	4	B.Tech	English	18	2
5	ME	Industrial Engineering& Management	4	B.Tech	English	18	8
6	MBA	Master of Business Administration	2	Any Degree	English	120	68

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com…)

b. semester system

11

c. trimester system

1

20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC/University/ State Government Recruited	0	0	0	0	0	0	0	0	0	0
Yet to recruit	0	0	0	0	0	0	0	0	0	0

Sanctioned by the Management/ society or other authorized bodies Recruited	11	2	12	8	52	100	28	15	25	8
Yet to recruit	0	0	0	0	0	0	0	0	0	0

21. **Qualifications of the teaching staff:**

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
Ph.D.	9	1	0	0	0	1	11
PG	2	1	12	8	52	99	174

22. **Number of Visiting Faculty/ Guest Faculty engaged with the College.** | 3 |

23. **Furnish the number of the students admitted to the college during the last four academic years.**

Categories	2016 – 2017		2015-2016		2014-2015		2013-2014		2012-2013	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ECE										
SC	2	1	0	0	1	1	1	0	1	1
ST	0	0	0	0	0	0	0	0	0	0
OBC	46	45	10	6	6	10	14	13	15	50
General	82	72	28	6	11	12	26	29	23	49
Others	0	0	1	0	1	0	1	2	0	0
CSE										
SC	2	2	0	0	0	1	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0
OBC	44	63	8	13	9	16	9	9	7	17
General	121	122	45	38	26	26	28	40	21	20
Others	4	3	1	1	0	1	3	1	0	0
EEE										
SC	2	0	2	0	0	1	1	0	0	0
ST	2	0	0	0	0	0	1	0	1	0

OBC	40	8	7	0	11	3	9	1	12	2
General	77	19	16	1	15	5	22	3	21	10
Others	5	1	3	0	3	0	2	1	3	0
CE										
SC	9	4	1	2	3	1	3	1	1	3
ST	1	0	0	0	1	1	0	0	1	0
OBC	123	113	42	19	24	25	20	25	13	14
General	96	140	15	20	36	36	33	32	19	16
Others	0	5	4	4	0	0	3	3	0	0
ME										
SC	7	0	3	0	4	0	3	0	4	0
ST	0	0	0	0	0	0	0	0	0	0
OBC	149	4	37	0	32	1	32	0	42	0
General	322	2	86	2	90	0	91	1	67	2
Others	17	0	4	0	5	0	4	0	5	0
MBA										
SC	3	5	3	2	2	4	2	1	4	4
ST	0	0	1	1	1	2	3	3	2	3
OBC	39	31	3	4	5	5	2	4	2	3
General	29	30	39	37	50	31	39	30	68	34
Others	1	5	0	0	0	0	0	0	0	0

2 4.   Details on students enrollment in the college during the current academic year:

Type of students	UG	PG
Students from the same state where the college is located	1562	190
Students from other states of India	5	0
NRI students	57	0
Foreign students	0	0
Total	**1624**	**190**

26. Unit Cost of Education

(Unit cost=total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) Including the salary component   Rs.68,700

(b) Excluding the salary component   Rs.30500

28. Provide Teacher-student ratio for each of the programme /course offered

Course Name	Teacher-student ratio	Teacher-student admitted ratio
B.Tech	1:15	1:14.2
M.Tech	1:12	1: 12.1
MBA	1:15	1:15

31. Number of working days during the last academic year.

220

32. Number of teaching days during the last academic year

(Teaching days means days on which lectures were engaged excluding the examination days)

164

CRITERION 1: CURRICULAR ASPECTS

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (number of staff members/departments represented on the Board of Studies ,student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.)

Sl.no:	Name of the faculty	Department	Contribution
1	Asha Panicker	ECE	Chairman, PG , Kottayam cluster (KTU)
2	Asha Panicker	ECE	Academic Auditor 2016-17 (KTU)
3	Sibu C Chithran	MBA	MBA Syllabus revision workshop MG University
4	Siby James	MBA	MBA Syllabus revision workshop MG University
5	Vinodh P Vijayan	CSE	Formation of KTU M.Tech syllabus
6	Aneesh K S	ME	Formation of KTU M.Tech syllabus
7	Jain P George	BSD	Revision of KTU B.Tech(Calculus) syllabus

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

Mangalam college of engineering conducts add on courses based on the industrial and research requirements. Every department is free to contact the industries pertinent to their field and asses the need of conducting any particular course. The departmental advisory committee later assigns the design development and planning of the course to a course in charge selected from within the department. The quality assurance cells through regular feedbacks asses the quality of the course. We conduct the following course in the institution.

Course offered	Department	Course-in charge
Spice/MATLAB/HDL	ECE	Mr. Gopakumar M G
PIC Microcontrollers- Introduction programming and interfacing	ECE	Mr. Gopakumar M G
Introduction to MATLAB	ECE	Ms. Remya Elizabeth Philip
Enrichment Program	ECE	Ms. Sunu Ann Thomas
Python Programming	CSE	Mitha Rachel Jose
MVC/JAVASCRIPT/HTML	CSE	Seena Theresa George
PHP	CSE	Anna Prathibha Shobak
Android	CSE	Syamamol T

Hadoop	CSE	Gokula C S
IoT	CSE	Sujitha M
Electrical System Design	EEE	Aju Thomas
ARDUINO	EEE	Neeba Sabu
CAD,REVIT,3DSMAX	CE	CADD CENTRE,KOTTAYAM (Int.Manjusha P K)
SURVEY CAMP	CE	Nissy Susan Mani Reshmi A S
ESTIMATION AND QUANTITY SURVEYING	CE	Sipli Abraham Reni Kuruvilla
TRIZ	ME	Praksh T
CAD	ME	Prakash T
CRDI Engine	ME	Shaiju Mohan
Automobile Engineering	ME	Shaiju Mohan

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc., offered by the institution.

Course	Goals and objective	Course in charge
Spice/MATLAB/HDL	Introduction to spice Introduction to VHDL Introduction to MATLAB Device Simulation using CAD tool	Gopakumar M G
Competitive exam Training	To get a good position in the public Sector	Ashu Prakash

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Python Programming	To acquire algorithmic solutions to problems using python programming	Mitha Rachel Jose
MVC/JAVASCRIPT/ HTML	To gain hands on experience on website development	Seena Theresa George
PHP	To learn web development using PHP	Anna Prathibha Shobak
Android	To familiriase with development of different mobile apps using android	Syamamol T
Hadoop	To know about processing and handling of large datasets	Gokula C S
IoT	To give an idea about latest technological developments using IoT	Sujitha M
Electrical System Design	To give an idea about basic concepts of machine design	Aju Thomas
ARDUINO	To give an awareness about the open source platform used for building electronics projects	Neeba Sabu

1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

Course offered	Level	Beneficiaries
Spice/MATLAB/HDL	Second year students	Regional as well as global companies
PIC Microcontrollers-Introduction programming and interfacing	Second year students	Regional as well as global companies
Introduction to MATLAB	Final Year Students	Regional as well as global companies
Enrichment Program	Second year students	Regional as well as global companies
MVC/JAVASCRIPT/HTML	Third year	MVC/JAVASCRIPT/HTML
PHP/ANDROID/HADOOP/IOT	Final year	PHP/ANDROID/HADOOP/IOT

Lectures/invited talks for the students

Sl.No	Name Of Function	Resource Person	Target Audience	Date Of Visit
1	Green Management & Technology	Mr.Henry Aspeqvist Specialist In Public Administration	Btech First Year And Second Year	19/8/2016

		Reform	Students	
2	IEEE Membership Benefits,Student Branch Operation & Awards	Prof.Biju K Member Of Executive Committee Of IEEE Kerala Section	Btech First Year And Second Year Students	29/8/2016
3	Some Thoughts for Budding EC Engineers	Joseph Samuel, Ph. D. Scholar, Stanford University	Btech First Year And Second Year Students	31/8/2016
4	The Power & Importance Of Reading	Mr Tom J Mangatt CEO,Indhulekha Media Network	Btech First Year And Second Year Students	8/9/2016
5	India In Space	Mr.Joby Mathew George Head,Test Operations Section In Aerospace Mechanisms Group VSSC,Trivandrum	Btech Second Year Students	6/10/2016

6	Innovation And Project Life Cycle	Er.Aravind N Nair HOC,Keltron	Btech Final Year Students	8/11/2016
7	Introduction To Arduino	Mr.Sreejith Project Manager.Leon Creator	Btech First Year And Second Year Students	11/11/2016
8	Common Rail System	Mr. Sankaranarayanan, Technical Director, BOSH	Btech Final Year Students	07.11.2016 & 08.11.2016
9	Institutional Chapter Of SAE India	Mr. Abhimanew A Deputy General Manager(PU), Kerala Agro Machinery Coporation Ltd.	Btech Second Year And Third Year Students	17.08.2016
10	Innovations in Mechanical Engineering	Mr.Jippu Jacob, Professor, AJC Kanjirapally	Btech First Year	29/9/16
11	On Becoming A Professional Engineer-The Human Factor	Prof:Jose Mathew Mattam,HR RAJAGIRI	Btech First Year	27/9/16
12	Expert Talk On Ethics	Fr. Jison Paul, Asst. Vicar, Kottayam	Btech First Year	03.09.2016

13	Concept Of Infinity	Dr. Abraham K Samuel ,Professor CMS College Kottayam	Btech Students	01/10/2012
14	Photonic Material	VP N NAMBOORI ,Professor Photonics Dept,CUSAT	Btech Students	28/11/2013
16	Vector Calculus	PROF.JAIN P GEORGE,HOD RIT,Pampady	Btech Students	05/08/2014
17	Nano Technology	Dr.Joseph T Moolayil ,Asso.Professor S.H Thevara	Btech Students	17/10/2015
18	Complex Analysis	Dr. ABRAHAM K SAMUEL, HOD CMS College, Kottayam	Btech Students	09/08/2016
19	Importance Of Earthing in Our Daily Life	Er. INDUCHOODAN D.R ASSISTANT ENGINEER (SAFETY),KSEB-PATTOM TVM	Btech Students	23/08/2016
20	Attitude For	Mr. SUNIL JOSEPH,	Btech	22/12/2016

		CEO, SARK CABLES	Students	
	Becoming An Enterpreneur			
21	Recent Trends In Power System Protection	Jayarajan, Executive Engineer Moolamattom Power Station	Btech Students	25/04/2016
22	Some Thoughts for Budding Engineers	Joseph Samuel , Ph. D. Scholar, Stanford University	Btech Students	31/8/2016
23	Environ mental Acts &Rules in India and Implementation	Er. K.G Sajeev, Pollution Control Board, Kottayam	Btech Students	28/7/ 2016
24	Passion for Civil Engineering Students-Perspective	Er. M.A.Joseph, ICI Kochi	Btech Students	18/11/2016
25	Women's health and Hygiene	Ms. Tintu Susan John, Obstetrician	Ladies Hostellers	20/12/2016
26	Mental Health Problems Among College Students	Dr. Nathalia Elizabeth Chacko, Psychatrist	Btech Students	22/12/2016
27	Industry Interaction	Mr.Binu Shankar, Asst.Director, E&Y Trivandrum	S3	26/07/2016
28	Webinar on "Linkedln Job Assisstance Program"	Ms.Kushboo Taneja, Linkedln group product Manager	S7	22/09/2016
29	Latest Technologies	Mr.S Thomas, CEO of DCT, Kochi	S1, S3. S5,S7	23/09/2016
30	Placement Talks	Prof.Biju Paul, Placement Officer- Rajagiri School of Engineering & Technology, Kakkanad	S1, S3. S5,S7	23/09/2016

31	Introduction to Machine Learning- A peak into Apriori Algorithm	Mr.Praseed Pai, UST Global	S7	23/09/2016

Technical Fest

Sl.No	Technical Fests	Date Of Events
1	CODEVEDA 2016	30/9/2016 & 1/10/2016
2	REINFORCE 2016	30/9/2016 & 1/10/2016
3	TORQUE 2016	30/9/2016 & 1/10/2016
4	ELEXPLODE 2016	30/9/2016 & 1/10/2016
5	ELECTROVAGANZA 2016	30/9/2016 & 1/10/2016

Non-Technical Fest

S.No	Non-Technical Fest	Date Of Events
1.	SAARANG 2016	1st and 2nd April 2016

CRITERION II: TEACHING – LEARNING PROCESS

2.1 Student Enrollment and Profile

2.1.1 How does the college ensure publicity and transparency in the admission process?

The college ensures the publicity and transparency in the admission process through the following means:

(i)   Publicity:

- ❖ The prospectus and websites of   the Commissioner for Entrance Examinations (CEE), Kerala (www.cee-kerala.org)
- ❖ College Website (www.**mangalam**.ac.in)
- ❖ Affiliated University Website (ktu.edu.in)
- ❖ Free telephonic counseling and guidelines about the application procedures and eligibility criteria and helplines at every districts.
- ❖ Project Exhibitions,Technical Outreach Seminars conducted on various schools,Social Services
- ❖ Technical and Arts Festivals
- ❖ Presence of college in various book fairs
- ❖ Word of mouth publicity by Alumnis, Parents, Students and Faculty Members
- ❖ News in various dailees about the college achievements,social service programmes and socially relevant projects

2.1.2 Explain in detail the criteria adopted and process of admission (Ex.(i)merit(ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

- ❖ The institution offers undergraduate and postgraduate programme.
- ❖ All state government rules and regulations are followed for all the admission at MLMCE
- ❖ The admission cell and senior teachers of each department forms a team and gives proper guidelines and counseling to select the branch suitable for the candidate.
- ❖ B.Tech:
  - o College offers 5 B.Tech Courses.They are
    1. Civil Engineering
    2. Computer Science Engineering
    3. Electronics and Communicatio Engineering

4. Electrical and Electronics Engineering

5. Mechanical Engineering

o The different criteria adopted for the B.Tech Admission are given below:

➢ **Merit Seats**:50% seats (General Merit) are filled as per the / State Government norms through CAP (Centralized Admission Process) and the rank list is published in the Government website. All the students who qualified the Entrance Examination (KEAM/JEE/AIEEE) and having a minimum of 45% marks in Mathematics ,50% marks in Physics and 50% marks in Chemistry separately can apply for the course.

➢ **Community and Management Seats**: 50 % seats consist of Community and Management Quota which is filled as per the College policy of inclusion and merit based admission. Merit is based on the entrance exam conducted by KSFECMA

❖ .MBA

o College offers 1specializations in its MBA Courses. They are:

o The different criteria adopted for the M.Tech Admission are given below:

➢ MBA candidates are asked to furnish their score for C-MAT, K-MAT, MAT, CAT.Eligibility for gaining admissiom is 50% mark in degree exams. The qualification is relaxed for OBC (47%) and SC/SCT (45%). Shortlisted candidate are admitted based on group discussions and interviews

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

Admissions 2016:

➢ **UG Programmes**

Programmes	Category	Government Seats (50%)		Management seats (50%)	
Computer Science Engineering		**First rank**	**Last Rank**	**Minimum Marks (XIIth)**	**Maximum Marks (XIIth)**
	General	**11526**	**55270**	**57**	**97**

		First rank	Last Rank	Minimum Marks (XIIth)	Maximum Marks (XIIth)
	OBC	**27271**	**44620**	**60**	**96**
	SC/ST	**NA**	**NA**	**NA**	**NA**
Civil Engineering		First rank	Last Rank	Minimum Marks (XIIth)	Maximum Marks (XIIth)
	General	24606	45251	62	95
	OBC	11249	48699	59.7	94.75
	SC/ST	47020	55436	62	75
Electrical and Electronics Engineering		First rank	Last Rank	Minimum Marks (XIIth)	Maximum Marks (XIIth)
	General	18351	50205	69	92
	OBC	24682	45155	-	-
Electronics and Communication Engineering		First rank	Last Rank	Minimum Marks (XIIth)	Maximum Marks (XIIth)
	General	281	55630	58	96
	OBC	1750	58640	61	90.16
Mechanical Engineering		First rank	Last Rank	Minimum Marks (XIIth)	Maximum Marks (XIIth)
	General	16339	55294	62.4	96.7
	OBC	18440	55369		
	SC/ST	45253	55845		

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion

Year of Admission	Programmes	Categories (in percentage)					
		SC /ST	OBC	Women	Differently Abled	Economically Weaker	Minority
2016-2017	B.Tech	2	33.85	35.85	0	16.25	24.05
	M.Tech	0	20	60	0	0	44
	MBA	8	40	62	0	15	47

2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement.

For 2016 admissions:

Programmes	Branch	Number of applications	Number of students admitted	Demand Ratio	Reasons
B.Tech	CE	124	112	1.1:1	• Decreased demand ratio is due to the increase in number of institutions
	CSE	150	116	1.3:1	
	ECE	74	68	1.1:1	
	EEE	45	42	1:1	
	ME	160	114	1:3:1	
M.Tech	CE	8	8	1:1	
	CSE	10	3	3:1	
	ECE	6	6	1.5:1	
	EEE	3	2	1.5:1	
	ME	10	7		
Management	MBA	85	68	1.3:1	Introduction of trimester system instead of conventional semester system

					creates unwanted ambiguity among parents & studentswhich Adversly affect the number of Intake.

2.3 Teaching-Learning Process

2.3.2 How does IQAC contribute to improve the teaching –learning process?

IQAC helps in the evaluation of various processes and their outcomes to ensure that they achieve the required bench mark. The various processes carried out by IQAC to improve the teaching learning process as a whole are

1. Evaluation of   course plan
2. Feedback process
3. Evaluation of the achievement of institutional objectives.
4. Planning and execution of staff quality improvement programme.
5. Periodical review of the documentation process.
6. Undertake faculty evaluation and students
7. Conduct academic audits
8. Inculcate ICT based Teaching – learning process
9. Ensuring the proper implementation of academic calendar
10. Conduct various programmes leading to quality improvement of faculties
11. Encourage departments to organize seminars, workshops and faculty development programmes

2.3.7 Detail (process and the number of students \benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?

Department	No: of students			
	Academic counselling	Personal counselling	psycho-social support and	Career guidance

ECE	18	18	18	85
CSE	383(student mentoring)	3	3	124
EEE	136	0	0	78
CE	429(student mentoring)	13	12	120
ME	464 (student mentoring)	19	0	122
MBA	20	120	11	8

2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faulty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

Department	Innovative teaching approaches adopted	Batch of students
ECE	• Providing Video lectures to Students • Using analogy for explaining new concepts • By reversing the role of student to that of a teacher • Introducing Practical Design Experience in Classrooms for HDL classes • Using of software tools • Using Power learning platform "My Haiku" and M-tutor. • NPTEL Online courses enrolled and completed under MLMCE Local chapter. • Register for Spoken tutorial Courses offered by IIT Bombay.	PG VLSI & ES Students PG Communication Engineering Students

	By question-and-answer method, drawing students into active participation in teaching and learning processes	
CSE	10-15min Question and answer session at beginning of each hour - Remedy for weak students - Open book Test - Black Board Teaching - Power Point Presentation - Student Motvation - Encourage and train students to participate in GATE exams . - Google Drive for sharing learning materials. - Google Forms for student feedback - Learning through ICT - Tutorials - Assignments - Student mentoring - Institute and industry interaction - Industrial Visits - Expert Talks - Webinars	2014-2015 2013-2014 2012-2013 2016-2017
CE	- Power Point Presentations - Video lectures to Students - Preparation of Models various structures, - Conducting Exhibition to explore student skills, - Conducting Technical Quiz.	Btech 2014-2015 2013-2014 2012-2013

	• Student Motivation • NPTEL Online Courses under Local Chapter	2016-2017
EEE	• Simulations using MATLAB and Conducting Technical Quiz. • Power Point Presentations • Simulation Softwares • ICT Tools • Orientation Programmes • Anti drug awarenesss programme	2012-2014 M.Tech Batch 2012-2016 B.Tech Batch 2013-2017.2015-2019,2016-2020 Batches
MBA	1. Interactive learning 2. Classes are supported by LCD presentation and Audio-Visual Aids 3. Case Study approach 4. Bridge Courses 5. Industry-institute interface 6. Outbound training 7. Video and movie based Teaching 8. Teaching through management games. 9. Role Plays 10. Use Social media as source of learning	200 MBA students in two batches (100 Each)
ME	1. Powerpoint Presentations 2. Video Presentations 3. Google Sites	All Batches

2.4 Teacher Quality

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
Ph.D.	9	1	0	0	0	1	11
PG	2	1	12	8	52	99	174
Total	**11**	**2**	**12**	**8**	**52**	**100**	**185**

2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality

Various Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning are listed below

Year	Name of the Event	Organizing Body	Dates	Remarks
2016	Faculty development programme on "ICT Tools".	Dept of CSE	14/7/2016	1 day
2016	Faculty development programme on " Preparation of Course Diary"	Dept of CSE	16/7/2016	1 day
2016-2017	FDP on Innovation & Entrepreneurship Development	MLMCE	2/7/2016	1 day
2016	SSTP on Micro electronics from fundemental to devices	IIT, Madras	11/7/2016 to 16/7/2016	6 days
2016	FDP on Art of Teaching	MLMCE	21/7/2016 - 22/7/2016	2 days
2016	WORKSHOP on Building Up Societal Innovators	The Institution of Engineers	26/7/2016	1 day
2016	Technical upgradation and skill development programme for laboratory instructors	MLMCE	22nd December	1 day (Conducted by ECE Department)
2016	FDP-Lecture series	MLMCE	7/6/2016,20/6/2016, 21/11/2016, 8/12/2016, 13/12/2016,22/12/2016,23/12/2016	11 sessions conducted by ECE department
2016	Sustainable Energy Management	CE	29/12/2016	1 day
2016	Soil Structure Interaction	CE	16/12/2016	1 day

2016	Analysis			
2016	Reliability Analysis in Engineering	CE	13/08/2016	1 day
2016	The Art of Teaching	CE	21/07/2016, 21/07/2016	2 day
2016	Earthquake Resistant Masonry Structures	CE	11/07/2016	1 day

Percentage of faculty *invited as resource persons in Workshops/Seminars/conferences organized by external professional agencies:

DEPARTMENT	PERCENTAGE
ECE	14.7
CSE	1
EEE	5
CE	3.12
MBA	14

*participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies

DEPARTMENT	PERCENTAGE
ECE	14.7
CSE	0.03
CE	55
EEE	5
ME	81.25
MBA	6

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent

learning, communication skills etc.

All the internal marks awarded to the students are based strictly on the guidelines given by the University for evaluating internal performance of the students. The university gives a clear guidelines on the weightage for attendance, internal exams, assignment, seminar, viva voice etc.. which are adhere to. After each student has been awarded the internal marks the total internal marks of every student is kept displayed on the notice board for at least a period of one week for the students any clerical error or miscalculation during the assessment of the report. Special attention is given to creativity and independent learning of the students in projects and seminars. During evaluation of seminars special attention is given to communication skill acquired by the student. The students may be intimated about any negative marking that will be incorporated during the internal evaluation of the students due to any of the behavioral indiscreprencies. Below is the table that shows the directions given by the university on the weightage to be given to each and every section on internal evaluation.

Year	Attendance	internal exams	Assignment	Seminar	project	viva voice
First and second semsetr (KTU)	Eligibilty Criteria	80%	20%	NA	NA	NA
Third semester (KTU)	Eligibilty Criteria	80%	20%	NA	NA	NA
Fourth semester (MGU)	20%	60%	20%	NA	NA	NA
Fifth semester (MGU)	20%	60%	20%	NA	NA	NA
Sixth semester (MGU)	20%	60%	20%	NA	NA	NA
Seventh Semster (MGU)	20%	60%	20%	50 mark	50 mark	NA
Eigth Semster (MGU)	20%	60%	20%	NA	100mark	50mark

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/ programme? Provide an analysis of the students results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes /courses offered.

The institute has laid out plan on monitoring and communicating the progress and communication of the students throughout the duration of the course. Each student performance is evaluated through 2 different evaluation methods

1. Internal evaluation method
2. External evaluation method

The internal evaluation is measured with the help of internal exams assignments and attendance whereas external evaluation is done through a single final examination out of 100 marks. Each department documents continually the progress of students by the various results in the internal and external evaluation process. These progress report and the performance appraisal of each student is communicated to their parent through the PTA'S/Open house conducted by each department for each semester for each class. Other than these the result is also made available to the students via the college software management system. If the performance of the student is going below a certain limits the parents might be called in for a detailed talk with the students and student mentor.

End Semester Results Are Given Below

COURSE	2016-2017
ECE	83.44
CSE	84.62
CE	73
EEE	57.1
ME	68.7
MBA	83.33

CRITERION III: RESEARCH, CONSULTANCYANDEXTENSION

3.1 Promotion of Research

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Name of Research	Department	Name
Signal Processing	ECE	Dr. Karthikeyan Chittayil
Embedded System	ECE	Mr. Joby John
Industrial Engineering Management	ME	Dr.Nidhish Mathew Nidhiry
Engineering Design	ME	Mr.Harikrishnan A R
Thermal System	ME	Mr.Vipinraj A R
Manufacturing & Production Control	ME	Mr.Rajeev K Mohan

3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged individual/collaborative research activity, etc.

Research project	Students	Guides	Paper presented
Design of Modified low power & high speed carry select adder using Brent Kung adder	Amala Maria Alex	Mr. Nidhish Antony	International Journal of Scientific Development and Research
Energy efficient ALU based on GDI comparator	Kiran Balu K	Ms. Binu Manohar	International Journal of Scientific Development and Research
Drip Irrigation and Monitoring based on Raspberry Pi and Arduino	Piya Susan Punnen	Ms. Jyothisree K.R	International Journal of Scientific Development and Research

High speed 32 bit MAC unit using reversible Vedic multiplier and Kogge Stone adder	Saranya Mohan	Mr. Rakesh S	International Journal of Scientific Development and Research
Enhancing Security of Traffic Redundancy and Elimination Approach in Cloud Data Storage using 3DES	Anisha Sarah Mathew	Mitha Rachael Jose	IJCSIT, Vol6, Issue 2, July 2015
Optimized Solution for Denial of Service attacks in Bloom's Filter Based Forwarding	Anisha Sarah Mathew	Mitha Rachael Jose	IJERGS, Vol3, Issue 4, July 2015
A New Tri Class Otsu Segmentation with K-Means Clustering in Brain Image Segmentation	Ann Josy John,	Merlin Mary James	IJARCET, Vol4, Issue 3, March2015
Cost Optimization in Multi Cloud Platforms using Priority Assignment	Anoop Abraham Eapen	Vineetha V Nair	IJCER, Vol5, Issue 3,March 2015
Efficient Practices of privacy preservation in relational databases	Anusmitha A	Renjana Ramachandran	IJARCET, Vol4, Issue 3, March 2015
A Hybrid Method for Blocking Malicious Nodes and Optimal Path Identification In Mobile Adhoc Networks	Diana P Varghese,	Vinodh P Vijayan	IJSER, Vol 6, Issue 3,Marh 2015
An Energy Efficient Lightweight Proactive Source Routing Protocol For Mobile AdHoc Networks	Neethu Krishna	Vinodh P Vijayan	IJAER, Vol10, No:20, July 2015
Route Update Overhead Reduction in MANETS using Node Clustering	Anoop Abraham Eapen	Vinodh P Vijayan	IJCATR, Vol4, Issue 8, July 2015
An Improved Energy Efficient Scheme for Scheduling Mobile Sensors in a Hybrid Wireless Sensor Networks with Obstacle Avoidance	Diana P Varghese	Vinodh P Vijayan	IJECS, Vol4, Issue 9, Sep 2015
An Improved Energy Efficient Wireless Sensor Networks Through Clustering in Cross Layer	Neethu Krishna	Vinodh P Vijayan	IJCATR,Vol4, Issue 8, July2015

Network Operations			
Improving Security of Publish/ Subscribe System Using HASBE	Gokula Nath G	Syamamol T	IJARCETVol4, Issue 2, Feb 2015
Advanced MPSE Scheme for Searching Shared and Encrypted Data	Gokula Nath G	Syamamol T	IJARCCE,Vol4, Issue 7, July 2015
Correlation-Based Feature Subset Selection for Privacy Preserving Data Mining	Jintu Ann John	Neethu Mariya John	IJERGS,Vol3, Issue 4,Aug 2015
Enhanced Security in Personalised Web Search	Leya Zacharias	Neema George	IJARCET,Vol4, Issue 3,Mar2015
Efficient Keyword search on large RDF data using optimization technique	Leya Zacharias	Neema George	IJERGS,Vol3, Issue 4,Aug 2015
Secure Mining of Generalized Association Rules from Horizontally Distributed Databases	Mintu Thomas	Neena Joseph	IJETST,Vol2, Issue 4,April 2015
A Unified Framework for Answering k Closest Pairs Queries and Variants using Grouping of Objects.	Mintu Thomas	Neena Joseph	IJIRCCE,Vol3, Issue8, Aug 2015
Flow Based Solutions for DoS and DDoS Attack Detection	Noble George	Sujitha M	IJARCET, Vol4, Issue 3, Mar 2105
Truthful Detection of Packet Dropping Attack in MANET	Noble George	Sujitha M	IJARCCE, Vol4, Mar 2015
Secure Multipath Packet Classification Based on Signature Tree	Pinky M S	Anna Prathibha Shobak	IJCSIT, Vol6, Issue 2,Mar 2015
Change Detection on Images Using Morphological Processing	Rose Mary Kurian	Tinu Thomas	IJARCSSE, Vol 5, Issue 3,Mar2015
CHOKe : A Stateless Queue for Securing Flows	Saniya Elza Dominic	Gayathri R Krishna	IJCSIT, Vol6, Issue 2, Mar 2015

Excellent Code Dissemination Protocol using Multi-Objective Optimization in WSN	Saniya Elza Dominic	Gayathri R Krishna	IJERGS, Vol4, Issue 3, Jul 2015
Minimizing Cost for Big Data Processing using online database	Sruthy V	Sreenimol K R	IJCSIT, Vol6, Issue 2, July 2015
FriendProbe-A new Friend Recommender System for Social Networks	Sruthy V	Sreenimol K R	IJARCCE,Vol4, Issue 7, Jul 2015
Efficient Ranking on Websites Using Scle Rank with Interpolation Search	Tinku Varghese	Subha Sreekumar	IJARCET, Vol4, Issue 3, Mar 2015
A Pairwise Homogenity Active Learning	Sneha Mary Thomas	Nimmymol Manuel	IJETST, Vol2, Issue 4, Apr 2015
Statistical Learning Method for String Transformation	Sneha Mary Thomas	Nimmymol Manuel	IJIRCCE, Vol 3, Issue 8, Aug 2015
An E-commerce Feedback Comment Mining Using SentiWordNet Tool and K-Means Clustering Method	Tinku Varghese	Subha Sreekumar	IJECS,Vol4, Issue 8, Aug 2015
Detection of Double JPEG Compression on Color Images using EBSF Method	Ann Josy John	Jissy Liz Jose	IJARCCE ,Vol4, Issue 8, Aug 2015
Automatic Phishing Detection System.	Pinky M S	Neethu Tom	IJIRCCE Vol3, Issue 8, Aug 2015,
An Improvement in Data Hiding Rate on Color Images	Rose Mary Kurian	Divya S B	IJARCCE, Vol4, Issue 8, Aug 2015
Supporting privacy preserving and content protection using location based query	Sherin Ansm Thomas	Seena Teresa George	IJARCCE, Vol4, Issue 8, Aug 2015
Question Level based Opinion Generation in Web Based Interactive Systems	Rajimol R	Vinodh P Vijayan	IJCATR,Vol5, Issue 2, 2016

An Efficient Steganography Using Mosaic Image with Enhanced Security	Anisha S	Neethu Mariya John	IJSR,Vol5, Issue 2, Feb 2016
WSRCG: A Framework for location awaqre webservice reccomendation and community generation	Anugraha Raj S	Sreenimol K.R	IJSER, Vol4, Issue 2, Feb 2016
Aspect based document annotaion and retrieval	Rose V Pattani	Anumol Babu	IJIRCCE,Vol4, Issue1, Jan2016
Co-Extracting Opinions from online reviews	Beema K S	Mitha Rachael Jose	IJCATR, Vol5, Issue 2, Jan 2016
Comparison of BFS and Prim's Algorithm when used in MANET Routing	Maria Jose	Subha Sreekumar	IJCATR, Vol5, Issue 2, Jan 2016
Pattern based Information Filtering for Author Community Generation	Neena G Krishnan	Neena Joseph	IJSER, Vol4, Issue 2, Feb 2016
Intentional Caching in Disruption Tolerant Network	Sincy Thomas	Syamamol T	IJETST, Vol3, Issue Jan2016
Distributed Digital Artifacts on Semantic Web	Susan P Kurian	Vishnu S Shekar	IJCATR,Vol5, Issue 2, Jan 2016
Profile Based Personalized Web Search Using LDA	Tinimol Andrews	Nimmymol Manuel	IJIRCCE,Vol4, Issue 1, Jan 2016
Space Reservation in Reversible Watermarking	Nisha S Sharma	Anna Prathibha Shobak	IJIRCCE, vol4, Issue 2, Jan 2016
False Node Identification in VANETs for Securing Warning Messages	Rajimol R	Vinodh P Vijayan	IJIRCCE, Vol 4, July 2016
Friend Recommendation in KNN Classification	Nisha S Sharma	Anna Prathibha Shobak	IJIRCCE, Vol 4, Jun 2016
CHUI Based Policy Prediction and Image Search on Content Sharing Sites	Neena G Krishnan	Neena Joseph	IJIRCCE, Vol 4, July 2016

Detection and Elimination of Selfish Nodes in Mobile Ad-Hoc Networks	Maria Jose	Subha Sreekumar	IJIRCCE, Vol 4, July 2016
A Novel Approach of Data Compression in Wireless Sensor Networks	Beema K S	Mitha Rachael Jose	IJIRCCE, Vol 4, July 2016
Unsupervised Celebrity Face Naming with HOG Scheme	Anugraha S Raj	Sreenimol K R	IJIRCCE, Vol 4, July 2016
Secure Data Sharing with Linkable Ring Signatures	Anisha S	Neethu Maria John	IJIRCCE, Vol 4, July 2016
SMC and Proxy Server: Privacy Preserving Data Sharing over DDS	Tinimol Andrews	Nimmymol Manuel	IJIRCCE, Vol 4, July 2016
2L Color QR code- A Novel Approach for Enhancing Capacity & Ensuring Authentication of QR Code	Susan P Kurian	Vishnu S Sekhar	IJIRCCE, Vol 4, July 2016
Efficient Data Access in WSN Using AVGDRA Scheme	Sincy Thomas	Syamamol T	IJCSCN, Vol 6, July 2016
Efficient Density Dased Clustering of Tweets and Sentimental Analysis Based on Segmentation	Anumol Babu	Rose V Patani	IJCT, Vol 3, July 2016
A Dual Switch Cc-Dc Convereter with coupled inductor and charge pump for High Step up Voltage gain	Anitha K	Rahumath Beeby	International Journal of scientific development and research (IJSDR)
A High Gain Dc-Dc Converter with coupled inductor and charge pump	Anitha K	Rahumath Beeby Shoma Mani	NIER International Conference
A High Efficient Fully Soft Switched Isolated DC-DC Boost Converter	Aravind Murali	Benny K.K Priya S.P	NIER International Conference
A Multi-Output DC-Dc Converter	Deepa Sanal	Jeneesh caria Rahul.p	NIER International Conference

Integrated Multi-Output Converter for Smps Application	Deepa Sanal	Jeneesh Scaria	International Journal of scientific development and research (IJSDR)
Multi Output SMPS Based On Bridgeless Converter for power Quality Improvement	Jestin P J	Preethi Sebastian	International Journal of scientific development and research (IJSDR)
Power Quality Imprtovement for Multiple Output SMPS Based On Bridgeless Converter	Jestin P J	Preethi Sebastian Jeepa K.J	International Journal of scientific development and research (IJSDR)
Power quality Enhancement inb Bridgeless isolated Cuk Converter fed BLDC Motor Drive	Midhun Mathew John	Phejil K Paul Liya alias	NIER International Conference
Improved Power Quality Bridgeless Isolated Cuk Converter Fed BLDC Motor Drive	Midhun Mathew John	Phejil K Paul	International Journal of scientific development and research (IJSDR)
Bridgeless Power Factor correction SEPIC Converter	Theertha Raj	Eugene peter	International Journal of scientific development and research (IJSDR)
Bridgeless PFC-Modified SEPIC Converter	Theertha Raj	Eugene Peter Meeras Rose Cherian	NIER International Conference
Selection Of An Optimum Maintenance Strategy For Improving The Production Efficiency In A Casting Unit	Jacob Joshua	Subin George Mathew	Published in Internatonal journal of Science Technology and Engineering
Improving The Supplier Selection Methodology In A Tool Manufacturing Unit	Noufal Gafoor	Vipin Mathew	Published in Internatonal journal of Science Technology and Engineering
Goal Programming Model For Working Capital Management Optimization At Agro Chemical Unit	Jacob Joseph	Aneesh K S	Published in Internatonal journal of Science Technology and Engineering
Response of RCC Slabs subjected to blast loading	Athira Rajan	Bennet Kuriakose	Published "Response of RCC Slab Subjected to

			Air Blast Loading", International Journal of Engineering Research and Science and Techology.
Sustainable Traffic Improvement of Ettumanoor Junction	Geethu Lal, Divya L. G., Nithin K. J.	Susan Mathew, Bennet Kuriakose	Published "Sustainable Traffic Improvement for Urban Road Intersection of Developing Countries: A Case Study of Ettumanoor, India" in Procedia Technology.
Numerical Analysis of Through Beam Connection between CFST column and RC beam	Anupama	Anu Mathew, Kavya K. Kumar	Published "Numerical Analysis of Through Beam Connection between CFST column and RC beam" in Applied Mechanics and Materials.
Numerical Analysis of Shear Buckling of Steel Plates with Cutouts	Swetha Shaji	Deepa Varghese	Published "Numerical Analysis of Shear Buckling of Steel Plates with Cutouts" in Applied Mechanics and Materials.
Dynamics Analysis of Buildings considering Soil-Structure Interaction	Beegam Thaiba T.	Tissa Sebastian	Published "Free Vibration Analysis of Buildings Considering Soil Structure Interaction" in Applied Mechanics and Materials
Numerical Analysis of Steel Reinforced Concrete Deep Beam with Openings using ANSYS	Reshma Biju	Nissy Susan Mani, Kavya K. Kumar	Published "Numerical Analysis of Steel Reinforced Ceoncrete Deep Beam with Openings using ANSYS" in Applied Mechanics and Materials

Numerical Modelling of Masonry Structures	Feba S. Thomas	Bennet Kuriakose	Published "Numerical Finite Element Analysis of Unreinforced Masonry Walls" in Applied Mechanics and Materials.
Analysis of Plates subjected to Pitting Corrosion	Gokul P. V.	Bennet Kuriakose, Shalini T. N. Kurian	Published "Numerical Analysis of Thin Plates with Holes" in Applied Mechanics and Materials.
Numerical Analysis of Gravity Dams	Margaret Abraham	Reni Kuruvilla, Bennet Kuriakose	Published "Static Analysis of Gravity Dams Considering Foundation-Structure Interaction" in Applied Mechanics and Materials.

Research projects with Collaborations are listed below.

Research projects	Students	Guides	Paper presented	Collaboration if any
Sustainable traffic improvement for ettumanoor junction	1.Geethulal 2.Nithin k joseph 3.Divya lakshmi gopinadh		3. "Sustainable Traffic Improvement for Urban Road Intersections of Developing Countries: A Case Study of Ettumanoor, India., Procedia Technology, 25, pp. 115-121, 2016.	National transportation planning and research centre (NATPAC)

Design of Pedestrian Crossing Bridge at Baker Junction, kottayam	1.Mr Amith M M 2.Mr Rosh Reji	Aparna Ben	1. Astra 2015-Technical fest St josephs College of Engineering	Framez Technologies, Kottayam
Design of Drainage System for Ettumanoor	1. Mohammed Unaiz 2. Lakshmy Jayapal 3.Gayathri Das 4.Prince Babu	Reshmi A. S.		Centre for Environment and Development (CED)
Site Selection of Travel Plaza and Design of Effluent Treatment Plant at Angamaly Municipality using GIS	1. Amal Thankachan 2. Jebin Jacob 3. Jinu George 4. Maria Simon	Sruthi Krishnan V.		Centre for Environment and Development (CED)
Assessment of Pedestrian Facilities in Major Corridors in Thiruvananthapuram City	1. Akhil Retheesh 2. Sarananand 3. Savyasaji 4. Sinu Mathew	Manjusha P. K.		National Transportation Planning and Researcch Centre (NATPAC)
Sewage Treatment Plant at Mutholi	1. Sharanya R. 2. Monisha M.	Revathy N.		Jalanidhi, Govt. of Kerala

Panchayath	3. Salini S. 4. Sreelatha L. B.			

3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

Programs	Department	Topic	Date
NDT	ME	NON DESTRUCTIVE TESTING	19/4/16
Rapid Prototype	ME	3D printing	26/7/16
Automobile Engg	ME	CRDI ENGINE	7/11/16-8/11/16
Automobile Engg	ME	Automobile Automation	26/12/16-2/1/17
Technical Seminar	CE	Series of Technical Seminars	20-06-2016, 27-06-2016, 04-07-2016, 11-07-2016
Project Presentation	Management Studies	Data Analysis for Management Research	12/08/ 2013
FDP	MBA	Doing Business research through SPSS	

3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

Broad research area	Faculty in-charge	No. of papers presented
Signal Processing	Dr. Karthikeyan Chittayil	16

Communication	Mr.Ajit Joseph	8
VLSI	Mr.Reneesh Zacharia	7
Embedded System	Mr. Joby John	1
Power Electronics	Susan V Ninan	3
Power Systems	Rehumath Beeby K A	4
MACHINE DESIGN	Ajith Kurian Baby	1
IEM	Aneesh Ks	3
Research Group(SOA) Soft Computing, Operating System, System Programming, Compiler & Architecture	Jissy Liz Jose	9
Research Group(DBA) Data-structure, DBMS, Data mining , Big data & Algorithm	Sujitha M	24
Research Group (WCA) Web Technology/Services, Cloud Computing, Computer Networks & Graphics	Nimmymol Manuel	15
Sustainable Energy Management	Reshma Kassim	1
Engineering Seismology	Kavitha B.	5
Structural Reliability	Bennet Kuriakose	2
Numerical Modelling of Concrete at Early Ages	Bennet Kuriakose	3
Blast Analysis of Structures	Bennet Kuriakose	2
Soil-Structure Interaction Analysis	Bennet Kuriakose	4

Numerical Modelling of Masonry Structures	Bennet Kuriakose, Feba S. Thomas	1

3.1.8. Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

Visited person	Area	Topic	Date
ECE			
Mr.Joby Mathew George	Aerospace	India in Space	Oct 6 2016
Mr.Aravind N Nair	Electrical & Eklectronics	Innovation and Project life cycle	Nov 8 2016
EEE			
RAJAN BABU C R Retd.Chief Electrical Superintendent,KSELB	POWER SYSTEM	Design and installation of grid tied solar power system	29/7/2016
ME			
JIPPU JACOB	Entrepreneurship	Innovation in Mechanical Enginnering	27/9/16
Prof. Jose Mathew Mattam	Entrepreneurship	On becoming a professional engineer-the human factor	29/9/16
Fr. Jison Paul	Human Values	Expert Talk on ETHICS	3/9/2016
Mr. ABHIMANEW A	Automobile	Institutional Chapter Of SAE India	17/08/2016

CE			
Dr. Elson John	Concrete Technology	Advancement in Concrete Technology	08/4/2016
Dr. Dhanya B. S.	Concrete Technology	Sustainability in Concrete Construction	08/4/2016

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

Department	% of faculty availed leave for PHD
ECE	2.9%
CE	6.45%

3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community.

Faculty	Department	Topic of seminar	Date
Dr. T D Subash	Jyothi Engineering College, Thrissur, Kerala, India.	RESEARCH METHODOLOGY-Writing Effective Research Articles	11th- 13th January, 2017
Fr. Bennet Kuriakose	College of Engineering, Kidangoor	Expert Session on Earthquake Resistant Structures	26th July 2016
Fr. Bennet Kuriakose	Amal Jyothi College of Engineering,	Technical Chair of AICERA 2016	29th July 2016

	Kanjirappally		
Fr. Bennet Kuriakose	College of Engineering, Kidangoor	Resource person of workshop "The Finite Element Method"	29th & 30th August 2016
Fr. Bennet Kuriakose	IES College of Engineering, Chittilappally	Workshop "Introduction to Finite Element Method"	28th October 2016

3.2 Resource Mobilization for Research

3.2.1 What percentage of the total budget is earmarked for research?

Year	Budget allocated	Budget utilized
2016	Rs. 46.1 Lakhs	Resource purchase

3.2.3 What are the financial provisions made available to support student research projects by students?

College IEDC invites application from students to avail funding for research projects. After approving the proposal, 50% of total project expense is funded by IEDC with a condition that the working model of project will be submitted to IEDC at end.

The KTU also supports research activities by providing a fund of Rs.10000 for good projects.

1. Name   of Project: **Smart Mirror & Smart Cane**
   Student members: Ananthakrishnan j

2. Name of project: **Third Eye**
   Student members: Jerome Pathrose, Prince Prakash,Robin Kurian

3. Name of project: **Edge Avoider Robort**
   Student members: Jerrin Jose, Jijo S,Joseph rajan,Rijo Sabu

3.3 ResearchFacilities

3.3.1

List of E-Journals

Sl. No	Title	E-Contents	Access
11	**IEEE ASPP Online**	169 E- Journals + Back file access since 2005	**http://www.ieee.org** **http://ieeexplore.ieee.org/xplore**

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

Department	Up gradation	Creation
ME	PG & Research Lab	A LAB WITH 18 SYSYTEMS
	CNC	1 CNC MACHINE

3.3.5 Provide details on the library/information resource center or any other facilities available specifically for the researchers?

List of E-Journals

Sl. No	Title	E-Contents	Access
1	IEEE ASPP Online	169 E- Journals + Back file access since 2005	**http://www.ieee.org** **http://ieeexplore.ieee.org/xplore**

3.4.3 Give details of publications by the faculty and students:

Sl.no	Faculty/students name	No of papers published National /Internation al journals	No of papers published/ presented in conference	Total	No of papers listed in internation al

					databases
1	Prof.Asha Panicker	4	0	4	0
2	Mr. Anu Philip Mathew	2	1	3	0
3	Ms. Binu Manohar	6	1	7	0
4	Mr.Ajit Joseph	4	0	4	0
5	Mr. Nidhish Antony	2	0	2	0
6	Mr. Reneesh C. Zachariah	8	1	9	0
7	Neethan Elizabeth Abraham	3	0	3	0
8	Mr.Jibu Thomas	0	2	2	0
9	Ms. Ayona Philipose	2	3	5	2
10	Ms.Mariya Vincent	1	3	4	4
11	Vinodh P Vijayan	12	7	19	19
12	Neethu Maria John	4	2	6	6
13	Sreenimol K.R	6	0	6	6
14	Nimmymol Manuel	4	0	4	4
15	Neena Joseph	6	0	6	6
16	Anna Prathibha Shobhak	4	0	4	4
17	Elsa Tom	0	1	1	0

18	Vineetha V Nair	2	1	3	3
19	Neema George	2	0	2	2
20	Mitha Rachel Jose	7	1	8	8
21	Syamamol T	6	0	6	6
22	Neethu Tom	2	2	4	4
23	Subha Sreekumar	5	0	5	5
24	Renjana Ramachandran	2	0	2	2
25	Gayathri R Krishna	2	0	2	2
26	Jissy Liz Jose	0	2	2	0
27	Merlin Mary James	2	1	3	2
28	Rose V Pattani	2	0	2	2
29	Seena Teresa George	2	0	2	2
30	Vishnu S Sekhar	4	0	4	0
31	Neena Susan Shaji	0	3	3	1
32	Jeny George	1	0	1	1
33	Jinu P Sainudeen	0	1	1	0
34	Nisha K S	0	1	1	1

35	Dr.T D Subash	1	0	1	1
36	Susan V Ninan	0	0	0	0
37	Preethi Sebastian	2	2	4	0
38	Benny K K	1	1	2	0
39	Reema Manavalan	0	0	0	0
40	Liya Alias	0	1	1	0
41	Jeneesh Scaria	1	1	2	0
42	Rehumath Beeby K A	1	1	2	0
43	Ajith Kurian Baby	2	0	2	0
44	Subin George Mathew	5	0	5	0
45	Tinu Thomas	1	0	1	0
46	Vipin Mathew	1	0	1	0
47	Aneesh Ks	1	0	1	0
48	Noufal Gafoor	1	0	1	0
49	Jacob Joshua	1	0	1	0
50	Jacob Joseph	1	0	1	0
51	ReshmaKassim	0/1	2	4	2

52	Kavitha B.	0/5	0	5	5
53	BennetKuriakose	1/14	2	17	14
54	Geethu Thomas	0	1	1	0
55	Femi Jose	0	1	1	0
56	Susan Mathew	0/1	0	1	1
57	Reni Kuruvilla	0/2	0	2	2
58	Salini Theres N. Kurian	0/1	0	1	1
59	Sruthi Krishnan	0/1	1	2	1
60	Nissy Susan Mani	0/1	0	1	1
61	Akhil Lal	0/1	0	1	1
62	Alice Johny	0/1	0	1	1
63	Surya Sasidharan	0	1	1	0
64	Deepthi S. Nair	0/4	1	5	4
65	Angitha Ann Kuriakose	0/1	0	1	1
66	Kavya K. Kumar	0/3	0	3	3
67	Anu Mathew	0/1	0	1	1
68	Arya Aravind	0/1	1	2	1

69	Feba S. Thomas	0/1	0	1	1
70	Dr. Sibu C Chithran	15	20	35	5
71	Siby James	3	6	9	0
72	Bose Tom	2	1	3	0
73	Ann Jose	2	2	4	0
74	Tinta Baby	1	1	2	0
75	Fathima Shirin Shaji	0	1	1	0

3.5 Consultancy

3.5.4 List the broad areas and major consultancy services provided by the institution and there venue generated during the last four years.

Sl no	Name of activity	Income(Rs)
1	TCS	973430
2	Compressive strength of concrete cube	46504/-
3	Compressive strength of concrete block	2100/-
4	Compressive strength of laterite block	1000/-
5	Tests on aggregates	1940/-
6	Concrete Mix Design	40000/-
7	Tension test on steel	540/-
8	Torsion test on steel	1000/-
Total		**190424/-**

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 How does the institution promote institution-neighborhood- community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

Sl no:	Clubs/ activities	Summary details of activities	Contribution to overall student development.
1	Technology and Innovation Club	Expert Talk on the Topic "Silicon Minds and Neural Computers"	To promote innovation, creativity and engagement in latest technologies.
2	Social Service	Visit toMGM Abhayabhavan & PMGM Balabhavan	Social Commitment

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

Sl no	Department	Activity	Period
1	EEE	Voice controlled Wheel Chair	2016-17
2		Energy Harvesting Using Piezo-Electric Crystal	2016-17
3		Fire Fighting Robotic Vehicle	2016-17
4		E- Desire Homes	2016-17
5	ME	Robotryx	8/6/2012
6		Enivironmental Awareness Program	5/6/2013
7		Torque	18/10/2016
10		Blood Donation Camp	26/08/2016
11		Bed Sheet Distribution	OCTOBER

12		Remediation of Fluoride Contamintaed Water with Cost-effective Biosorbents	2016
13		Site Selection of Travel Plaza and Design of Effluent Treatment Plant at Angamaly Municipality using GIS	2016
14		Assessment of Pedestrian Facilities in Major Corridors in Thiruvanthapuram City	2016
15		Banana Fibre Reinforced Stone Matrix Asphalt	2016
16		Sewage Treatment Plant at Mutholi Panchayath	2015
17		Stability Analysis of Soft Clay Stabilized Using Stone Column	2016
18		Suitability of Various Industrial Wastes on Improving Geotechnical Properties of Kuttanad Clay	2016
19		Relaibility of Masonry Buildings Built in Kerala Against Earthquake	2014
20		Effect of Plastic Strips on CBR Value of Clayey Soil	2015
21		Soil Stabilization Using Lime and Ground Granulated Blast Furnace Slag	2015
22	CE	Design of Flexural Pavement Using Demolished Concrete Aggregates	2015
23		Building Blocks Incorporating Waste Materials	2015
24		Planning and Designing of pedestrian cross over at baker junction, Kottayam	2015
25		Design of Water Treatment plan at Kumarakom	2015
26		Non Linear Analysis of Unreinforced Masonry Walls	2016

3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institute and industry for research activities. Cite examples and benefits accrued of the initiative

collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

Sl no:	Department	Institution where students have been sent for project activities BTech/ Mtech
1.	CE	1. Jalanidhi, Govt. of Kerala
2.	ME	1.Autokast Ltd.Cherthala 2. Travancore Cochin Chemicals, Ernakulam 3. Kens Industrial Tools 4.KAMCO

3.7.2 Provide details on the MoUs / collaborative arrangements (if any) with institutions of national importance / other universities /industries/ Corporate (Corporate entities etc. and how they have contributed to the development of the institution.

Sl No:	Name Of Organisation
1	Technovia Info Solutions Pvt Ltd
2	Arvin Technologies
3	Diligent Spark Embedded Technologies Pvt. Ltd.
4	Acharyaji Technologies Private Limited,New delhi
5	Shark Cables Private Limited,Palakkad
6	Revert Technology Private Limited,New delhi
7	Texas Instruments Innovation Lab,Bangalore
8	Radius technical Services LLC, Dubai
9	CADD School
10	Thankam Enterprises
11	TCS
12	ICT Academy

13	Kerala Start up Mission, Trivandrum
14	CADD Centre, Kottayam
15	WEXCO Homes Pvt. Ltd., Kottayam

3.7.4 Highlighting the names of eminent scientists/participants who contributed.

The following Dignitaries have visited the campus for various Talks:

- Special Lecture on "Industry Interaction" by Mr.Binu Sankar, Asst.Director, E&Y Trivandrum on 26/07/2016.

- Webinar on "LinkedIn Job Assisstance Program" by Ms.Kushboo Taneja, LinkedIn group product Manager on 22/09/2016.

- Expert Talk on "Latest Technologies" on 23/09/2016 by Mr.S Thomas, CEO of DCT, Kochi and Prof.Biju Paul, Placement Officer- Rajagiri School of Engineering & Technology, Kakkanad.

- Webinar on "Introduction to Machine Learning- A peak into Apriori Algorithm" by Mr.Praseed Pai, UST Global on 23/09/2016.

3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages.

Sl No:	Name Of Organisation
1	Technovia Info Solutions Pvt Ltd
2	Arvin Technologies
3	Deligent Spark Embedded Technologies Pvt. Ltd.
4	Acharyaji Technologies Private Limited,New delhi
5	Shark Cables Private Limited,Palakkad
6	Revert Technology Private Limited,New delhi
7	Texas Instruments Innovation Lab,Bangalore
8	Radius technical Services LLC, Dubai
9	CADD School, Trivandrum

10	Thangam Enterprises
11	TCS
12	Kerala Startup Mission
13	ICT Academy, Trivandrum
14	CADD Centre, Kottayam
15	WEXCO Homes Pvt. Ltd., Kottayam

Nature of interaction

1. **ACHARYAJI TECHNOLOGIES PRIVATE LIMITED,NEW DELHI (6/01/2017)**

   - Committed to impart high quality education to its students and also foster advancement of education in different engineering and scientific disciplines.
   - It also has embarked on Industrial research and development to support industries with new and alternate technologies and design solutions

   Beneficiaries : Mangalam students and faculties

2. **SHARK CABLES PRIVATE LIMITED,PALAKKAD (21/12/2016)**

   - **MCE** and **Sark Cables Private Limited, Palakkad** will establish a **"Core Consulting Team"**.
   - Both the Parties shall ensure that the **"Core Consulting Team"** comprises of appropriate personnel to discuss and implement the ideas.
   - Both sides will also have Single Point of Contact for coordinating various activities and for administration purpose

   Beneficiaries : Mangalam students and faculties

3. **REVERT TECHNOLOGY PRIVATE LIMITED, NEW DELHI (21/12/2016)**

   - To provide active technical team working on Micro controller lab at any given point of time.
   - Different Technical team members would need necessary experience on Embedded in order to provide comprehensive Micro controller lab.
   - Maintain key S/W and hardware from the vendors concerned.

   Beneficiaries : Mangalam students and faculties

4. **TEXAS INSTRUMENTS INNOVATION LAB, BANGALORE (21/12/2016)**

- To provide industry experts to support and conduct consulting activity for research lab**.**

- To train MCE engineers on best industry practices and develop competency free of cost at MCE premises.

- To work closely with vendor to provide recommendation for latest and optimized versions of S/W hardware to be procured by MCE. It is understood MCE already has latest versions of the tools and Hardware

Beneficiaries : Mangalam students and faculties

5. ARVIN TECHNOLOGIES (from 15/6/2015)

Introducing new technologies in the area of embedded systems and providing technical support for the research product implementation

- **Beneficiaries :** Electronics & Communication engineering students

6. TECHNOVIA INFO SOLUTIONS Pvt. LTD. (from 20/1/2016)

Delivery of enrichment programme based on latest technologies in different embedded platforms

- **Beneficiaries :** Electronics & Communication engineering students

7. DELIGENT SPARK EMBEDDED TECHNOLOGIES PVT. LTD. (from 4/7/2016)

Technical support for latest embedded technologies

- **Beneficiaries :** Electronics & Communication engineering students

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1. Physical Facilities

4.1.2 Detail the facilities available for

a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

The college is placed in a serene lush green campus. It is located at Vettimukal hills, Ettumanoor, Kottayam District. The total extent of land available is 25.03 acres. The college has a built-up area of over 19804.8m^2.

Infrastructure facilities for curricular and co-curricular activities

S No	Name of the facility	Number of rooms	Area in sq.m
1	Class rooms	44	3229.26
2	Tutorial rooms	5	362.62
3	Drawing Halls	1	135
4	All laboratories & Workshops	41	4861.54
5	Seminar halls	4	519.19
6	Conference rooms	4	250.60
7	Digital Theatre	1	154
8	Computer centre /Research Lab/Language/Incubation Centre	4	625
9	Library and reading rooms & Department Libraries	1	599.38

TOTAL	**105**	**10680.7**

b) Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

Sports:

▪ The College encourages and provides facilities for students to participate in both outdoor and indoor games .For example the college has completely waived the fees for the following students

Sl No	Name	Year of Admission	Branch	Year
1	Jerin Jose Philip	2016	CS	2016
2	Gokul Sreekumar	2016	CS	2016
3	SamuelThomas Biju	2016	ME	2016

4.1.3 **How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any)**

The Institute develops the infrastructure as per the norms of AICTE, University, State government and KTU. The experts from university and KTU are regularly visits the Institute every year. This enables the Institute to ensure the infrastructure adequacy and optimum use for academic growth. As per the academic requirements and co curricular activities the institute makes the arrangements and assigns fund for developing the infrastructure to meet the same. Amount spent for various facilitates developed for the last 4 years (in rupees) is given below.

Sl No	Description	2015-16 (Rupees)	2014-15 (Rupees)	2013-14 (Rupees)	2012-13 (Rupees)	2011-12 (Rupees)
1	Infrastructure land / buildings	58980211	39657074	28144265	18014005	3996136
2	Laboratory equipment	1498389	441597	2398543	5056414	588873
3	Library books and Journals	1947140	17,77,815	10,20,037	21,05,735	25,59,838
4	Furniture	3397782	4000607	5549993	1635680	3856744
5	Vehicle	7037822	5291935	4567084	5457304	2372093
6	Computers	13544120	400000	3540000	5160000	209213
7	Electrical Equipments	879071	2162281	2701538	1262610	195165

4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a Committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

The college library has a Library Committee comprising of following members:

Head of the committee: Dr.M M Paulose

Committee Members:

Asst Prof: Sunu Ann Thomas (Electronics department)

Asst Prof: Sreedevi P R (Electrical& Electronics department)

Asst Prof: Angitha Ann Kuriakose (Civil Department)

Assoc. Prof: Sreenimol K R(Computer Science department)

Asst Prof: Benphil C Mathew (Mechanical department)

Total area of the library (in Sq. Mts.)	400 sq.m
Total seating capacity	138
Working hours: 9.00 am – 6.00 pm	
Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources) available	
Reading space	138
Reference section	Yes
Book racks	25 shelf, open rack -7
Others	

The Library has

1. Circulation Counter

2. Reference Books

3. Reprographic Section

4. Current Periodicals and Newspapers

5. Digital Library (E-Resources)

4.2.3 How does the library ensure purchase and use of current titles, print and ejournals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Purchase of books and journals are based on the following criteria:

 a) Books which are frequently issued or books which are in high demand

b) Books which are referred by the teachers

c) Newer editions of the existing books

 d) Books pertaining to emerging areas of academic concern

e) Journals in related fields

 f) Journals for greater grasp over the curriculum and also beyond into the arena of current scientific research

Year	New Books (Amount in Rupees)	Print & Online Journals in Rs	E-RESOURCES
2010-11	707,040.53	-	-
2011-12	221,053.71	1,06,000	Mc Graw hill,

			Springer, Wiley, J-gate, ASTM Digital Library
2012-13	627,377.19	1,95,626 & 697,113	"
2013-14	158,455.46	1,92,236 & 736,225	ASCE, ASME,IEEE, J-Gate
2014-15	519900	1257915	ASCE, ASME,IEEE, J-Gate
2015–16	1113,461	870,988	IEEE
2016-17	-	464640	IEEE

4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the Institution.

The institute provides hi-tech computer laboratories equipped with modern teaching aids to meet all the demands of teaching –learning processes. All computing labs consists latest configuration computers with original software and Networking peripherals. The computing facility available on the college is as given below.

Sl No	DESCRIPTION	TOTAL
1	DESKTOP -DELL Intel Core i3/ 2GB RAM/250 GB HDD/DVD ROM/18.5"LCD	210
2	DESKTOP -LENOVO Intel Core i3/ 4GB RAM/500 GB HDD/18.5"LCD	200
3	DESKTOP -LENOVO Intel Core i3/ 4GB RAM/500 GB HDD/18.5"LCD	100
4	DESKTOP -LENOVO Intel Core i3/ 4GB RAM/500 GB HDD/18.5"LCD	100
5	DESKTOP -DELL Intel Core i3/ 4GB RAM/500 GB HDD/DVDRW/18.5"LCD	80

6	DESKTOP -DELL Intel Core i3/ 4GB RAM/500 GB HDD/18.5"LCD	100
7	DESKTOP -Assembled Intel Core 2 Duo/ 2GB RAM/320 GB HDD/15.6""LCD	36
8	DESKTOP -Assembled Intel Celeron/ 1GB RAM/40 GB HDD/15" CRT	20
9	SERVER DELL POWER EDGE 2900/QUIAD CORE XEON/ 2GB/146GB X2/19.5"LCD	1
10	FIREWALL FORTINET 311B	1
11	NETWORK SWITCH 24 PORT10/100/1000 MBPS	77
12	PRINTERS CANON LASERJET	63
13	PRINTERS HP LASERJET	7
14	PRINTERS DOT MATRIX	8
15	PRINTERS CANON LASERJET ALL IN ONE	4
16	SCANNER CANON	2
17	FIREWALL CYBERROAM 500 iNG	1

1. Computer Student Ratio:
   - UG (1:6)
   - PG (1:3)

5. Internet Service Provider with bandwidth details:

   No. of Connections: 2

   (a) Service Provider Name: BSNL 10 Mbps NMEICT

(b) Service Provider Name: Asianet

Total Bandwidth available: 64 Mbps

6. Licensed Software available in different departments:

Sl No	Department	Details of Software
1	CE	Primavera
		STAAD
		Ansys Academic Teaching Mechanical
		ETABS
		AUTOCAD
		Microsoft Open Value Subscription
2	CSE & IT	Turbo C++ Suite
		Oracle 10g
		BORLAND JBUILDER X DEVELOPER
		ADOBE CREATIVE SUITE PREMIUM EDITION
		MARCOMEDIA STUDIO MX
		IBM RATIONAL SEED PROGRAM
		Microsoft Open Value Subscription
3	ECE	Mentor Graphics & Xilinx
		Ansys Academic Research HF
		MATLAB
		Microsoft Open Value Subscription
4	EEE	MATLAB
		PSCAD
		AUTOCAD ELECTRICAL
		ETAP
		Microsoft Open Value Subscription
5	ME	Solid Works
		AutoCad
		IBM SPSS
		Solid Edge
		Microsoft Open Value Subscription
6	Central Library	SOUL 2.0
7	Communication	ETNL
8	General Purpose	Windows OS
		RedHat Linux
		Ubantu
		Office package

7. No. of systems in Central Computing facility:

- 120 Computers

8. No. of Nodes / Computers with internet facility:

- 846 Nos.

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

The college properly executes the allocation and utilization of funds. The needs of each department is collected and reviewed. Basing on the review the budget is allocated for various purposes.

The details of funds utilized in the last four years are given below.

Head	Year	Amount allocated in Rupees	Amount utilized in Rupees
Building	2010-11	4,025,000.00	3,120,283.39
	2011-12	4,580,000.00	3,996,136.00
	2012-13	16,000,000.00	18,014,005.45
	2013-14	25,000,000.00	28,144,265.45
	2014-15	37,500,000.00	39,657,074.00
	2015 – 16	18,600,000.00	58,980,211.00
Lab Equipment	2010-11	120,000.00	99,748.00
	2011-12	700,000.00	588,873.00
	2012-13	4,500,000.00	5,056,414.00
	2013-14	2,450,000.00	2,398,543.00
	2014-15	500,000.00	441,597.00
	2015 - 16	500,000.00	1,498,389.00
Office Equipments	2010-11	675,000.00	

			561,976.00
	2011-12	1,400,000.00	1,125,857.00
	2012-13	800,000.00	806,005.00
	2013-14	500,000.00	429,283.00
	2014-15	200,000.00	171,980.00
	2015 - 16	3,00,000.00	2,297,135.00
Electrical Equipments	2010-11	6,200,000.00	5,918,685.00
	2011-12	220,000.00	195,165.00
	2012-13	1,350,000.00	1,262,610.00
	2013-14	2,800,000.00	2,701,538.00
	2014-15	2,000,000.00	2,162,281.00
	2015-16	2,900,000.00	879,071.00
Computers	2010-11	5,072,000.00	5539199.00
	2011-12	120,000.00	209213.00
	2012-13	7,540,000.00	5160000.00
	2013-14	1,550,000.00	3540000.00
	2014-15	4,030,000.00	400000.00
	2015-16	4,700,000.00	13,544,120.00
Vehicles	2010-11	6,500,000.00	6,733,893.00
	2011-12	2,540,000.00	2,372,093.00
	2012-13	5,500,000.00	5,457,304.00
	2013-14	4,500,000.00	4,567,084.00
	2014-15	5,400,000.00	5,291,935.00
	2015-16	5,600,000.00	7,037,822.00

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1.2 Specify the type, number and amount of institutional scholarships/free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

Sources of Scholarship	2016-2017		2015-2016	
	No. of Student	Average Amount	No. of Students	Average Amount
MCM(MERIT-CUM-MEANS) SCHOLARSHIP	353	20000	226	20000

5.1.3. What percentage of students receives financial assistance from state government, central government and other national agencies?

ACADEMIC YEAR	PERCENTAGE (NUMBER) OF STUDENTS RECEIVING FINANICIAL ASSISTANCE					
	COLLEGE	UNIVERSITY	GOVERNMENT (B.TECH)		OTHER AGENCIES	
					BTECH	MTECH
			SC/ST	OEC		
2016-2017	49.36(390)	NIL	1.13(9)	2.78(22)	NIL	NIL

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR-NET, UGC-NET, SLET, ATE/ CAT/ GRE/ TOFEL/ GMAT/ Central / State services, Defense, Civil Services, etc

Preparation for competitive exams is incorporated within the course plan. Exams requiring quantities aptitude are covered by training given in placement cell.

Year	Type of Exam	No. Of Students Appeared	No. Of Students Qualified
2015-2016	GATE	98	6

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

- BANDHAN BANK

5.1.12. Is there an anti-ragging committee? How many instances (ifany) have been reported? During the last four years and what action has been taken on these?

Two cases were reported in last year

5.2 Student Progression

5.2.1. Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed

Student progression		2016
UG to PG		3.678
Employed	Campus selection	14.31
	Other than campus recruitment	4.02

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the UG- B.Tech.

1. B.Tech

Sl.No	Branch	2016
		%
1	Civil Engineering	68.67
2	Computer Science Engineering	55.38
3	Electronics and Communication Engineering	46.67
4	Electrical and Electronics Engineering	49
5	Mechanical Engineering	37.4

2. M.Tech

Sl.No	Branch	2016
		%
1	Civil Engineering (Structural Engineering and Construction Management)	100
2	Computer Science Engineering (Computer science Engineering)	100
3	Electronics and Communication Engineering (VLSI and Embedded systems)	83.33
4	Electronics and Communication Engineering (Communication Engineering)	50
4	Electrical and Electronics Engineering (Power electronics and power systems)	83
5	Mechanical Engineering (Industrial Engineering And Management)	100

5.3.2 Furnish the details of major student achievements in cocurricular, extracurricular and cultural activities at different levels: University /State /Zonal /National/,etc for the previous four years.

Achievements in sports
2015-16
Mangalam basketball team secured 2nd in MG university south zone basketball championship

S.No	Year	Name of Students	Name Of Project	Venue	Organized By	Award/Prize
7	2016	Aswin Philip	Webcraft	AAROH-16, College of Engineering, Adoor		First
8	2016	Aswin Philip	Quzzy Web	ATHARVA-16,College of Engineering And Management ,Punnapra	ATHARVA-16, College of Engineering And Management,P unnapra	First
9	2016	Aswin Philip	Decipher	ATHARVA-16,College of Engineering And Management ,Punnapra	ATHARVA-16, College of Engineering And Management,P unnapra	Second
10	2016	Aswin Philip	Web Designing	LUMIERE-16,College of Engineering, Kidangoor	LUMIERE-16, College of Engineering,Ki dangoor	Second
11	2016	Aswin Philip	Web Designing	VAIBHAV-16,Universal Engineering College	VAIBHAV-16, Universal Engineering College	Second
12	2016	Amal K Moncy	Circuit Debugging	LUMIERE-16,College of Engineering, Kidangoor	LUMIERE-16, College of Engineering,Ki dangoor	First
13	2016	Arjun Prasanna Babu	Circuit Debugging	LUMIERE-16,College of Engineering, Kidangoor	LUMIERE-16, College of Engineering,Ki dangoor	First

14	2016	Vishnu Sekhar	Circuit Debugging	SFERICS-16 ,Saintgits College of Engineering	SFERICS-16,S aintgits College of Engineering	Second
15	2016	Arun Valsalan	Circuit Debugging	SFERICS-16 ,Saintgits College of Engineering	SFERICS-16,S aintgits College of Engineering	Second
16	2016	Rohit Reghu	Technical Quiz	St Gits College of Engineering	KSEB	District level First Prize
17	2016	Jerrin George	Technical Quiz	St Gits College of Engineering	KSEB	District level First Prize
18	2016	Raseem P Mansoor	Treasure Hunt In Obsquara 2016	Ilahia College Of Engineering Muvattupuzh a	Ilahia College Of Engineering Muvattupuzha	IST PRIZE
19	2016	Munna Mujeed	Treasure Hunt In Obsquara 2016	Ilahia College Of Engineering Muvattupuzh a	Ilahia College Of Engineering Muvattupuzha	IST PRIZE
20	2016	Jebin Jacob	Treasure Hunt In Obsquara 2016	Ilahia College Of Engineering Muvattupuzh a	Ilahia College Of Engineering Muvattupuzha	IST PRIZE
21	2016	Tanuj Jacob Roy	Landscaping In Eternia 2016	Saintgits College Of Engineering Pathamuttom	Saintgits College Of Engineering Pathamuttom	2ND PRIZE
22	2016	Kiran Sajan	Basketball In Arena 2016	Amaljyothi College Of Engineering	Amaljyothi College Of Engineering	IST PRIZE
23	2016	Kiran Sajan	Basketball In Pace 2016	St.Joseph's College Of Engineering, Pala	St.Joseph's College Of Engineering,Pa la	IST PRIZE
24	2016	Vishnu Asokh	Reinforce Ipl Auction	Mangalam College Of Engineering Ettumanoor	Mangalam College Of Engineering Ettumanoor	IST PRIZE

25	2016	Jino M Thomas	Reinforce Cad Drawing	Mangalam College Of Engineering Ettumanoor	Mangalam College Of Engineering Ettumanoor	IST PRIZE
26	2016	Manzoor Samad	Web Designing	Christ Knowledge City	Druva 2k16	First Prize
27	2016	Manzoor Samad	Web Designing	College Of Engineering ,Adoor	Druva 2k16	First Prize
28	2016	Manzoor Samad	Web Designing	College Of Engineering Kidangoor	Lumiere 16	Second Prize

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.2.3 Describe the internal organizational structure and decision making processes.

Name of the Body	Members
College Academic Council	- Principal, **Dr. M M Paulose** **Prof.Asha Panicker** HOD, Department of Electronics & Communication Engg. **Prof.Benny K K,** HOD, Department of Electrical& Electronics Engineering **Prof.Vinodh P Vijayan,** HOD, Department of Computer Science Engineering **,Nidhish Mathew Nidhiry** HOD, Department of Mechanical Engineering **Prof. Reshma Kassim** HOD, Department of Civil Engineering **Dr. Sibu C Chitran** HOD, Department of Management Studies
• College Council	- Chairman - Mr. Biju Varghese - Mangalam Educational Society - Representative of Management - Dr. Abraham Chettisserry - Principal, Dr.M M Paulose - Prof. Asha Panicker, HOD, Department of Electronics & Communications Engineering - Prof. Benny KK, HOD, Department of Electrical& Electronics Engineering - Prof. Vinodh P Vijayan, HOD, Department of Computer Science Engineering - Dr. Nidhish Mathew Nidhiry, HOD, Department of Mechanical Engineering

	• Prof. Reshma Kassim, HOD, Department of Civil Engineering • Dr. Sibu C Chitran, HOD, Department of Management Studies
IQAC (Internal Quality Assurance Cell)	• Dr.M M Paulose, Principal, Chairperson • Ms.Neena Joseph, CSE Coordinator • Ms.Reshma Kassim, Asso.Professor, CE • Mr.Vinodh P Vijayan, Asso.Professor, CS • Prof. Asha Panicker, Professor, EC • Mr. Benny K K, Associate Professor, HOD – EE • Dr. Nidhish Mathew Nidhiry, Professor, ME • Prof. Jain P George, Professor, BS&H • Dr. Sibu Chithran, Professor, MBA • Ms. Sipli Abraham, Asso.Professor, CE • Ms. Neethu Maria John, AssoProfessor, CS • Ms. Nimmymol Manuel, Assistant Professor, CS • Mr. Ajit Joseph, Asso.Professor, EC • Ms. Susan V Ninan, Asso.Professor, EE • Mr. Vipin Mathew, Assistant Professor, ME • Mr. Albin M John, Asst.Professor, BS & H • Mr. Siby James, Associate Professor, MBA • Mr. Sam V George, Alumni, Dept. of CSE • Mr. Devanarayanan A, Alumni, Dept. of EE • Mr. Mathew Alex, Administrative Officer • Mr. Vijai Joseph, System Administrator • Dr. Abraham Chettissery, Member from Mgmt. • Mr. Deepesh Divakaran, External Member • Mr. Vikas Varghese, External Member

Industry interaction

- Professional bodies like IST IETE,SAE,ASME
- MOU s with various companies

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

MANGALAM COLLEGE OF ENGINEERING ETTUMANOOR

Self Appraisal form for Teaching Staff

(Members of staff may **list out** their academic and other activities during the academic year 2015 – 2016 and allot points as per guidelines given)

Name: **Date of joining:**

Dept. & Designation:

	Academic Work	Points
1.	**Theory subjects handled in the academic year** (10 points/subject) 	Sl. No.	Class	Subject	Hrs/Week
---	---	---	---
2.	**Number of practical subjects (batches) handled** (5 points/subject) 	Sl. No.	Class	Subject	Hrs/Week
---	---	---	---
3.	**Number of effective weeks for theory subjects** i.e.(Total Number of hours engaged for the subject) / (Number of hrs per week) (12 above – 20 points 10,11 – 15 points 8,9 – 10 points <8 – 5 points) (Points to be awarded for the highest. For S1&2 take effective week/2) | Sl. No.	Class	Subject	Hrs/ Week	Hrs engaged	Effective Weeks
---	---	---	---	---	---
4.	**University exam pass percentage** **B. Tech University exam pass percentage** (Points to be awarded for the highest) (>90% - 100 points, 80-89% - 90 points, 70-79% - 70 points, 60-69% - 50 points, <60% - 0 points 	Sl. No.	Class	Subject	% Pass
---	---	---	---

75

	M. Tech University exam pass percentage (Points to be awarded for the highest) (>90% - 75 points, 80-89% - 60 points, 70-79% - 50 points, 60-69% - 40 points, <60% - 0 points	
	<table><tr><th>Sl. No.</th><th>Class</th><th>Subject</th><th>% Pass</th></tr><tr><td></td><td></td><td></td><td></td></tr></table>	
5.	**Pass % in Class test / Series test** (>90 % - 10 points, 80-89% - 5 points, 70-79% - 3 points, <70% - 0 points) <table><tr><th>Sl. No.</th><th>Class</th><th>Subject</th><th>% Pass</th></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>	
6.	**Coaching classes for weak students – List** (10 points/subject) <table><tr><th>Sl. No.</th><th>Class</th><th>Subject</th><th>Hrs taken</th><th>No. of students</th></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>	
7.	**Other Academic activities – List** (Staff advisor(10), Lab-in charge(10), Industrial visit(10), Funded projects(50), Assistant Class Teacher (5), Others(5 points each)	
8.	**Co-curricular – Activities List** **Guided projects:**	
9.	**Extra-curricular - Activities List** (College Union Activities - 5 each, NSS officer - 20 points, Magazine, Sports, Arts, Tech Fest etc - 10 points, Tour - 10 points)	
10.	**Placement Activities – List** (Training program organized/Attended, Aptitude tests conducted etc - 10 points each)	

11.	**Use of ICT in T/L process** (Use of anyone in addition to Chalk & Board : 5 points per course taught)	
12.	**Research publications/Patents in 2015-16** **BOOKS / Chapters in Books** (Books : International – 30, National – 20 per book / Chapters **:** International – 15, National – 10 chapters per book**)** **Research papers published (** Scopus Indexed Journals – 30,Non - Indexed Journals -20 / **Conference proceedings** (International -20,National – 10) **Patents/** Consultancy Services **– (30 each)**	
13.	**Research Guidance** (10 points for each candidate)	
14.	**Interaction with outside world** **Collaborations/Interactions** (International -20 / National-10/ State -5 each) **Short Tem Courses attended by Faculty** (2 weeks -10,1 week -7,< 1 week – 5)	
15.	**Other Activities – List** (coordinated 10 points each, participated 5 points each) Anti Ragging efforts, Disciplinary efforts	
16.	**Students Feedback Index with class and subjects** (Points = highest index)	
Signature of Staff :	**TOTAL**	

Recommendation of HOD	

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1.2 What are the initiatives taken by the College to make the campus eco - friendly?

Energy Conservation

- A hybrid air conditioning system which utilises both solar and electrical energy has been installed.
- Celebrated energy conservation day and conducted an awareness programme for staff on the importance of power saving.
- Poster Presentation and its display on respective class room display boards as a part of Nature Club.
- Planting trees as a part of Nature club.

7.3 Best Practices

BEST PRACTICE II

- Anti drug awareness program has been conducted for students to make them aware about the consequences of drug usage
- Different case study has been conducted on various products & companies.
- Organizing Blood Donation Camps in college.
- Issuing of Organ donation Card to Students and Staff.
- Donation of bedsheets to patients of Cancer Ward.

EVALUATIVE REPORT OF CIVIL DEPARTMENT

3. Names of Programmes /Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc:

Sl. No.	Programme	Annual/ Semester/ Choice based credit system
1	B. Tech. (Civil Engineering)	Semester
2	M. Tech. (Structural Engineering and Construction Management)	Semester

4. Names of Interdisciplinary courses and the departments/units involved :

Sl. No	Courses	Department
6	Analytical Methods in Engineering	Basic Science and Humanities
13	Electrical Workshop	Electrical and Electronics Engineering
16	Research Methodology	Electrical and Electronics Engineering

5. Annual/semester/choice based credit system (programme wise):

Sl. No	Programme	Annual/semester/choice based credit system
1	B. Tech. Ist Year	Annual for MGU, Semester for KTU
2	B. Tech. other years	Semester
3	M. Tech.	Semester

6. Participation of the department in the courses offered by other departments

Sl. No.	Name of the Course	Name of the Department involved
1	Engineering Mechanics	All other departments
2	Basics of Civil Engineering	All other departments
3	Introduction to Sustainable Engineering	All other departments
4	Civil Engineering Workshop	All other departments
5	Strength of Materials Lab	Mechanical Engineering

9. Number of teaching posts

Sl. No	Post	Sanctioned	Filled
1	Professors	2	1
2	Associate Professors	4	3
3	Assistant Professors	23	27

10. Faculty profile with name, qualification, designation specialization,   (D.Sc./ D.Litt. / Ph.D./M.Phil. etc.,)

Sl. No	Name of Faculty	Qualification	Designation	Specialisation	Experience in Years (I=Industrial, A=Academic)	PhD Students Guided
1	Kavitha B.	M.Tech., Ph. D.	Professor	Structural Engineering	I=0, A= .5	Nil
2	Reshma Kassim	M.E., Ph. D. (Pursuing)	Associate Professor	Construction Engineering	I=1, A=14.5	Nil
3	Sipli Abraham	M.E., Ph. D. (Pursuing)	Associate Professor	Construction Engineering	I=3, A=12.5	Nil
4	Bennet Kuriakose	M. Tech., Ph. D. (Pursuing)	Associate Professor	Structual Engineering	I=2, A=3.5	Nil

5	Reni Kuruvilla	M.E.	Assistant Professor	Structural Engineering	I=3, A=6.5	Nil
6	Manoj C. M.	M.Tech.	Assistant Professor	Geomechanics and Structures	I=8, A=3.8	Nil
7	Surya Sasidharan	M. Tech.	Assistant Professor	Geomechanics and Structures	I=2, A=4.5	Nil
8	Geethu Thomas	M.Tech.	Assistant Professor	Geomechanics and Structures	I=0, A=4	Nil
9	Aswathy Soman	M.Tech.	Assistant Professor	Structural Engineering and Construction Management	I=0, A=3.8	Nil
10	Femi Jose	M.Tech.	Assistant Professor	Environmental Geotechnology	I=0, A=3.6	Nil
11	Manjusha P. K.	M.Tech.	Assistant Professor	Traffic and Transportation Planning	I=0, A=3.6	Nil
12	Susan Mathew	M.Tech.	Assistant Professor	Water Resource &Hydro informatics	I=0, A=3.6	Nil
13	Deepak K Lekshmanan	M.Tech.	Assistant Professor	Structural Engineering and Construction Management	I=0, A=3.6	Nil
14	Revathy N.	M.Planning	Assistant Professor	Planning	I=0, A=3.6	Nil
15	Reshmi A. S.	M.Planning	Assistant Professor	Planning	I=0, A=3.6	Nil

16	Salini Theres N. Kurian	M.Tech.	Assistant Professor	Computer Aided Structural Engineering	I=0, A=3	Nil
17	Alice Johny	M.Tech.	Assistant Professor	Computer Aided Structural Engineering	I=0, A=2.8	Nil
18	Nissy Susan Mani	M.Tech.	Assistant Professor	Computer Aided Structural Engineering	I=0, A=2.5	Nil
19	Sruthi Krishnan V	M.Tech.	Assistant Professor	Energy and Environmental Engineering	I=0, A=2.5	Nil
20	Akhil Lal	M.Tech.	Assistant Professor	Transportation Engineering	I=0, A=2.5	Nil
21	Deepthy S. Nair	M. Tech.	Assistant Professor	Computer	I=0, A=2.5	Nil
22	Anu Mathew	M.Tech.	Assistant Professor	Offshore Structures	I=0, A=1	Nil
23	Anitha Philip	M.Tech.	Assistant Professor	Structural Engineering and Construction Management	I=0, A=2	Nil
24	Arya Aravind	M.Tech.	Assistant Professor	Computer Aided Structural Engineering	I=0, A=1.9	Nil

25	Angitha Ann Kuriakose	M.Tech.	Assistant Professor	Computer Aided Structural Engineering	I=0, A=1.9	Nil
26	Deepak Vijay	M. Tech.	Assistant Professor	Structural Engineering and Construction Management	I=0, A=1.2	Nil
27	Vilbin Varghese	M. Tech.	Assistant Professor	Soil Mechanics and Foundation Engineering	I=0, A=1.2	Nil
28	Kavya K. Kumar	M. Tech.	Assistant Professor	Geomechanics and Structures	I=0, A=0.5	Nil
29	Aswathy Annie Varghese	M. Tech.	Assistant Professor	Geotechnical Engineerring	I=0, A=0.5	Nil
30	Blesson John	M. Tech.	Assistant Professor	Geotechnical Engineerring	I=0, A=0.5	Nil
31	Feba S Thomas	M. Tech.	Assistant Professor	Structural Engineering and Construction Management	I=0, A=0.5	Nil

13. Student-Teacher Ratio (programme wise):

Course	Number of students	Number of teachers	STR

| B.Tech | 435 | 24 | 18.13 |
| M.Tech | 26 | 3 | 8.67 |

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Faculty with P.G = 31

19. Publications:

- Publication per faculty

Sl. No	Author	Title	Year	Journal
1	Bennet Kuriakose	Relaibility of raft foundations on uniformly random soils	2017	Journal of Structural Engineering
2	Kavitha B	Regional Level Forecasting of Seismic Energy Release	2016	ActaGeodetica et Geophysica
3	Bennet Kuriakose	Pushover Analysis of Buildings Considering Soil-Structure Interaction	2016	Applied Mechanics and Materials
4	Bennet Kuriakose,Reni Kuruvilla	Static analysis of gravity dams considering foundation structure interaction	2016	Applied Mechanics and Materials
5	Bennet Kuriakose,Shalini Teressa	Numerical analysis of thin plates with holes	2016	Applied Mechanics and Materials
6	Bennet Kuriakose,Feba s Thomas	Nonlinear finite element analysis of unreinforced masonry walls	2016	Applied Mechanics and Materials
7	Nissy Susan Mani,Kavya K Kumar	Numerical analysis of steel reinforced concrete deep beam with openings using ansys	2016	Applied Mechanics and Materials
8	Tissa Sebastian	Free vibration analysis of building considering soil structure interaction	2016	Applied Mechanics and Materials
9	Deepa Varghese	Numerical analysis of shear buckling of steel plate with cut outs	2016	Applied Mechanics and Materials
10	Anu Mathew,Kavya K Kumar	Numerical analysis of through beam connection between cfst column and rc beam	2016	Applied Mechanics and Materials
11	Bennet Kuriakose	Probabilistic settlement analysis of raft using first	2016	International Journal of Earth

		order reliability method		Science and Engineering
12	Reshma Kassim	Basic studies on embodied energy in construction materials	2016	International Journal of Earth Science and Engineering
13	Bennet Kuriakose,Susan Mathew	Sustainable traffic improvement for urban road intersections of developing counrties:A case study of ettumanoor	2016	Procedia Technology
14	Bennet Kuriakose	Early age temperature distribution in a massive concrete foundation	2016	Procedia Technology
15	Deepthy S Nair	Study on hybrid length steel fiber reinforced concrete subjected to elevated temperatures	2016	International Journal of Engineering Research
16	Deepthy S Nair	Performance of steel fiber reinforced concrete under elevated temperature	2016	International Organization of Scientific Research
17	Deepthy S Nair	Effect of workability on concrete by using hybrid length steel fibers	2016	transactions on engineering and sciences
18	Bennet Kuriakose	Response of RCC Slab Subjected to Air Blast Loading	2016	International Journal of Engineering ResearchST
19	Bennet Kuriakose	"Numerical Analysis of One-way RC Slabs Subjected to Air Blast Loading"	2016	Internatationai Conference on computing in mechanical engineering

* Number of papers published in peer reviewed journals(national)

* Number of publications listed in International Data base (For Eg:Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCOhost, etc.)

   *SJR

Sl.No	Topic	Author	Journal	Issue	Year
1	Reliability of raft foundations on uniformly random soils	Bennet Kuriakose	Journal of Structural Engineering	In press	2017
2	Regional Level Forecasting of Seismic Energy Release	Kavitha B	ActaGeodetica et Geophysica	Vol 50,pp 359-391	2016
3	Pushover Analysis of Buildings Considering Soil-Structure Interaction	Bennet Kuriakose	Applied Mechanics and Materials	Vol 857,pp 189-194	2016
4	Static analysis of gravity dams considering foundation structure interaction	Bennet Kuriakose,Reni Kuruvilla	Applied Mechanics and Materials	Vol 857,pp 237-242	2016
5	Numerical analysis of thin plates with holes	Bennet Kuriakose,Shalini Teressa	Applied Mechanics and Materials	Vol857,pp154-158	2016
6	Nonlinear finite element analysis of unreinforced masonry walls	Bennet Kuriakose,Feba s Thomas	Applied Mechanics and Materials	Vol857,pp 142-147	2016
7	Numerical analysis of steel reinforced concrete deep beam with openings using ansys	Nissy Susan Mani,Kavya K Kumar	Applied Mechanics and Materials	Vol857,pp 148-153	2016
8	Free vibration analysis of building considering soil structure interaction	Tissa Sebastian	Applied Mechanics and Materials	Vol 857, pp 125-130	2016

9	Numerical analysis of shear buckling of steel plate with cut outs	Deepa Varghese	Applied Mechanics and Materials	Vol 857	2016
10	Numerical analysis of through beam connection between cfst column and rc beam	Anu Mathew,Kavya K Kumar	Applied Mechanics and Materials	Vol 857,pp 159-164	2016
11	Probabilistic settlement analysis of raft using first order reliability method	Bennet Kuriakose	International Journal of Earth Science and Engineering	Vol09	2016
12	Basic studies on embodied energy in construction materials	Reshma Kassim	International Journal of Earth Science and Engineering	Vol 9	2016
13	Sustainable traffic improvement for urban road intersections of developing counrties:A case study of ettumanoor	Bennet Kuriakose,Susan Mathew	Procedia Technology	Vol. 25, pp 115-121	2016
14	Early age temperature distribution in a massive concrete foundation	Bennet Kuriakose	Procedia Technology	Vol.25, pp 107-114	2016
15	Modelling heat of hydration for thick concrete construction- a note	Bennet Kuriakose	Journal of Structural Engineering	Vol.42 (348-357)	2015
16	A geophysical approach for the development of hazardous building zonation mapping	Sruthi Krishnan V	Arabian Journal for Science and Engineering	Vol.41,pp 1329–1341	2015
17	Ground Motion Relations for Active Regions in India	Kavitha B	Pure and Applied Geophysics	Vol.171, pp 2241–2275	2014

18	Stochastic Finite Fault Modelling of Subduction Zone Earthquakes in Northeastern India	Kavitha B	Pure and Applied Geophysics	Vol1	2013
19	Estimation of Ground Motion During the 18th September 2011 Sikkim Earthquake	Kavitha B	Geomatics, Natural Hazards and risks	Vol 3	2012
20	Static behavior of laminated composite structure	Bennet Kuriakose	Journal of institution of engineers India series A	A 93(4) 251-257	2012
21	Dynamic Behaviour Laminated Composite Shells	Bennet Kuriakose	Journal of institution of engineers India series A	Vol 92	2011

20. Areas of consultancy and income generated

Sl. No	Name of activity	Income(Rs)
1	Compressive strength of concrete cube	46504/-
2	Compressive strength of concrete block	2100/-
3	Compressive strength of laterite block	1000/-
4	Tests on aggregates	1940/-
5	Concrete Mix Design	40000/-
6	Tension test on steel	540/-
7	Torsion test on steel	1000/-
	Total	93,084/-

21. Faculty as members in a) National committees b) International Committees c) Editorial Board

Sl. No	Name of faculty	Name of national committee
1	Reshma Kassim	Indian Concrete Institute
2	Sipli Abraham	Indian Concrete Institute
3	Nissy Susan Mani	Institute of Engineers of India
4	Alice Johny	Institute of Engineers of India
5	Bennet Kuriakose	Indian Concrete Institute
5	Reni Kuruvilla	Institute of Engineers of India

21. Student projects

a) **Percentage of students who have done in-house projects including interdepartmental/programme :** 92%

b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies :** 8%

24. List of eminent academicians and scientists/visitors to the department

Sl. No	Date of visit	Name of Scientist/ Visitor	Designation/ Field
2	28/07/2016	Sajeev K. G.	Environmental Engineering, Polution Control Board, Kottayam
3	29/12/2016	Blesson Skaria John	Post Doctoral Fellow, Indian Institute of Science Bangalore
4	22/12/16	Dr. Nathalia Elizabeth Chacko	Consultant Psychatrist, Carithas

			Hospital, Kottayam

26. Student profile programme/course wise :

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Tech Civil Engineering 2010-2014 Batch	33	33	15	18	63.6
B.Tech Civil Engineering 2011-2015 Batch	70	64	39	25	47.6
B.Tech Civil Engineering 2012-2016 Batch	75	69	32	37	52.2
B.Tech Civil Engineering 2016-2020 Batch	110	110	49	61	N/A
M.Tech 2014-2016	7	7	-	6	100
M.Tech 2015-2017	8	8	-	8	N/A

*M=Male   *F=Female

27. Diversity of Students

Name of the Course	%of students from the same state	% of students from other States	%of students from abroad
B.Tech Civil Engineering 2016-2020 Batch	100	NIL	NIL
M.Tech 2015-2017	100	NIL	NIL
M.Tech 2016-2018	100	NIL	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?   2

29. Student progression

Student progression	Against %enrolled
UG to PG	15.8
Employed	
• Campus selection	4.24
• Other than campus recruitment	26.66
• Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities

1	Library: Main Library: Department library	4109 Books 93 Books
3	Class rooms with ICT facility	10 classrooms with ICT
4	**Laboratories**	Area Sqm
5	PG lab/Research Lab	35.7 sq. m.

31. **Number of students receiving financial assistance from college, university, Government or other agencies:**

Sl No	Academic Year	College	University	Government and other Agencies
1	2010-2011	-	0	-
2	2011-2012	-	0	-
3	2012-2013	2	0	-

4	2013-2014	10	0	37
5	2014-2015	9	0	6
6	2015-2016	0	0	42
7	2016-2017	29	0	3

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

4. Interdisciplinary courses and the departments/units involved

Sl. No.	Course	Semester	Department
1	Calculus	S1&S2	Basic Science Department
2	Linear Algebra	S3	
3	Probability	S4	
4	Engineering Mathematics IV	S5	
5	Language Lab		
6	Physics Lab	S1&S2	
7	Chemistry Lab	S1&S2	
8	Life Skills	S3	
9	Business Economics	S4	
10	Engineering Physics	S1&S2	
11	Engineering Chemistry	S1&S2	
12	Engineering Mechanics	S1&S2	Department of Civil Engineering
13	Basic Civil Engineering	S1&S2	
14	Civil Workshop	S1&S2	
15	Engineering Graphics	S1&S2	Department of Mechanical Engineering
16	Basic Mechanical Engineering	S1&S2	
17	Mechanical Workshop	S1 & S2	
18	Mechanical Technology Lab	S3	
19	C-Programming Theory	S3	Department of Computer Science Engineering
20	Programming Lab	S3	
21	Computer Networks	S8	
22	Basic Electronics Engineering	S1&S2	Department of Electronics & Communication Engineering
23	Electronics Workshop	S1&S2	

5.

6. Participation of the department in the courses offered by other departments.

Sl. No	Name of Courses Offered	Semester	Name of department
1	Basic Electrical Engineering & Electrical Workshop	S1 & S2	To All other Departments
2	Electric Drives and Control	S5	Electronics and Communication Dept
3	Electrical Technology	S4	Mechanical Dept
4	Mechatronics & Control System	S6	Mechanical Dept.

9. Number of teaching posts

Designation	Sanctioned	Filled
Professors	1	1
Associate Professors	3	5
Asst. Professors	14	14

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Sl. No.	Name	Qualification	Designation	Specialisation	Teaching Experience in Years
1	Benny K.K.	M Tech	Associate Professor & HOD	Industrial Drives & Control	8
2	Dr.T.D.Subash	M E, Ph.D	Professor	Embedded System Technologies	7
3	Preethi	M Tech	Associate	Industrial Management	

			Professor		
	Sebastian				15
4	Susan V Ninan	M Tech	Associate Professor	Industrial Drives & Control	13
5	Rahumat Beeby.K.A	M Tech	Assistant Professor	Power System	9
6	Dhanya S	M.Tech	Assistant Professor	Power Electronics and Power Systems	5
7	Rahul P	M.Tech	Assistant Professor	Power System	6
8	Jeneesh Scaria	M.E.	Assistant Professor	Power Electronics and Drives	6
9	Jeepa K J	M.Tech	Assistant Professor	Industrial Drives & Control	6
10	Liya Alias	M.Tech	Assistant Professor	Power Systems	5
11	Aju Thomas	M.Tech	Assistant Professor	Power Systems	4
12	Meera Rose Cherian	M.Tech	Assistant Professor	Power Electronics and Power Systems	4
13	Shoma Mani	M.Tech	Assistant Professor	Power Systems	4
14	Eugene Peter	M.Tech	Assistant Professor	Power Electronics	5
15	Priya S P	M.Tech	Assistant	Power Systems	

			Professor		3
16	Phejil K Paul	M.E	Assistant Professor	Power Electronics and Drives	3
17	Sreedevi P.R	M.Tech	Assistant Professor	Power Systems	2
18	Neeba Sabu	M.Tech	Assistant Professor	Machines	5
19	Sebastian Joseph	M.Tech	Associate Professor	Industrial Management	6
20	Shaji Jacob	M Tech	Associate Professor	Electrical Energy Systems	5

13. Student-Teacher Ratio (programme wise):

Academic Year	Total Number of Students (UG)					Total number of faculty in the programme	Teacher Student Ratio
	1st Year	2nd Year	3rd Year	4th Year	Total		
2016-2017	39	19	38	40	136	17	1:9
2015-2016	28	38	40	49	155	14	1:11

Academic Year	Total Number of Students (PG)			Total number of faculty in the programme	Teacher Student Ratio
	1st Year	2nd Year	Total		
2016-2017	2	1	3	3	1:1
2015-2016	1	6	7	3	1:2

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Qualification	Number of Faculty
Ph.D	1
Ph D (pursuing)	2

PG	17

19. Publications

Faulty Name	Date of print	Title of paper	National/ Inter-national	Journal/ Conf:/ workshop Name	Was it published when you were with Mangalam
Benny K.K	2016	A High Efficient Fully Soft Switched Isolated DC-DC Boost Converter	NIER International Conference		yes
Preethi Sebastian		Power Quality Imprtovement for Multiple Output SMPS Based On Bridgeless Converter		International Journal of scientific development and research (IJSDR)	yes
Rahumath Beeby K.A		A Dual Switch Cc-Dc Convereter with coupled inductor and charge pump for High Step up Voltage gain		International Journal of scientific development and research (IJSDR)	yes
		A High Gain Dc-Dc Converter with coupled inductor and charge pump	NIER International Conference		yes
Rahul. P		A Multi-Output DC-Dc Converter	NIER International Conference		yes
Jeneesh Scaria		Integrated Multi-Output Converter for Smps Application		International Journal of scientific development and research (IJSDR)	yes
		A Multi-Output DC-Dc Converter	NIER International Conference		yes
Jeepa K.J		Power Quality Imprtovement for Multiple Output SMPS Based On Bridgeless Converter		International Journal of scientific	yes

				development nt and research (IJSDR)	
Liya Alias	2016	Power quality Enhancement inb Bridgeless isolated Cuk Converter fed BLDC Motor Drive	NIER International Conference		yes
Phejil K. Paul		Improved Power Quality Bridgeless Isolated Cuk Converter Fed BLDC Motor Drive		International Journal of scientific developme nt and research (IJSDR)	yes
		Power quality Enhancement inb Bridgeless isolated Cuk Converter fed BLDC Motor Drive	NIER International Conference		yes
Eugene Peter		Bridgeless Power Factor correction SEPIC Converter		International Journal of scientific developme nt and research (IJSDR)	yes
		Bridgeless PFC-Modified SEPIC Converter	NIER International Conference		yes
Meera Rose Cheria n		Bridgeless PFC-Modified SEPIC Converter	NIER International Conference		yes
Shoma Mani		A High Gain Dc-Dc Converter with coupled inductor and charge pump	NIER International Conference		yes
Priya S.P		A High Efficient Fully Soft Switched Isolated DC-DC Boost Converter	NIER International Conference		yes

- Books Published

Sl No	Title Of The Book	Author	Designation	Publication

| 1 | Power Electronics | Chikku Abraham | Associate Professor | Elsevier |
| 2 | Fudamentals Of Electrical Machines And Drives | Chikku Abraham | Associate Professor | Elsevier |

21. Faculty as members in

a) National Committee :

Dr. T D Subash – Senior Member IEEE – Chairman IEEE Photonics Society Madras Chapter.

Shaji Jacob – Member of IEI – Institute of Engineers India

Preethi Sebastian – Member of IEEE (staff coordinator)

22. Student projects

Year	Percentage of students who have done in-house projects (UG) %	Percentage of students placedfor projects in organizations outside the institution. (UG) %
2016 - 2017	90	10
2015 - 2016	100	-

Year	Percentage of students who have done in-house projects (PG) %	Percentage of students placed for projects in organizations outside the institution. (PG) %
2016 - 2017	100	-
2015 - 2016	100	-

23. Awards / Recognitions received by faculty and students:

Faculty :
- Dr. T D Subash – Received the "Certificate of Appreciation" from International Journal of Advanced Computer Research (IJACR) for the outstanding services to IJACR as a member of Editorial board/Reviewer board during the year 2015-16.

Students:

1).Aravind A, of first semester EEE secured second prize at college level in the IEEE PES Quiz Contest 2016", a quiz contest   for the first year engineering students   held on Oct 4th 2016 as part of IEE day celebrations by the   IEEE power and Energy society.

2). Rohit Reghu and Jerrin George of seventh semester,EEE department   secured first in the

district level technical quiz conducted by   KSEB at St Gits college of Engineering.

3) Deepak Siby & Henry K Joseph of first year EEE was selected for their project " Foot Step Power Generation " in a workshop on " Development of scientific temperament ' under Vidya Bharathi Sanskrithi Shiksha Sansthan.

3).First year Students of   EEE designed a 'Smart Helmet for Road Safety " which was published in the news paper.

4). Sixth semester students Evin Xavier , Vineeth Mathew and Vipin Babu were members of the college team which were the winners in various   All Kerala Basket Ball Tournaments conducted and came in 3rd position in the Inter Collegiate University basketball tournament.

5) Subin Thomas won first prize in event " Tech Quiz" -   a national level technical fest at Saint Gits College Of Engineering.2015

24. List of eminent academicians and scientists/visitors to the department:

Resource Person	Designation	Date
Joby Mathew George	Scientist- Head of test operations section in Aerospace Mechanism Group – VSSC (Vikram Sarabhai Space Centre) Thiruvananthapuram	06/10/16
Rajan Babu,	Chief Electrical Inspector,KSEB .	29/07/16

(Retd.)		
Induchoodan D.R,.	Assistant Engineer (Safety), KSEB, Pattom, Trivandrum	23/08/16
Henry Aspequist Sweden	Expert in Green Management Technology	20/08/16
Sunil Joseph.	CEO –Sark Cables. Palakkad	22/12/16

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		%Pass
			*M	*F	
B.Tech EEE 2016- 20Batch	43	39	30	9	-
B.Tech EEE 2015-19 Batch	31	29	28	1	34.5%
M.Tech PEPS 2016 - 2018	3	2	1	1	-
M.Tech PEPS 2015 - 2017	2	1	0	1	100

27. Diversity of Students

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-2017	B.Tech (EEE)	92.3	-	7.7
	M.Tech(PEPS)	100	-	-
2015-2016	B.Tech (EEE)	100	-	-
	M.Tech(PEPS)	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Year	GATE
2015-2016	1

29. Student progression   -   Against %enrolled

Academic Year	UG to PG %	PG to PhD %	Employed (Campus Selection) %	Employed (Other than campus recruitment) %	Self Employment %
2015-2016	4.1		24.5		
2014-2015			6.9		

30. Details of Infrastructural facilities:

a) Department Library:

Department	Electrical and Electronics Engineering
No. of Volumes	330
No. of Book Titles	207

IEEE ASPP Online :   169 E-Journals – Back file access since 2005   : http://ieeexplore.ieee.org/xplore

c) Classrooms with ICT facility

Rooms	Number

Department Room	1
Lecture Rooms	6
Seminar Hall (shared)	1
Tutorial Room	1
Department Library	1

d) Laboratories:

Name of the Lab	Lab Handled	Equipments to run the experiments	Area of the Lab (m^2)
Electrical Machines Lab (Room L105)	Electrical Workshop S1 & S2	Wiring Boards and wiring Accessories, Energy Meter, ELCB, MCB, Fan, Mixi, Bulbs	270 m^2
	Electrical Machines Lab 2-8th Semester	Lpf wattmeter, pf meter voltmeter, ammeter, frequency meter tachometer, DC-shunt, series, compound motor,-Generator,Induction Machine-Squirrel Cage and Slip ring, alternator, Transformer-single phase and three phase, rheostat, amplidyne generator, Cascaded M-G Set, Synchroscope , Double cage induction motor.	
	Electrical Measurements Lab- S4	Wattmeter,Voltmeter,Ammeter,Variable Inductor,Rheostat,Lpf Wattmeter,Rheostat	
Power Electronics Lab (Room M202 -a)	Electronic Circuits Lab-S3	1-phase parallel inverter,chopper circuit,DSO,1-phase controlled rectifier,power electronics trainer kit,1-phase bridge inverter,trainer kit for step down chopper,dual power supply ,power scope,series resonant converter,controller	91 m^2
	Integrated Circuits Lab-S5		

	Power Electronics Lab- S6	card,3 pahse IGBT based power module,DC buck boost converter, TMS 320LF 2407A based DSP trainer kit.CRO,ressistor,inductor,capacitor.integrated circuits trainer,analog ic tester,5V and 30V power supply,function generator,IC-7410,7476,LM 317,7447,7400	
	Control and Simulation Lab- S7		
Computer Łab (Room M202-b)	C-Programming Lab- S3	Hardware – No. of computers - 33 Software - MatLab, C programme, PS-CAD, E-TAP	. . 73 m^2
	Electrical CAD Lab- S7		
	Control and Simulation Lab – S7		
PG Lab (Room No. 213)		Hardware – No. of computers – 15 Software - MatLab, PS-CAD, E-TAP	50 m^2

31. Number of students receiving financial assistance from college, university, government or other agencies:

Academic Year	College Scholarship/ Discount	University	Government and Other agencies
2016 - 2017	18		
2015 - 2016	-		2

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:

1. Talk on 'Design and Installation of Grid Tied Solar Power System' -   Er. Rajan Babu,Retd. Chief Electrical Inspector,KSEB .- 29/07/16

2. Talk on' Importance of Earthing In Our Daily Life ' - Er. Induchoodan D.R, Assistant Engineer (Safety), KSEB, Pattom, Trivandrum.- 23/08/16

3. Talk on 'Recent trends in power system protection' - Jayarajan ,Executive Engineer at Moolamattom Power station

4. Talk on 'Attitude for becoming an Entrepreneur ' – Mr. Sunil Joseph CEO –Sark Cables. Palakkad.-22/12/16

5. Seminar on " IEEE membership benefits and student branch operation "
   Prof Biju K – Member of executive committee IEEE Kerala Section – 29/08/16

6. Seminar on " Innovation and project life cycle " – Er. Aravind N Nair – HOC- Keltron Knowledge centre.

7. Anti Drug Awareness Programme – 15/7/ 16

8. Electrical CAD Training -

9. Soft Skill & Aptitude Training

33. Teaching methods adopted to improve student learning

ICT – Google Sites

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Date	Batch	No.of Students	Place
May 2015	2012- 2016	49	Snehatheeram,Kuthrappally P O,Karukachal,Kottayam
May 2015	2013-2017	38	Mother Theresa Public School for disabled , Uzhavoor
December 2016	2014 -2018	2	Technical Outreach – Presentation by students of EEE at Gandhi Nagar Government School on Electrical Safety and Energy Conservation.

35. SWOC analysis of the department and Future plans

Strength

- Young Dynamic faculty members with specialization in different steams of Electrical and Electronics Engineering
- Effective student   mentoring system
- Remedial classes based on various assessment methodologies
- Well equipped lab facilities
- Cordial relationship between staff and students

Weakness

- Shortage of external funding for research and development
- **Opportunity**
- Possibility for strengthening consultancy services
- Enhancement of curriculum through affiliation to KTU
- **Challenge**
- Lack of sufficient number of quality students with strong interest in Electrical engineering.
- Emerging of local and new engineering colleges under self financing sector.
- Students with rural background

Future Plans
- Plan for funded project proposals to various funding agencies.
- Awaiting approval for the application submitted for STUDY AND ANALYSIS OF NANO WARE FETs AND ITS APPLICATIONS IN HIGH SPEED LOW POWER LOGIC CIRCUITS, Proposal File No: EMR/2016/002043
- Motivating the students   to publish their final year projects in national or international journal and faculty for enrolling for their PhD.
- Extension of consultancy activities
- Conduct more department level faculty/Student development programmes.

EVALUATIVE REPORT OF COMPUTER SCIENCE DEPARTMENT

4. Names of the Interdisciplinary courses and the department/units involved

Sl No	Course	Department
1	Differential Equations	Basic Science & Humanities
2	Calculus	
3	Linear Algebra & Complex Analysis	
4	Discrete Computational Structures	
5	Life Skills	
6	Business Economics	
7	Engineering Physics Lab	
8	Language Lab	
9	Probability Distributions, Transforms and Numerical Methods	
10	Engineering Chemistry Lab	
11	Introduction to Sustainable Engineering	Civil Engineering
12	Basics of Mechanical Engineering	Mechanical Engineering
13	Design & Engineering	
14	Mechanical Engineering Workshop	
15	Basic Electrical Engineering	Electrical and Electronics Engineering
16	Electrical Workshop	
17	Basics of Electronics Engineering	Electronics and Communication Engineering
18	Switching Theory and Logic Design	
19	Electronics Devices and Circuits	
20	Electronic Circuits and Communication Lab	
21	Electronics Workshop	
22	Logic Design Lab	
23	Digital Systems Lab	

6. Participation of the department in the courses offered by other departments

Sl. No	Name of the Course	Name of the department involved
1	Wireless Networks	M.TECH in Electronics & Communication Engineering with specialization in Communication Engg.
2	Computer Programming	

3	Programming Lab	Electrical & Electronics Engineering
4	Computer Programming Lab	
5	Computing Techniques Lab	Civil Engineering
6	Computer Programming Lab	Mechanical Engineering
7	Wireless Communication	Information Technology
8	Artificial Intelligence	
9	Web Application Lab	
10	Internetworking	
11	Internetworking Lab	
12	CASE Lab	
13	Computer Graphics	
14	Data mining & Data Warehousing	

9. Number of teaching posts

Teaching Designation	Sanctioned (As per AICTE)	Filled
Professors	3	2
Associate Professor	6	3
Asst Professors	19	26

10. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D./ M.Phil. etc.,

Sl.No	Name of the Faculty Member	Qualification	Designation	Area of Specialization	Experience in Years	No.of Ph.D Students guided for the last 4 years
1	Dr. E.Gopinathan	Ph.D, IIT Delhi	Professor, 21/03/2016	Signal Processing	46	NIL
2	Mr. Vinodh P Vijayan	M.E,Anna University, 2008	Associate Professor, 12/7/2012	Computer Science & Engineering	8.5	NIL
3	Mr.George Sebastian	M.Tech, Kuvemp university,2007	Professor, 7/6/2010	Computer Science & Engineering	19.5	NIL
4	Mrs.Neethu Maria John	M.E,Anna University, 2007	Associate Professor, 16/6/2010	Computer Science & Engineering	9.5	NIL
5	Ms. Sreenimol K.R.	M.Tech,Cochin University, 2007	Associate Professor, 3/3/2008	Computer & Information Sciences	9	NIL
6	Mrs.Nimmymol Manuel	M.Tech,M.S. University, 2012	A.P, 17/10/2008	Computer Science & Engineering	9.5	NIL
7	Mrs.Neena Joseph	M.Tech, M.S. University, 2012	A.P, 1/9/2008	Computer Science & Engineering	8	NIL
8	Mrs.Anna Prathibha Shobak	M.E,Anna University, 2013	A.P, 27/9/2008	Computer Science & Engineering	8	NIL
9	Mrs.Jinu P Sainudeen	M.Tech,2012,MS university	A.P, 27/07/2006	Computer Science & Engineering	10.5	NIL
10	Mrs. Mitha Rachel Jose	M.E, Anna University, 2010	A.P, 11/7/2010	Computer Science & Engineering	5.5	NIL

11	Mrs.Divya S B	M.Tech,Anna University, 2011	A.P, 3/1/2011	Information Technology	8.5	NIL
12	Mrs.Elsa Tom	M.Tech, 2012, MG University	A.P, 13/1/2012	Computer Science & Engineering	8.5	NIL
13	Mrs. Vineetha V Nair	M.E,Anna University, 2013	A.P, 3/1/2011	Computer Science & Engineering	7.5	NIL
14	Mrs.Sujitha .M.	M.Tech, Anna University, 2013	A.P, 17/8/2009	Information Technology	7	NIL
15	Mrs.Neema George	M.E, Anna University, 2014	A.P, 3/8/2009	Computer Science & Engineering	7	NIL
16	Mrs.Nisha K S	M.E Anna University,2013	A.P, 21/06/2010	Computer Science & Engineering	6.5	NIL
17	Mrs.Sruthy Emmanuel	M.E, Anna University, 2013	A.P, 17/07/2010	Computer Science & Engineering	6.5	NIL
18	Mrs.Simy Mary Kurian	M.Tech,2010,Karunya University	A.P, 3/1/2011	Computer Science & Engineering	6	NIL
19	Mrs.Neethu Tom	M.Tech,Karunya University,2011	A.P, 1/7/2011	Computer Science & Engineering	5	NIL
20	Ms. Syamamol T	M.Tech, 2011,university of Kerala	A.P, 4/2/2012	Technology Management	5.5	NIL
21	Mrs. Subha Sreekumar	M.Tech, Amrita ViswaVidyapeedam, 2012	A.P, 14/6/2012	Computer Science & Engineering	5	NIL
22	Mrs. Renjana Ramachandran	M.E, 2011,Noorul Islam University	A.P, 2/1/2013	Computer Science & Engineering	4	NIL
23	Mrs. Gayathri R Krishna	M.Tech,M.G University, 2012	A.P, 16/7/2012	Computer Science & Engineering	4.5	NIL
24	Mrs.Jissy Liz Jose	M.Tech,2012, University of Kerala	A.P, 6/8/2012	Computer Science & Engineering	4.5	NIL
25	Mrs. Merlin Mary James	M.E, Anna University,2012	A.P, 3/12/2012	Computer Science & Engineering	4.5	NIL

26	Mrs. Seena Teresa George	M.Tech,2013,Amrit aViswaVidyapeeda m	A.P, 1/7/2013	ComputerVis ion & Image Processing	3.5	NIL
27	Mr.Vishnu S Sekhar	M.Tech,2014 MG university	A.P, 4/5/2015	Computer Science & Engineering	1	NIL
28	Ms.Neena Susan Shaji	M.Tech, Anna University, 2014	A.P, 10/7/2015	Computer Science & Engineering	1.5	NIL
29	Ms.Jeny George	M.Tech, MG University, 2014	A.P, 10/8/2015	Computer Science & Engineering	1.5	NIL
30	Ms. Tinu Thomas	M.E, Annamalai University, 2012	A.P, 14/6/2012	Computer Science & Engineering	4	NIL
31	Ms.Gokula Nath	M.Tech, MG university, 2015	A.P, 20/4/2016	Computer Science & Engineering	0.5	NIL

13. Student-Teacher Ratio (programme wise)

Sl No	Academic Year	Total no of students UG					Total number of faculty in the program	Teacher Student Ratio
		I Year	II nd year	III year	IV th year	Total		
1	2015-2016	106	82	88	65	341	29	1:12
2	2016 - 2017	115	78	80	88	361	28	1:13

Academic Year	Total no of students(PG)			Total number of faculty in the program	Teacher Student Ratio
	I year	II year	Total		
2015-2016	3	11	14	3	1:5
2016-2017	3	3	6	3	1:2

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Staff Designation	Filled
System Administrator	1
Instructor	5

15. Qualifications of teaching faculty with DSc /D.Litt /Ph.D /MPhil /PG.

S.No	Qualification	Number of Faculty
1	P.G	28
2	Ph.D	1+2*

* doing Ph.D (Part time)

19. Publications:

   a) **Publication per faculty**

   b) **Number of papers published in peer reviewed journals (national International) by faculty and students**

Number of publications listed in International Database (For Eg: Web of Science, Scopus, And Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

- **Monographs**
- **Chapter in Books**
- **Books Edited**
- **Books with ISBN/ISSN numbers with details of publishers**

Sl no	Name of authors	Date of print	Title of paper	National/ international	Journal/ conference	Indexing	Was it published when you were with mangalam
1	Vinodh P Vijayan and N Kumar	July 2016	Coverage and Lifetime Optimization of WSN using Evolutionary Algorithms and Collision Free Nearest Neighbour Assertion	INTERNATIO NAL	Journal	SCOPUS	YES
2	Rajimol R, Vinodh P Vijayan	2016	Question Level based Opinion Generation in Web Based Interactive Systems	INTERNATIO NAL	Journal	DOAJ, Index Copernicus	YES
3	Anisha S , Neethu Mariya John	Feb-16	An Efficient Steganography Using Mosaic Image with Enhanced Security	INTERNATIO NAL	Journal	iCi,sciseek, Index Copernicus	YES
4	Anugraha Raj S, Sreenimol K.R	Feb-16	WSRCG: A Framework for location awaqre webservice reccomendation and community generation	INTERNATIO NAL	Journal	CiteFactor, IndexCoper nicus, DOAJ	YES
5	Rose V Pattani, Anumol Babu	Jan-16	Aspect based document annotaion and retrieval	INTERNATIO NAL	Journal	DRJI, Index Copernicus	YES
6	Mitha Rachael Jose, Beema K S	Jan-16	Co-Extracting Opinions from online reviews	INTERNATIO NAL	Journal	DOAJ, Index Copernicus	YES

7	Maria Jose, Subha Sreekumar	Jan-16	Comparison of BFS and Prim's Algorithm when used in MANET Routing	INTERNATIONAL	Journal	DOAJ, Index Copernicus	YES
8	Neena G Krishnan, Neena Joseph	Feb-16	Pattern based Information Filtering for Author Community Generation	INTERNATIONAL	Journal	CiteFactor, IndexCopernicus, DOAJ	YES
9	Sincy Thomas, Syamamol T	Jan-16	Intentional Caching in Disruption Tolerant Network	INTERNATIONAL	Journal	SIS,DRJI, DOAJ	YES
10	Susan P Kurian, Vishnu S Shekar	Jan-16	Distributed Digital Artifacts on Semantic Web	INTERNATIONAL	Journal	DOAJ, Index Copernicus	YES
11	Tinimol Andrews,Nimmy mol Manuel	Jan-16	Profile Based Personalized Web Search Using LDA	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
12	Nisha S Sharma, Anna Prathibha Shobak,	Jan-16	Space Reservation in Reversible Watermarking	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
13	Rajimol R,Vinodh P Vijayan	Jul-16	False Node Identification in VANETs for Securing Warning Messages	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
14	Nisha S Sharma,Anna Prathibha Shobak	Jun-16	Friend Recommendation in KNN Classification	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
15	Neena G Krishnan,Neena Joseph	Jul-16	CHUI Based Policy Prediction and Image Search on Content Sharing Sites	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES

16	Maria Jose,Subha Sreekumar	Jul-16	Detection and Elimination of Selfish Nodes in Mobile Ad-Hoc Networks	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
17	Beema K S,Mitha Rachael Jose	Jul-16	A Novel Approach of Data Compression in Wireless Sensor Networks	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
18	Anugraha S Raj,Sreenimol K R	Jul-16	Unsupervised Celebrity Face Naming with HOG Scheme	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
19	Anisha s,Neethu Maria John	Jul-16	Secure Data Sharing with Linkable Ring Signatures	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
20	Tinimol Andrews,Nimmy mol Manuel	Jul-16	SMC and Proxy Server: Privacy Preserving Data Sharing over DDS	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
21	Susan P Kurian,Vishnu S Sekhar	Jul-16	2L Color QR code- A Novel Approach for Enhancing Capacity & Ensuring Authentication of QR Code	INTERNATIONAL	Journal	DRJI, Index Copernicus	YES
22	Sincy Thomas,Syamam ol T	Jul-16	Efficient Data Access in WSN Using AVGDRA Scheme	INTERNATIONAL	Journal	DOAJ,Index Copernicus	YES
23	Anumol Babu,Rose V Patani	Jul-16	Efficient Density Dased Clustering of Tweets and Sentimental Analysis Based on Segmentation	INTERNATIONAL	Journal	DOAJ,DRJI	YES

- **Citation Index**

Sl.No	Name of Faculty	Citation Details
1	Vinodh P Vijayan	

20. Areas of consultancy and income generated:

Areas of Consultancy	Income Generated
TCS ion online examination centre (GATE, IBPS) (2016-2017)	Rs. 489533/-

22. Student projects

a) **Percentage of students who have done in-house projects including interdepartmental/ programme**

Academic Year	Percentage of Students who have done in-house projects (UG)	Percentage of Students who have done out-house projects (UG)
2015-2016	100	NIL
2016-2017	100	NIL

Academic Year	Percentage of Students who have done in-house projects (PG)	Percentage of Students who have done out-house projects (PG)
2015-2016	100	NIL
2016-2017	100	NIL

23. Awards/ Recognitions received by faculty and students:

1. Mr.Manzoor Samad, CS8 was designated as Web Master of Digital Kerala Week, 2015, conducted by Kerala IT Mission and MyGov.

2. Mr.Manzoor Samad won 1st in Web designing in the Intercollegiate Techno Cultural Fest Druva 2K16 and TechFest conducted by College of Engineering, Adoor.

3. Mr.Manzoor Samad won 2nd prize in Web designing of Lumiere16 conducted by College of Engineering, Kidangoor.

4. Mr.Sanjay T won First prize in ARENA 2K16, All Kerala Inter Collegiate Basket Ball Tournament held at AJCE, Kanjirapally

5. Golden Beam Award 2016 by EY was awarded to Mr.Paul George.

24. List of eminent academicians and scientists/ visitors to the department:

Sl.No	Name	Details of Visit
1	Mr.Santhosh Kurup	Special Lecture on "Role of ICT in Education" by ICT Academy Trivandrum held on 11/09/2015.
2	Mr.Binu Sankar, Asst.Director, E&Y Trivandrum	Special Lecture on "Industry Interaction" on 26/07/2016
3	Mr. Thomas, CEO Digital Core Technologies, Kochi	Expert Talk on "Latest Technologies" on 23/09/2016
4	Prof.Biju Paul, Placement Officer- Rajagiri School of Engineering & Technology, Kakkanad	Expert Talk on "Latest Technologies" on 23/09/2016

25. Seminars/ Conferences/ Workshops organized & the source of funding

Sl.No	Name of Activity	Type of Event	Source of Funding
1	Netpreneurship & Business Idea Competition	National Workshop	Kerala Startup Mission

| 2 | Skill Development & Android Workshop | National Workshop | Kerala Startup Mission |
| 3 | Workshop on Python | National Workshop | Kerala Startup Mission |

26. Student profile programme/ course wise:

*M=Male   *F=Female

Programme /Course		Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
B.TECH (CSE)	2011-2012	70	61	38	23	-
	2012-2013	75	65	28	37	-
	2013-2014	106	90	40	50	-
	2014-2015	95	81	37	44	-
	2015-2016	130	110	61	49	
	2016-2017	150	116	61	55	
M.TECH (CSE)	2012-2013	40	17	2	15	99
	2013-2014	45	18	2	16	-
	2014-2015	20	14	1	13	-
	2015-2016	7	3	2	1	
	2016-2017	10	3	1	2	

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
UG	100	0	0
PG	100	0	0

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29. Student progression

Student progression	Academic Year	Total No of Students	No of Students Secured	Against % enrolled
UG to PG	2015 - 2016	65	0	0
	2014-2015	61	1	1.63
	2013-2014	67	8	11.9
	2012-2013	72	6	8.3
	2011-2012	68	7	10.0
PG to Ph.D.	NIL			
Ph.D.to Post-Doctoral				
Employed • Campus selection	2016-2017	88	8	7.9
	2015-2016	65	19	21.5
	2014-2015	61	8	13.11
	2013-2014	67	13	19
	2012-2013	72	16	22
	2011-2012	68	5	7.3
Employed • Other than campus recruitment	2015-2016	65	9	13.8
	2014-2015	61	14	22.9
	2013-2014	67	30	45
	2012-2013	72	45	63
	2011-2012	68	30	44
Entrepreneurship/Self-employment	2014-2015	61	NIL	0
	2013-2014	67	NIL	0
	2012-2013	72	NIL	0

	2011-2012	68	7	10.3

30. Details of Infrastructural facilities

a) Library

Department	Computer Science & Engineering
No. of Volumes	1245
No. of Book Titles	622
No. of Project Reports	329
No. of Seminar Reports	451

b) Internet facilities for Staff & students

The department is provided with internet facility for all students and staff. Campus is WiFi enabled with a speed of 64Mbps.

c) Class rooms with ICT facility

Rooms	No. of rooms	Facilities Available
Lecture rooms	10	Fan, Lights, adequate number of writing tables and sitting benches, Notice boards, all PG & UG classes are equipped with multimedia projectors.
Tutorial Rooms	1	Fan, adequate number of tables & Seats, equipped with multimedia projectors.
Seminar Hall	1	Fan, adequate number of tables & Seats multimedia projectors.

d) Laboratories

Laboratory Description	Practical's Conducted	Platform	Tools	Area of the Lab and list of major equipments
PG Lab	NS2 Lab	Windows, Ubuntu	Turbo C, C++ Jdk 7.0, JDK	No. of Computers: 36

			6.0,GCC, NS2, Wireshark, XGraph	
RISC	Advanced Computing Lab & Projects	Windows, Ubuntu, Fedora	Turbo C, Turbo C++, Wega, Jdk 7.0, JDK 6.0,GCC	No. of Computers: 18

31. Number of students receiving financial assistance from college, university Government or other agencies

Category	Admission Year	No of Students
SC/ST/OEC	2016 - 2017	5
	2015 – 2016	5
	2014-2015	1
	2013-2014	4
	2012-2013	2
	2011-2012	1
Tuition Fee waiver from Govt.	2016 – 2017	17
	2015 - 2016	18
	2014-2015	3
	2013-2014	2
	2012-2013	NIL
	2011-2012	1
MCM Scholarships	2016 – 2017	75
	2015-2016	71

32. Details on student enrichment programmes (special lectures/workshops/ Seminar)

with external experts.

- Special Lecture on "Role of ICT in Education" by Mr.Santhosh Kurup, CEO, ICT Academy Trivandrum was held on 11/09/2015.

- Special Lecture on "Industry Interaction" by Mr.Binu Sankar, Asst.Director, E&Y Trivandrum on 26/07/2016.

- Webinar on "Linkedln Job Assisstance Program" by Ms.Kushboo Taneja, Linkedln group product Manager on 22/09/2016.

- Expert Talk on "Latest Technologies" on 23/09/2016 by Mr.S Thomas, CEO of DCT, Kochi and Prof.Biju Paul, Placement Officer- Rajagiri School of Engineering & Technology, Kakkanad.

- Webinar on "Introduction to Machine Learning- A peak into Apriori Algorithm" by Mr.Praseed Pai, UST Global on 23/09/2016.

-

33. Teaching methods adopted to improve student learning

- Improved Usage of ICT tools

- Introduction to Spoken Tutorial Courses

34. Participation in Institutional Social Responsibility(ISR) and Extension activities

- Have participated in activities under NSS.

- Every year faculty visit different schools and conduct seminars on "ICT and Cyber awareness", to bring social awareness among the students.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

4. Names of Interdisciplinary courses and the departments/units involved

Semester	Subject	Department
S1ECE	MA 101 Calculus	Basic Science
S1 ECE	PH 100C Engineering Physics	Basic Science
S1 ECE	BE 100 Engineering Mechanics	Civil Engineering
S1 ECE	BE 103 Introduction to Sustainable Engineering	Civil Engineering
S1 ECE	EE 100 Basics of Electrical Engineering	Electrical& Electronics Engineering
S1 ECE	PH 110 Engineering Physics Lab	Electrical& Electronics Engineering
S1 ECE	EE 110 Electrical Engineering Workshop	Electrical& Electronics Engineering
S1 ECE	ME 100 Basics Of Mechanical Engineering	Mechanical Engineering
S1 ECE	ME 110 Mechanical Engineering Workshop	Mechanical Engineering
S2 ECE	CY100 Engineering chemistry	Basic Science
S2 ECE	MA102 Differential equations	Basic Science
S2 ECE	BE102 Design & Engineering	Mechanical Engineering
S2 ECE	BE110 Engineering Graphics	Mechanical Engineering
S2 ECE	ME100 Basics of Mechanical Engineering	Mechanical Engineering
S2 ECE	CE100 Basics of Civil Engineering	Civil Engineering
S2 ECE	CY110 Engineering Chemistry Lab	Basic Science
S2 ECE	ME110 Mechanical Engineering Workshop	Mechanical Engineering
S2 ECE	CE110 Civil Engineering Workshop	Civil Engineering
S3 ECE	MA 201 Linear Algebra And Complex Analysis	Basic Science
S3 ECE	HS 210 Life Skills	Basic Science
S7 ECE	EC010 706L03 System Software	Computer Science Engineering

5. Annual/semester/choice based credit system (programme wise)

Grading

Eligibility for writing the end semester examination and for grading Students with 45% or more marks in internal assessment in a course shall only be permitted to write the end semester examination in that course. Those with less than 45% internal marks shall be awarded FE grade and have to register for the course again. A student should have a minimum of 45% marks in the end semester examination to be eligible for grading in a course. Otherwise he/she will be considered to have failed in the course and an F grade will be awarded. Internal marks given to the students who got 45% marks or more in the end semester examination shall be regulated in line with the end semester examination performance. Internal mark percentage shall not exceed 25%

over the end semester mark %. (For example if the end semester mark % is 45, then the maximum internal mark % is to be 45+25 = 70 %.) In case the student writes the supplementary examination, the mark got in that will be taken into consideration for regulating the internal marks. Those who have more than 45% marks in the end semester examination are awarded the grade based on both internal assessment and end semester examination marks

Credit System

A student earns credits for a course if the grade is P or above. Award of Grades Grading is based on the % marks obtained by the student in a course. The grade card will only give the grades against the courses the student has registered Semester grade card will give the grade for each registered course, Semester Grade Point Average (SGPA) for the semester as well as Cumulative Grade Point Average (CGPA). Grades and Grade Points Grades and Grade Points as per UGC guidelines is to be followed by the University

Total marks scored by the passed candidate	Corresponding Grade allotted	Grade Points
90% and above	O[S]	10
85% and above but less than 90%	A+	9
80% and above but less than 85%	A	8
70% and above but less than 80%	B+	7
60% and above but less than 70%	B	6
50% and above but less than 60%	C	5
45% and above but less than 50%	P	4
Less than 45%	F	0
Failed due to lack of attendance	FA	0
Failed in Semester	FS	0

Examination		
Course Incomplete	I	

6. Participation of the department in the courses offered by other departments

Subjects taken for S1S2		Hours	Credit
Civil Engineering	EC100 Basics of Electronics Engineering	3	3
Computer Science Engineering	EC100 Basics of Electronics Engineering	3	3
Electrical & Electronics Engineering	EC100 Basics of Electronics Engineering	3	3
Mechanical Engineering	EC100 Basics of Electronics Engineering	3	3
Civil Engineering	EC110 Electronics Engineering Workshop	2	1
Computer Science Engineering	EC110 Electronics Engineering Workshop	2	1
Electrical & Electronics Engineering	EC110 Electronics Engineering Workshop	2	1
Mechanical Engineering	EC110 Electronics Engineering Workshop	2	1
Subjects Taken for S3		**Hours**	**Credit**
Computer Science Engineering	CS 203 Switching Theory and Logic Design	5	4
	CS 207 Electronics Devices & Circuits	5	3
	CS 233 Electronics Circuits Lab	3	1
Subjects Taken for S4		**Hours**	**Credit**
Computer Science Engineering	CS 234 Digital Systems Lab	3	1
Subjects Taken for M.Tech			
Electrical & Electronics Engineering	04 EE 6602Embedded controllersfor power converters	4	3

9. Number of teaching posts

Teaching Designation	Sanctioned	Filled
Professors	2	4
Associate Professors	4	2*

Asst.Professors	24	28

*   1 staff on Study leave – Pursuing Ph.D. in CUSAT

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. /Ph.D. /M.Phil. etc,)

Sl. NO	Name	Qualification	Designation	Specialization	No. Of Years of Experience	
					Teaching	**Industry**
1	Prof. Asha Panicker	M.Tech	Professor&HOD	Electronics & Communication	27 years 11 Months	Nil
2	Dr.Karthikeyan Chittayil	PhD	Professor	Industrial Engineering	12 Years	26 Years
3	Dr.Vaibhav A Meshram	PhD	Professor	Nano Electronics	12 Years 9 Months	11 Years
4	Dr. K Nirmal Raja	PhD	Professor	Information & Communication Engineering	7 Years	Nil
5	Mr.Ajit Joseph*	M.Tech,	Associate Professor	Optical Communication	9 Years 8 Months	Nil
6	Mr. Rijo Sebastain* (on leave)	M.Tech	Associate Professor	Embedded System Design	6 Years	Nil
7	Mr.Anu Philip Mathew	M.E	Assistant Professor	Embedded Systems Technology	9 Years 5 Months	Nil
8	Ms. Jyothisree K R	M.E	Assistant Professor	Embedded Systems Design	7 Years 5months	Nil
9	Ms. Sreelakshmi K*	M.Tech,	Assistant Professor	Applied Electronics	8 Years 1 Month	Nil

				Technologies		
10	Mr. Nidhish Antony	M.Tech	Assistant Professor	Solid State Technology	6 Years 6 Months	Nil
11	Ms.Sunu Ann Thomas	M.E	Assistant Professor	Optical Communication	7 Years 7 Months	1 Year
12	Ms. ResmaChandran	M.E	Assistant Professor	Applied Electronics	8 Years 8 Months	3 Months
13	Mr. Reneesh C. Zachariah	M.Tech	Assistant Professor	VLSI Design	6 Years 7 Months	Nil
14	Mr. Rakesh S*	M.E	Assistant Professor	VLSI Design	4 Years 6 Months	1 Year 9 Months
15	Mr. Gopakumar M. G.	M.E	Assistant Professor	VLSI Design	6 Years 5 Months	2 Years
16	Ms. Simi P. Thomas	M.Tech	Assistant Professor	Applied Electronics	5 Years 7 Months	Nil
17	Ms. Aswathi Gopan	M.E	Assistant Professor	VLSI Design	4 Years 5 Months	Nil
18	Mr. Kevin Varghese	M.E	Assistant Professor	Mechatronics	4 Years 11 Months	Nil
19	Mr. Joby John	M.E	Assistant Professor	Applied Electronics	4 Years 6 Months	4 Years
20	Ms. Hima Sara Jacob	M.Tech	Assistant Professor	VLSI & Embedded system	4 Years 2 Months	Nil
21	Ms. Jency Andrews	M.Tech	Assistant Professor	VLSI Design	6 Years 6 Months	Nil
22	Ms. Kriza Baby	M.Tech	Assistant	Communication	4 Years 9	Nil

			Professor	Systems	Months	
23	Mr. Jibu Thomas	M.Tech	Assistant Professor	Wireless Technology	2 Years 1 Month	Nil
24	Ms. Lakshmy Sasidharan Nair	M.Tech	Assistant Professor	Wireless Technology	3 Years 6 Months	Nil
25	Mr. Nikhil Thomas	M.E	Assistant Professor	Communication Engineering	1 Year 7 Months	8 Months
26	Ms. Remya Elizabeth Philip	M.E	Assistant Professor	Communication Systems	3 Years	Nil
27	Ms. Ayona Philipose	M.Tech	Assistant Professor	Communication Engineering	1 Year 7 Months	Nil
28	Ms. Neethan Elizabeth Abraham	M.Tech	Assistant Professor	Communication Engineering	4 Years 2 months	Nil
29	Ms. Krishnapriya CV	M.Tech	Assistant Professor	Power Electronics	1 Year 7 Months	1 Year
30	Mr. Dhanoop K Dhanpal	M.Tech	Assistant Professor	Communication Engineering	9 Months	Nil
31	Ms. Mariya Stephen	M.Tech	Assistant Professor	VLSI & Embedded system	7 Months	Nil
32	Ms. Neethu Thomas	M.Tech	Assistant Professor	Signal Processing	7 Months	Nil
33	Ms. Neethumol Jose	M.Tech	Assistant Professor	Communication Systems	2 Years 7 Months	Nil
34	Ms. Mariya Vincent	M.Tech	Assistant Professor	Communication Engineering	7 Months	Nil

*Doing Ph.D

13. Student-Teacher Ratio (programme wise)

Sl. No	Academic Year	Total Number of Students : UG					Total Number of Faculty in Program	Teacher Student Ratio
		1st Year	2nd Year	3rd year	4th Year	Total		
5	2015-2016	52	44	86	116	298	27	1:11
6	2016-2017	67	48	45	85	245	29	1:9

Sl. No	Academic Year	Total Number of Students : PG			Total Number of Faculty in Program	Teacher Student Ratio
		1st Year	2nd Year	Total		
4	2015-2016	3	8	11	5	1:2
5	2016-2017	4	3	7	4	1:2

15. Qualifications of teaching faculty with DSc/D.Litt /PhD/MPhil/PG.

Sl.NO	Qualification	Faculty Number
1	Ph.D.	3
2	PG	31

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl.No	Project	Year	Amount	Status	Funded By
1	Electrical Lineman Safety	2015	4400	Completed	KSCSTE
2	Smart Speed Governor	2015	2200	Completed	KSCSTE

19. Publications:

- ▪ **a) Publication per faculty**
- ▪ **Number of papers published in peer reviewed journals (national/ International) by faculty and students**
- ▪ **Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCOhost, etc.)**
- ▪ **Monographs**
- ▪ **Chapter in Books**
- ▪ **Books Edited**
- ▪ **Books with ISBN/ISSN numbers with details of publishers**
- ▪ **Citation Index**
- ▪ **SNIP**
- ▪ **SJR**
- ▪ **Impact factor**
- ▪ **h-index**

Year of Publication	Faculty	Title	Conference/Journals
2016	Mariya Vincent	An Improved Three Input Fuzzy Based Relay Station Deployment Scheme for 4G Networks	IJAER
	Mariya Vincent	A Novel Network Planning Scheme for Multi hop Relay Network	International Conference on Electronics & Communication systems
	Ayona Philipose	Investigation on energy efficient sensor node placement in railway systems	Engineering Science and Technology, an international journal, elseiver
	Nidhish Antony	Modified low power & high speed row and column bypass multiplier using FPGA	International journal of science & Engineering Development research
	Binu Manohar	Energy Efficient ALU based on GDI Comparator	IJSDR
	Rakesh S	High Speed 32 Bit MAC using Reversible Vedic Multiplier and Kogge Stone Adder	IJSDR

	Jyothisree K R	Drip Irrigation and monitoring based on raspberry pi and arduino	IJSDR
	Nidhish Antony	Design of modified low power & high speed carry select adder using brent kung adder	International journal of science & Engineering Development research
	Neethan Elizabeth Abraham	Random Area Selective Image Steganography with LSBMR	International Journal of Advanced Research in Computer and Communication Engineering
	Mariya Vincent	A Novel Fuzzy Logic Based Relay Station Selection Scheme for 4G Cellular System	International Conference on Communication & Signal Processing
2015	Aswathy.K .Sarma	HAZE REFINEMENT STRATEGIES	International Journal of Engineering Research and General Science
	Aswathy.K .Sarma	Secure Image Transmission via Secret-Fragment-Visible Mosaic Images by Optimization using Genetic Algorithm	International Journal of Scientific Engineering and Technology research
	Aswathy.K .Sarma	Dual-Band EBG Integrated Monopole Antenna Deploying Fractal Geometry for Wearable Applications	IEEE ANTENNAS AND WIRELESS PROPAGATION LETTERS, VOL. 14, 2015
	Asha Panicker	LTE Advanced: Next Generation Wireless Broadband Technology"-Further study on LTE Uplink	International Journal of Advanced Research in Computer and Communication Engineering
	Asha Panicker	Channel assignment for performance optimization in multi-radio WMNs.	International Journal of Science and Research
	Ajit Joseph	Energy efficient routing protocol for cluster based WSN with non-uniform Node distribution	International Journal Of Scientific & Technology Research,International Journal of Scientific and Engineering Research
	Ajit Joseph	Coherent signal's DOA estimation and its relation ship with SNR and number of samples	International Journal of Science and Research
	Ajit Joseph	A convergent version of maximum SINR algorithm for MIMO interference channel	International Journal of Advanced Research in Computer and Communication Engineering
	Sreeraj K P	Channel assignment for performance optimization in multi-radio WMNs.	International Journal of Science and Research

	Sreeraj K P	NOC with smart arbiter	IJISET - International Journal of Innovative Science, Engineering & Technology
2015	Sreeraj K P	Optimization of cooperative spectrum sensing to minimize the total error rate in cognitive radio networks	International Journal of Advanced Research in Computer and Communication Engineering
	Binu Manohar	Implementation of efficient fused ADD-MULTIPLY OPERATOR USING COMPRESSOR	International Journal Of Advances in EngineeringScience and Technology (IJAEST)
	Binu Manohar	Fused floating point three term adder using Brent-kung Adder	International Journal of Innovative Science, Engineering & Technology(IJISET)
	Binu Manohar	Design and analysis of fast adder circuits in various logics using CNTFET	International Journal Of Advances in EngineeringScience and Technology (IJAEST)
	Anu Philip Mathew	Modified MAC based fir filter using carry select adders	International Journal of Engineering Science and Innovative Technology (IJESIT)
	Anu Philip Mathew	VHDL Implementation of An Area Efficient Algorithm for Turbo Decoders having Wireless Sensor Networking Applications	International Journal of Innovative Science, Engineering & Technology(IJISET)
	Jyothisree K R	AN EFFICIENT DESIGN OF LOW POWER,FAST EL-LIPTIC CURVE SCALAR MULTIPLIER IN ECC USING KARATSUBA MULTIPLIERS	International Journal of Innovative Science, Engineering & Technology(IJISET), International Journal of Advanced Computer Technology(IJACT)
	Reneesh C Zachariah	Lower-Area Lower-delay Data Comparison Circuitry Using Modified BWA Based Architecture	International Journal of Innovative Science, Engineering & Technology(IJISET)
	Reneesh C Zachariah	Application of FIN shaping on silicon and Germanium FINFET	International Journal of Innovative Science, Engineering & Technology(IJISET)
	Jinu Issac Kuruvilla	ARM based smart energy metering with digital anti-stealing techniques	International Advanced Research Journal in Science, Engineering and Technology(IARJSET)

	Jinu Issac Kuruvilla	Self correction with shared spare allocation for digital systems	International Journal of Innovative Science, Engineering & Technology(IJISET)
	Jinu Issac Kuruvilla	Implementation of WG cipher with high security	International Journal of Innovative Science, Engineering & Technology(IJISET)
	Ms.Jency Andrews	A COMPARATIVE STUDY OF CLOCK GATED ETCAM WITH ZTCAM	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY
	Hima Sara Jacob	AN EFFICIENT DESIGN OF LOW POWER,FAST EL-LIPTIC CURVE SCALAR MULTIPLIER IN ECC USING KARATSUBA MULTIPLIERS	International Journal of Innovative Science, Engineering & Technology(IJISET),
	Hima Sara Jacob	Lower-Area Lower-delay Data Comparison Circuitry Using Modified BWA Based Architecture	International Journal of Innovative Science, Engineering & Technology(IJISET)
	Hima Sara Jacob	A New Method for TDM Calculation in Speculative Multipliers	International Journal of Advanced Research in Electronics and communication Engineering(IJARECE)
	Sreeraj K P	FPGA implementation of feature extraction based on histopathalogical image and subsequent classification by support vector machine	IJISET - International Journal of Innovative Science, Engineering & Technology
	Mr. Gopakumar M G	ARM based smart energy metering with digital anti-stealing techniques	IARJSET
	Mr. Gopakumar M G	An Efficient FPGA Implementation Of Feature Extraction Based On Histopathalogical Image and Subsequent Classification By SVM	International Journal of Innovative Science, Engineering & Technology(IJISET),
	Jyothisree K R	Fast Speculative multipliers based on TDM carry save tree	IJISET - International Journal of Innovative Science, Engineering & Technology
	Hima Sara Jacob	Fast Speculative multipliers based on TDM carry save tree	IJISET - International Journal of Innovative Science, Engineering & Technology

Sunu Ann Thomas	Background Suppression for Visual Surveillance Using SOM	Journal of Communication Engineering & Systems
Sunu Ann Thomas	Reduced partial product booth multiplier with an effective error compensation circuit	International journal of Trends in electrical engineering
Simi P Thomas	Reduced partial product booth multiplier with an effective error compensation circuit	International journal of Trends in electrical engineering
Resma Chandran	Reduced partial product booth multiplier with an effective error compensation circuit	International journal of Trends in electrical engineering
Ms. Sunu Ann Thomas	Performance analysis of inter-satellite optical wireless link using multiple TX/RX and CO-OFDM Techniques	International Journal of Scientific and Engineering Research
Ms. Sunu Ann Thomas	Performance Analysis of Dispersion Compensation using FBG and DCF in WDM Systems	International Journal of Advanced Research in Computer and Communication Engineering
Hima Sara Jacob	Low power elliptic curve scalar multiplication using hybrid karatsuba multiplier with less area utilization	IJISET - International Journal of Innovative Science, Engineering & Technology
Jency Andrews	PSD Computation using modified Welch algorithm	The Board of International Journal of Scientific Research Engineering & Technology (IJSRET)
Krishnapriya C V	Bidirestional Buck Boost Cascade Inverter	International Conference on technologicam advancements in power & energy
Ayona Philipose	Performance analysis of an improved energy aware MAC protocol for railway systems	IEEE Conference
Mariya Vincent	A Novel Fuzzy based relay node deployment scheme for multi hop relay network	International conference on emerging trends in engineering,science & technology (ICETEST)

21. Faculty as members in

a) **National committees b) International Committees c)Editorial Boards….**

d) **List of faculty with life time membership in ISTE**

SL.No	Name Of Faculty	Responsibility
2	Prof Asha Panicker	**Life Time Member** of Indian Society For Technical Education (**ISTE**)
3	Dr. K Nirmal Raja	**Reviewer** of **I**nternational **J**ournal on **E**xcellent **R**esearch in **E**ngineering &**S**cience. **Life Time member** of **MISTE, MIET**
4	Mr. Rakesh S	**Life Time Member**of Indian Society For Technical Education (**ISTE**)
		Selected as the **Reviewer** of **I**nternational **J**ournal of **E**ngineering **D**evelopment and **R**esearch
		Selected as the **Reviewer** of **I**nternational **J**ournal for **I**nnovative **R**esearch in **S**cience &**T**echnology
5	Dr. Vaibhav A Meshram	**Life Time member** of **ISTE, SPIE** Member of **IEEE, IEEE Photonic Society**

22. Student projects

a) **Percentage of students who have done in-house projects including interdepartmental/ programme**

b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies**

Batch/Year	a) % of In house Projects	b) % of Projects Outside the Institution
B.Tech (2012-2016)	0	100
M.Tech(2014-2016)	100	0
B.Tech (2013-2017)	47	53
M.Tech(2015-2017)	100	0

23. Awards / Recognitions received by faculty and student

➢ **Awards/Recognitions received by Students for Projects**

Students are encouraged to participate in various Internal and external competitions to

excel in extra and co- curricular activities. Following are the list of students who have proved themselves and won prizes in various events conducted by nearby colleges.

Sl.No	Year	Name of Students	Name Of Project/Events	Venue	Organized By	Award/ Prize
1	2016	Aswin Philip	Webcraft	College of Engineering, Adoor	College of Engineering, Adoor	First
2	2016	Aswin Philip	Quzzy Web	College of Engineering And Management,Punnapra	ATHARVA-16,College of Engineering And Management,Punnapra	First
3	2016	Aswin Philip	Decipher	College of Engineering And Management ,Punnapra	ATHARVA-16,College of Engineering And Management,Punnapra	Second
4	2016	Aswin Philip	Web Designing	College of Engineering, Kidangoor	LUMIERE-16,College of Engineering, Kidangoor	Second
5	2016	Aswin Philip	Web Designing	Universal Engineering College	VAIBHAV-16,Universal Engineering College	Second
6	2016	Amal K Moncy	Circuit Debugging	College of Engineering,Kidangoor	LUMIERE-16,College of Engineering,Kidangoor	First
7	2016	Arjun PrasannaBabu	Circuit Debugging	College of Engineering, Kidangoor	LUMIERE-16,College of Engineering,Kidangoor	First
8	2016	Vishnu Sekhar	Circuit Debugging	Saintgits College of Engineering	SFERICS-16,Saintgits College of Engineering	Second
9	2016	ArunValsalan	Circuit Debugging	Saintgits College of Engineering	SFERICS-16,Saintgits College of Engineering	Second
	2016	Jidhin John	Smart Phone	AmalJyothy	KSCSTE & KTU	Grant of

10		Jithin Jose	Based Electric Line Man Safety	College of Engineering		4400/-
		Jerin J Xavier				
		Mohammed Diab Khan				
11	2016	Asish Mathew Johnson	Smart Speed Governor	AmalJyothy College of Engineering	MalayalaManorama&AmalJyothy College of Engineering	Funded Project
		Ashitha V				
		Aparna Jose				
		Anuja Jacob				
12	2016	Asish Mathew Johnson	Smart Speed Governor	AmalJyothy College of Engineering	KSCSTE & KTU	Grant of 2200/-
		Ashitha V				
		Aparna Jose				
		Anuja Jacob				

24. List of eminent academicians and scientists/ visitors to the department

Sl. No	Resourse Person	Designation	Details	Date Of Visit
1	Prof.Biju K	Member of Executive committee of IEEE KERALA Section	IEEE Membership benefits,student branch operation & awards	29/08/2016
2	Mr.Joseph Samuel	IIT Graduate	Talk on Miscellaneous academic topics	31/08/2016
3	Tom J Mangatt	CEO,Indhulekha Media Network	The Power & Importance Of Reading.	08/09/2016
4	Er.Aravind N Nair	HOC,Keltron	Innovation and project life cycle	8/11/2016

25. Seminars/Conferences/Workshops organized& the source of funding

Sl.No	Seminars/ Conferences/Workshops organized	Date	Source of Funding
1	Tesla 2016 Technology Up gradation & Skill Development Programme for Laboratory Instructors.	22/12/2016	Mangalam Educational trust
2	E- Smart Women empowerment Program	17/12/2016	Mangalam Educational trust

3	ELECTROVAGANZA 2016 (Project Exhibition)	31/09/2016& 1/10/2016	Dept Of ECE/ MLMCE

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B-Tech Electronics and Communication Engineering (2012-16 Batch)	122	114	76	38	46.67%
B-Tech Electronics and Communication Engineering (2013-17 Batch)	100	83	45	38	-
B-Tech Electronics and Communication Engineering (2014-18 Batch)	51	40	19	21	-
B-Tech Electronics and Communication Engineering (2015-19 Batch)	56	51	12	39	-
B-Tech Electronics and Communication Engineering (2016-20 Batch)	74	68	35	33	-
M-Tech VLSI & ES (2011-13 Batch)	21	18	2	16	72.22
M-Tech VLSI & ES (2012-14 Batch)	20	18	3	15	94.5
M-Tech VLSI & ES (2013-15 Batch)	20	18	3	15	88.88
M-Tech Communication Engineering (2013-15Batch)	13	11	2	9	90.9
M-Tech VLSI & ES (2014-16 Batch)	7	6	2	4	83.3
M-Tech Communication Engineering (2014-16Batch)	2	2	0	2	50
M-Tech Communication	2	2	0	2	-

Engineering (2015-17 Batch)					
M-Tech VLSI & ES (2015-17 Batch)	1	1	0	1	-
M-Tech Communication Engineering (2016-18Batch)	2	2	0	2	
M-Tech VLSI & ES (2016-18 Batch)	4	4	0	4	

*M=Male   *F=Female

27. Diversity of Students

Year	Nameofthe Course	%of students fromthe samestate	%ofstudents fromother States	%of students from abroad
2016-2017	B.Tech (ECE)	100%	NIL	NIL
	M.Tech(VLSI& ES)	100%	NIL	NIL
	M.Tech(CE)	100%	NIL	NIL
2015-2016	B.Tech (ECE)	100%	NIL	NIL
	M.Tech(VLSI& ES)	100%	NIL	NIL
	M.Tech(CE)	100%	NIL	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Year	Gate	NET	SSB	IES
2015-2016	5	-	-	-

29. Student progression (last four batches)

Student progression	Against% enrolled

UG to PG	6.25%

Employed(based on eligible students-2016)
  • Campus selection
  • Other than campus recruitment
	76 %
	
	 3%

Employed(based on eligible students-2015)
  • Campus selection
  • Other than campus recruitment
	10 %
	
	 5%

30. Details of Infrastructural facilities

a) List of E-Journals

Sl.No	Title	E-Contents	Access
11	IEEE ASPP Online	169 E- Journals + Back file access since 2005	**http://www.ieee.org** **http://ieeexplore.ieee.org/xplore**

c) Class rooms with ICT facility

Sl. No	Class/ division	Number of Rooms	Actual Area (in Sq. m)	Facility
1	Class Rooms	8	653.8	Projector, Desk, Bench, Black Board, Notice Board, Plat foam, Podium, Fan, Tube Lights
	Tutorial Room	1	85.91	Table, Chair, LCD Projector, Black Board, Notice Board, Podiums
	Seminar Hall	1	151.00	Chair with Writing Pad, LCD Projector, Podium, Chairs
			TOTAL	**890.71 m^2**

d) Laboratories

Sl. No	Name of Lab	Lab Handled	Equipments to Run Experiments	Size of Lab
9	Electronics Workshop	Basic Electronics Workshop	CRO(9),Function Generator(3),Power supply(19),Soldering iron(15), Soldering stand(15),Wire stripper(10),Nipper(10),Desoldering Pump(10),Triplex tool(5), Tweezer(10), Home toolKit(1),Multimeter(6),Bread board(15)	87.30m^2

e) Class Room infrastructure details

Ug/pg	Class/ division	Room no	Actual area (in sq.m)	Utility (exclusive/ shared)
UG	S1/S2 A	M 407	87.30	EXCLUSIVE
	S1/S2 B	M 409	87.30	EXCLUSIVE
	S3	M 410	87.30	EXCLUSIVE
	S5	M 405	87.30	EXCLUSIVE
	S7/S8A	M 101	87.30	EXCLUSIVE
	S7/S8B	M 415	87.30	EXCLUSIVE
	Tutorial Room	N 309	85.91	EXCLUSIVE
	Seminar Hall	Digital Theatre	151.00	SHARED
PG	PG VLSI & Embedded System	M411	65.00	EXCLUSIVE
	PG Communication Engg.	M406	65.00	EXCLUSIVE
			TOTAL	**890.71 m^2**

f) Department Infrastructure

Sl No.	NAME	ROOM NO	ACTUAL AREA (in Sq.m)
1	Staff Room I	M 408	99.50
2	HOD Room	M408	11.00
3	Staff Room II	M 416	77.50
4	Department Library	M 414	33.00
		TOTAL	221 m^2

31. Number of students receiving financial assistance from college, university, government or other agencies

32.

UG Batch

Year	Financial Assistance				
	Management	University	State Govt	Central Govt	Others
2016-2017	40	-	-	-	-

PG Batch: NIL

33. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

Sl.No	Name of Function	Resource Person	Target Audience
7	Green Management & Technology	Mr.Henry Aspeqvist	S3(2015-2019),S1(2016-2020)
8	IEEE Membership benefits,student branch operation & awards	Prof.Biju K	S3(2015-2019),S1(2016-2020)
9	Talk on Miscellaneous academic topics	Mr.Joseph Samuel	S3(2015-2019),S1(2016-2020)
10	The Power & Importance Of Reading	Mr Tom J Mangatt	S3(2015-2019),S1(2016-2020)
11	India in Space	Mr.Joby Mathew George	S3(2015-2019)
12	Innovation and project life cycle	Er.Aravind N Nair	S7 (2013 - 2017)
13	Introduction to Arduino	Mr.Sreejith	S3(2015-2019),S1(2016-2020)

34. Teaching methods adopted to improve student learning

1. Faculties are following power school learning tools like my haiku, google site etc.through this way they can share the study material like course notes, PPT presentation, subject plan, tutorial plan, assignments and other data with the students.

2. Faculties are mentoring students to do online courses through NPTEL local chapter, MLMCE. 50 students are registered for course noc16-hs15 in year September 2016.

35. Participation in Institutional Social Responsibility(ISR)and Extension activities

The Students of 2013-2017 ECE have done fifteen days of social service at "MOTHER THERESA" Special School for mentally handicapped children located atUzhavoor, Kottayam during June-July 2014.

Students of 2014-2018 ECE batch have done fifteen days of social service at "MGM ABHAYA BHAVAN" located atPothenpuram, Pampady during June 2015.

As part of the extension activity the department of ECE conducted SAMBODHYA (Travelling Science fair) during 2014, 2015 and 2016.The department also conducted annual event to empower women named E-SMART 2015 & E-SMART 2016.

EVALUATIVE REPORT OF MECHANICAL DEPARTMENT

9. Number of teaching post

DESIGNATION	SANCTIONED	FILLED
PROFESSORS	4	2
ASSOCIATE PROFESSORS	8	3
ASSISTANT PROFESSORS	28	28

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. Of Years Of Experience	Ph.D Students Guided For The Last Four Years
Dr. Paulose M M	Ph D	Principal	Fluidized Bed	32	No
Dr. Nidhish Mathew Nidhiry	Ph D	HOD, Professor	Production &Industrial	14	No
Rajeev K Mohan	M.TECH	Associate Professor	Welding Engineering	6	No
Aneesh K S	M TECH	Associate Professor	Production &Industrial Engg	9	No
Harikrishnan. A.R	M.TECH	Associate Professor	Industrial Engg: & Management	10	No

Vipin Mathew	M.TECH	Assistant Professor	Industrial Engg: & Management	6	No
Suresh.S	M.E	Assistant Professor	Manufacturing Engg	13	No
Bindu Divakar	ME	Assistant Professor	Manufacturing Engg	11	No
Shaiju Mohan	M.E,MBA	Assistant Professor	CAD	8	No
Subin George Mathew	M.TECH	Assistant Professor	Industrial Engg: & Management	5	No
Abu Thomas Cherian	M.TECH	Assistant Professor	Machine Design	4	No
Prakash T	M.TECH	Assistant Professor	Machine Design	4	No
Hariprasad K S	M.TECH	Assistant Professor	Industrial Engineering And Management	4	No
Arun Jose	M.TECH	Assistant Professor	Industrial Engineering And Management	4	No
Sarath Chandran K G	M.TECH	Assistant Professor	Industrial Engg: & Management	4	No
Jishnu M	MTECH	Assistant Professor	Ic Engines & Turbomachinery	3.5	No

Benphil C Mathew	M.TECH	Assistant Professor	Ic Engines & Turbomachinery	2.5	No
Ajith Kurian Baby	M.TECH	Assistant Professor	Machine Design	3.5	No
Binny Kuriakose	M.TECH	Assistant Professor	Machine Design	3.5	No
Shifa Sulaiman	M.TECH	Assistant Professor	Machine Design	4	No
Vipinraj A R	M.E	Assistant Professor	Heat Power Engineering	6	No
Jacob C Joy	M.TECH	Assistant Professor	Production Engineering	3	No
Albert Mathew	M.E	Assistant Professor	Design	3	No
Sammon Korah	M.TECH	Assistant Professor	Design Engineering	1.8	No
Mahesh S Kumar	M.E	Assistant Professor	Manufacturing	1	No
Anoop A Pillai	M.E	Assistant Professor	Engineering Design	1	No
Manoj Balu	M.TECH	Assistant Professor	Industrial Metallurgy	1.6	No
Leneesh N Gopal	M.TECH	Assistant Professor	Industrial Engineering And Management	7	No
Anoop S R	M.TECH	Assistant Professor	Production Engineering	6	No

Arun Jose Tom	M.TECH	Assistant Professor	Machine Design	6 months	No
Tinu Thomas	M.TECH	Assistant Professor	Industrial Engineering And Management	7 months	No
Arjun M S	M.TECH	Assistant Professor	Energy Management	7 months	No

13. Student -Teacher Ratio (programme wise)

B.Tech in Mechanical Engineering

Year	X	Y	Z	X+Y+Z	N1	STR
2012 -13	70	68	70	208	16	13:1
2013 -14	134	70	68	272	22	12.3:1
2014 -15	127	131	68	326	21	15.5:1
2015-2016	126	127	130	383	32	11.9:1
2016-2017	95	123	122	340	33	10.3:1

where, x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme

z = Number of students in 4th year of the programme

$N1$ = Total number of faculty members in the programme

M.Tech in Industrial Engineering and Management

Year	X	Y	X+Y	N1	STR
2016-2017	7	1	8	6	1.3:1
2015-2016	1	7	8	5	1.6:1

where, x = Number of students in 2nd year of the programme

y = Number of students in first year of the programme

$N1$ = Total number of faculty members in the programme

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Name	Designation	Total Sevice In Mangalam	HQ	Prev. Experience (Yrs.)
Anand K V	Lab Instructor	1 months	B Tech	1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG

SL NO.	FACULTY NAME	QUALIFICATION
1	Dr. M M Paulose	Ph D
2	Dr. Nidhish Mathew Nidhiry	Ph D
3	Rajeev K Mohan	M.TECH
4	Aneesh K S	M TECH
5	Harikrishnan. A.R	M.TECH
6	Vipin Mathew	M.TECH
8	Suresh.S	M.E
9	Bindu Divakar	M E
10	Shaiju Mohan	M.E,MBA
11	Subin George Mathew	M.TECH
12	Abu Thomas Cherian	M.TECH
13	Prakash T	M.TECH
14	Hariprasad K S	M.TECH
15	Arun Jose	M.TECH
16	Sarath Chandran K G	M.TECH
17	Jishnu M	MTECH
18	Benphil C Mathew	M.TECH
19	Ajith Kurian Baby	M.TECH
20	Binny Kuriakose	M.TECH
21	Shifa Sulaiman	M.TECH

22	Vipinraj A R	M.E
23	Jacob C Joy	M.TECH
24	Albert Mathew	M.E
25	Sammon Korah	M.TECH
26	Mahesh S Kumar	M.E
27	Anoop A Pillai	M.E
28	Manoj Balu	M.TECH
29	Leneesh N Gopal	M.TECH
30	Anoop S R	M.TECH
31	Arun Jose Tom	M.TECH
32	Mr. Tinu Thomas	M.TECH
33	Arjun M S	M.TECH

19. Publications:

    (a) Publication per faculty -   0.16

    (b) No. of publications of faculty in conferences and journals: 5

20. Areas of consultancy and income generated

DESIGN OF STACKER FOR KEYS INDUSTRIES, ETTUMANOOR

Income : Rs 2500/-

21. Faculty as members in

    a) National committees : NIL

    b) International Committees: NIL

    c) Editorial Boards:

Faculty Name	Membership Details
Dr. Nidhish Mathew Nidhiri	Member of Emirates association of mechanical and aeronautical engineers. (Review Committee)

22. Student projects:

a) **Percentage of students who have done in-house projects, including inter-departmental/programme**:

Year	% of in- house project
2016	28

23. Awards / Recognitions received by faculty and students :

Sl. No	Name	Batch	Award / Recognition	Year
1	Arun J P	M.TECH IE&M	First Rank In M. G University Degree Examination	2015
2	Asha Susan Thomas	M.TECH IE&M	Second Rank In M. G University Degree Examination	2015

24. List of eminent academicians and scientists / visitors to the department:

Lectures on 'Present Automotive Trends' was delivered by Mr. A.Abhimanew, Deputy General Manager, Kerala Agro Machinery Corporation LTD 19th August 2016.

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
Mechanical Engineering (B.Tech 2016)	122	114	112	2	27
Industrial Engineering & Management (M.TECH 2016)	18	13	11	2	100

29. Student progression

ACADEMIC YEAR 2010-2014

Student progression	Against % enrolled
UG to PG	7.2 %

Employed	%
Campus selection	10
Other than campus recruitment	7
Entrepreneurship/Self-employment	NIL

30. Details of Infrastructural facilities

a) Library

ITEMS	DEPARTMENT LIBRARY
Total No. of Books	550
Reference Books	50
Periodicals/Journals	4
General books	10
Project & Seminar reports	778

d) Description of Class Rooms, Faculty Rooms, Seminar and Conference Halls:

Adequate number of rooms for lectures (core/electives), seminars etc. for the program are available as given in the above table as per AICTE norms.

Room Description	Usage	Shared/ Exclusive	Capacity (in sqm)	Room equipped with

M301	Class room for S1 B / S2 B	Exclusive	77.08	LCD projector, 2 tube lights, 6 fans, green board, 15 four seater benches in good condition, staff table, sufficient air circulation, natural lighting and one exit.
M 302	Class room for S1 A/ S2 A	Exclusive	77.08	LCD projector, 2 tube lights, 4 fans, green board, 12 four seater benches in good condition, staff table, sufficient air circulation, natural lighting and one exit.
M 303	PG 2	Exclusive	31.35	1 tube lights, 2 fans, 3 tables in good condition, 14 chairs, staff table, sufficient air circulation, natural lighting and one exit.
M 305	Faculty Rooms	Exclusive	84.05	3 tube lights, 6 fans, Internet, book rack, 12 staff tables and chairs, one exit. Faculty tables of senior faculty equipped with personal computers (Three numbers), 2 steel almirahs, Intercom phone and one printer are provided for each computer.
	HOD's Desk			1 tube lights, 1 fan, PC with Internet, printer, telephone, book racks, table, chairs and one exit.

M306	Class room for S3 A/ S4 A	Exclusive	84.05	LCD projector, 2 tube lights, 4 fans, green board, and 17 four seater benches in good condition, staff table, sufficient air circulation, natural lighting and one exit.
M 307	Faculty Rooms	Exclusive	67.96	1 tube lights, 2 fans, black board, PC with Internet, telephone, book racks, 2 almirahs, 12 tables, chairs and one exit.
M 308	Conference Hall	Shared	84.72	LCD projector, conference table, Internet, telephone, chairs and Two exits
M 309	Class room for 1st year M.Tech	Exclusive	67.82	LCD projector, 2 tube lights, 2 fans, 8 tables in good condition, 23 chairs, staff table, green board, sufficient air circulation, natural lighting and one exit.
M 310	Class room for 2nd S3 B / S4 B	Exclusive	85.075	LCD projector, 2 tube lights, 4 fans, green board, 16 four seater benches in good condition, staff table, sufficient air circulation, natural lighting and one exit.

M 311	Class room for S5 A/ S6 A	Exclusive	85.075	LCD projector, 4 tube lights, 4 fans, green board, and 16 four seater benches in good condition, staff table, sufficient air circulation, natural lighting and one exit.
M 313	PG Computer Lab	Exclusive	30.08	18 PCs equipped with internet and one Printer
M 314	CAD Lab	Exclusive	77.08	36 PCs equipped with internet, 2 Air conditions and white board.
M 315	Class room for S5 B / S6 B	Exclusive	77.08	LCD projector, 3 tube lights, 4 fans, green board, 17 four seater benches in good condition, staff table, sufficient air circulation, natural lighting and one exit.
M 205	Class room for 2nd year M. Tech / Tutorial 2	Sharing	82.7	LCD Projector, 4 tube lights, 4 fans, white board, 24 chairs and 6 tables in good condition, staff table, sufficient air Circulation, natural lighting and one exit.

e) Teaching aids

Sl. No.	Teaching Aids	Quantity

1	Black boards	In all UG and PG classrooms, tutorial, elective rooms and all laboratories.
2	White Boards	In all PG class rooms
3	LCD Projectors	5 In all UG and PG class rooms
4	PA System	0

31. Details of Students Receiving Financial Assistance

ACADEMIC YEAR	NUMBER OF STUDENTS RECEIVING FINANICIAL ASSISTANCE					
	COLLEGE	UNIVERSITY	GOVERNMENT		OTHER AGENCIES	
			(B.TECH)		BTECH	MTECH
2016 - 2017			SC/ST	OEC		
	8	NIL	4	4	8	0

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

Sl No	Workshop on	Date	Batch
1	RAPID prototyping	26/06/2016	S5 ,S7
2	AutoCAD	13/7/2016 -16/7/2016	S5,S7
3	CRDI engine	7/11/2016-8/11/2016	S5,S7

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Evaluative Report of Department of Management Studies

5. Annual/ semester/choice based credit system (programme wise):

     a. MGU MBA Programme (Semester Wise)

     b. KTU MBA Programme (Trimester Wise)

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

     SAP Certification in Collaboration with Electromech Enterprises, Cochin

     MOU with Waiarki University, New Zealand   for Student Exchange Programmes

9.   Number of teaching posts

	Sanctioned	Filled
Professors	2	1
Associate Professors	3	3
Asst. Professors	11	11

10.   Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr Sibu C Chithran	MBA, M.Phil, PhD	Professor	Marketing & HRM	18 years	5
Mr Siby James	MBA, PhD(Pursuing)	Associate Professor	Marketing & Finance	13 years	Nil
Mr Bose Tom	MA, MBA, M.Phil	Associate Professor	International Business	11 Years	Nil
Mrs Tinta Baby	MBA, MHRM	Associate Professor	HRM	7 years	Nil

Mrs Ann Jose	MBA	Assistant Professor	HRM	5 years	Nil
Ms Reshma Raveendranath	MBA	Assistant Professor	HRM & Finance	2 years	Nil
Mrs Demy Devassy	MCA	Assistant Professor	Information Systems	3 years	Nil
Ms Ashu Prakash	M.Sc	Assistant Professor	Quantitative Methods	2 years	Nil
Ms Malini K	MBA	Assistant Professor	Finance	1 year	Nil
Ms Jeenu Mathew	MBA	Assistant Professor	Finance	4 years	Nil
Mr Anoop T	M.Com, MBA	Assistant Professor	Finance	5 years	Nil
Ms Fathima Shirin Shaji	M.Com	Assistant Professor	Finance	2 Months	Nil
Mrs Manju	LLM	Assistant Professor	Legal	6 Months	Nil
Mr Mathews C J	MBA	Assistant Professor	Marketing	3 years	Nil
Mr Akhil V Mohanan	MBA	Assistant Professor	Marketing	1 Year	Nil

11. List of senior visiting faculty

1. Dr Abraham Chettisserry, Senior Advocate

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Administrative Staffs = 2 (Sanctioned 4)

Technical Staffs = 1 (Sanctioned 2)

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

PhD(1), M.Phil(2), MBA(12), UGC-NET(2), PhD (Pursuing)-2

19. Publications:

* **a) Publication per faculty**

Dr Sibu C Chithran	24 Publications in National Journals
Mr Siby James	3 Publications in National Journals
Mr Bose Tom	3 Publications in National Journals
Mrs Ann Jose	2 Publications in National Journals
Mrs Tinta Baby	1 Publications in National Journals
Ms Reshma	1 Publications in National Journals

* **Number of papers published in peer reviewed journals (national /international) by faculty and students**

Dr Sibu C Chithran	7 Publications in peer reviewed journals

*Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* **Monographs**

* **Chapter in Books**

* **Books Edited**

* **Books with ISBN/ISSN numbers with details of publishers**

* **Citation Index**

* **SNIP**

* **SJR**

∗**Impact factor**

∗**h-index**

21. Faculty as members in

b) **National committees b) International Committees c) Editorial Boards….**

1. Travancore Management Association   -

   2 Member

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

1. Project with Ettumanoor Municipality on 'Waste Disposal Systems' (20%)

   2013-2014 = 10%, 2014- 2015 = 10%

24. List of eminent academicians and scientists / visitors to the department

1. Dr Raju Narayana Swamy IAS
2. Shri C V Jacob, Chairman, Synthite Group
3. Shri V K Mathews, Chairman, IBS Group
4. Shri V A Joseph, Ex. Chairman, South Indian Bank
5. Dr Suresh Paul, Professor, IIM-T

26.   Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
MBA (2016-2017)	116	60	26	34	83%

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
MBA (2016)	58	0	2

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

2 Students (UGC – NET)

29. Student progression

ACADEMIC YEAR 2010-2015

Student progression	Against % enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	3 Persons (0.4%)
Ph.D. to Post-Doctoral	
Employed ➥ Campus selection ➥ Other than campus recruitment	108 (15%)
Entrepreneurship/Self-employment	8

30. Details of Infrastructural facilities

d) Laboratories:

1(Business Computing Lab) – 60 Systems

33. Teaching methods adopted to improve student learning

1. Online and Video based Classes

2. Email & Whatsapp Group Based resource Sharing

35. SWOC analysis of the department and Future plans

Opportunities

✓ Updated Syllabi and Time bound Course Structure from KTU

✓ Closure of Off Campus MBA Programmes of   State Universities

Future Plans

1)   Mahasangram- Management Fest,2017

2)   Convocation -2017