INFORMATION
BULLETIN 2016-17

CEP KOLLAM

COLLEGE OF ENGINEERING PERUMON

(Under the Co-operative Academy of Professional Education, Estd. by Govt. of Kerala)

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Information Bulletin

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VISION

An institution global stature to excel in technical education, research and development for molding engineers to lead competitive professional enviornment.

MISSION

To mould quality engineers by providing them with fundamental knowledge, analytical skills, creativity, innovation, integrity and ethics to suite the needs of society.

To prepare Engineers globally competent in technical and leadership skills to solve increasingly challenging technological problem for the betterment of the community.

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1 Co-operative Academy of Professional Education (CAPE)

The Co-operative Academy of Professional Education (Kerala) was formed to establish Educational Institutions in various professional fields to provide facilities for Education and Training. The Co-operative Academy of Professional Education is promoted by the Co-operation Department of the Government of Kerala and is an autonomous society under Government of Kerala. The Society is registered under the Travancore-Cochin Literary, Scientific and Charitable Societies Act, 1955 on the basis of the Memorandum of Association and the Rules as approved by the Government of Kerala.

The Ex- officio Chairman of the Society
Shri. Pinarayi Vijayan
The Hon'ble Chief Minister of Kerala

The Ex-officio Vice Chairman of the Society
Shri. A.C.Moideen
Hon'ble Minister for Co-operation, Tourism

Chairman of the Board of Governors
Dr. R. Sasikumar
Director, CAPE

The members of the Society includes, amongst others, the Secretary to Government (Co-operation), Director of Technical Education, Director of Medical Education, Registrar of Co-operative Societies, Presidents of Kerala State and District Co-operative Banks, eminent experts in Technical and Medical Education and Industrialists. The governance of the CAPE is vested with a seven member Executive Committee headed by the Hon'ble Minister for Co-operation, Khadi and Village Industries.

The establishment of our first institution was in the year 1999-2000 followed by five Engineering colleges and a Medical college in 2000-2001. The first institution started was College of Engineering, Vadakara(Formerly Co-operative Institute of Technology Vadakara), the others were College of Engineering Perumon, College of Engineering Trikaripur, College of Engineering Thalassery, College of Engineering Kidangoor, Cochin Medical College(Formerly Co-operative Medical College Kochi). These Engineering colleges are affiliated to the Kerala Technological University (KTU). The College of Engineering & Management Punnapra was started

during the academic year 2008 at Punnapra in Alleppey district which is affiliated to Kerala Technological University.

As per the G.O (MS) No.488/2013/H&FWD dated 17-12-2013, the Government of Kerala took over the possession of Cochin Medical College, Kochi and brought it under the control of DME.

Professionally executed, all the Engineering Colleges are fully established with sprawling campuses of over 25 acres, well equipped labs and workshop, well stocked library, highly qualified and experienced faculty, career guidance and placement cell and transport facilities.

The overwhelming public response to its educational mission has inspired CAPE to present to the community its business school, the Institute of Management and Technology (IMT) at Punnapra which is affiliated to Kerala University. The first batch of MBA students were admitted during the academic year 2009-2010. The CAPE finishing school, Kerala Institute of Making the Best(KIMB) also started at Punnapra which is going to be the best finishing school in kerala. A number of projects and activities were implemented during 2010-2011. Sagara Hospital at Punnapra which is envisaged as the Satellite Hospital to the CMC, Kochi was inaugurated during 2010 by the then Honorable Chief Minister of Kerala. College of Engineering Pathanapuram started in the year 2011 and College of Engineering Aranmula in 2014 and College of Engineering Muttathara in Thiruvananthapuram city started in 2016. Future venrures is College of Engineering Wadakkanchery in Thrissur district. The foundation stone ceremony of College of Engineering Muttathara was done by the Hon'ble Chief Minister of Kerala, Shri.Oommen Chandy on 04-12-2013. 25 acres of land has already been allotted by Govt. of Kerala for starting an Engineering College at Wadakkanchery in Thrissur District. Initial work for starting the college is going on.

Excellence is the watchword in all our endeavors and our staff and students strive for attaining it through hard work, perseverance and dedication.

Official Website of CAPE : **www.capekerala.org or www.capekerala.com**

1.1 COLLEGE AT A GLANCE

1.1.1 Introduction

College of Engineering Perumon, Kollam is one of the Government

sponsored self-financing engineering colleges managed by the Co-operative Academy of Professional Education Kerala (CAPE Kerala) Society which was established by the Govt. of Kerala. Started in the academic year 2000-2001, the college now offers the following UG and PG courses in various discipline.

A. Four Year B.Tech UG courses in

1. Electronics and Communication Engineering (120 Seats)
2. Electrical and Electronics Engineering (60 Seats)
3. Computer Science and Engineering (60 Seats)
4. Information Technology (60 Seats)
5. Mechanical Engineering (60 Seats)

B. Two Year M.Tech course in

6. Computer and Information Science (18 seats)

The college is affiliated to the Kerala Technological University (KTU) and is approved by the All India Council for Technical Education (AICTE), Delhi. It is under the administrative control of CAPE Kerala. Prof. (Dr.) F.V. Albin was the first Principal, followed by Prof. (Dr.) K.S.Ramakrishnan and Prof. (Dr.) Shaji Senadhipan. The present Principal is Prof. (Dr.) Z.A. Zoya.

1.1.2. Location

The college is located in a vast area on the banks of Ashtamudi lake with a picturesque and serene ambience place at Perumon, in Panayam Panchayath in Kollam District. The college is about 12 km from the K.S.R.T.C Kollam bus stand and 13 km from the Kollam Railway junction. The nearest airport is Trivandrum international air-port, about 78 km from the college.

1.1.3. Brief History

This college was established on 25 acres of the land donated by the Govt.of Kerala. The foundation stone was laid in 2000 by Sri. E.K.Nayanar, then Chief Minister of Kerala. Initially the college was functioning in temporary buildings at Kundara. Within two years, construction of the buildings was completed and regular work was shifted to the present campus. The former Minister for Co-operation, Sri.M.V.Raghavan inaugurated the college buildings in Feb, 2004. The buildings now have total built up area of about 13500 sqm. About 1400 students and 120 staff are there in the roll now.

1.1.4 TEQIP - Phase II

Technical Education Quality Improvement Programme (TEQIP) was envisaged in 2003 as a long-term programme of about 10-12 years duration

to be implemented in 3 phases for transformation of the Technical Education system.

The first phase of TEQIP commenced in March 2003 and ended in March 2009, covering 127 institutions (in 13 states), in which 5 institutions were from our state. To continue the development activities initiated through TEQIP-I, a sequel project is planned as TEQIP-II. The project duration was for four years.

Our college has been selected for the implementation of the Techinical Education Qulaity Improvement Programme (TEQIP - Phase II), a centrally sponsored scheme under the MHRD, Govt. of India. A grant-in-aid to a maximum of 10 crores will be granted to this institute to implement this programme which spans over 2011-15 for strengthening the institution to improve the quality of the educational outcomes. The grant is born by the central and state Governments in the proportion 3:1

The project will focus on the following objectives :

- Strengthening institutions to produce high quality Engineers for better employability,
- Scaling-up Postgraduate Education and demand - driven Research & Development and Innovation.
- Establishing Centers of Excellence for focused applicable research
- Training of faculty for effective Teaching, and
- Enhancing Institutional and System Management effectiveness.

2. PROSPECTUS

2.1. Mode of Admission and Eligibility Conditions

Out of the total seats available 50% seats are under the state quota and 35% are under the management quota and the remaining 15 % are under the NRI quota. For all the categories of seats the various fees are fixed by the Govt. and for the state quota seats the fees fixed is same as that in Govt. Engineering Colleges / comparable to that in Govt. Engineering Colleges. To the state quota and the man-agement quota the students are admitted by the Commissioner of Entrance Examinations (CEE) based on the rank obtained in the entrance test and observing all reservation norms as applicable to the Govt. Engineering Colleges. In the case of NRI seats the stu-dents are admitted based on the marks obtained in the qualifying examination. This college is the choice of top rank holders in the CEE.

Eligibility for admission is as per the rules and regulations of the

Commissioner of the Entrance Examinations, which are stipulated by the Govt. of Kerala, and as per the course regulations of the Kerala Technological University (KTU). The eligibility criteria are included in section 6.1.

2.2. College Development Council

The general administration of the college is by the Principal subject to the control of the Director, CAPE. The members of the college staff also participate in the general administrative work of the college as per the directions and under the supervision of the Principal. The College Development Council is the supporting body to the Principal in the general administration of the college and is empowered to consider the report on any matter concerning accommodation, courses of instruction, rules of discipline etc. referred to it by the Principal. However, the council shall not interfere in any manner with the general administration of the college, which is invested with the Principal. The College Development Council consists of the Principal as the chairman and the following staff as members.

1. All Heads of the Departments (ECE, EEE, CSE, IT, ME, Applied Science, CE/Projects).
2. Senior-most faculty member next to the Head from the main engineering departments (ECE, EEE, CSE, IT & ME).
3. Staff member in charge of the College Union
4. Convenor of the Students Grievance Redressal Cell.
5. Administrative officer.
6. Secretary, PTA.
7. Representative from the non-teaching staff, other than the office staff.

2.3. Advisory System

A staff member will be assigned to each class of students as their Class Advisor. The Class Advisor will maintain a dossier of personal details of all the students under him/her and will guide the students in all curricular, co-curricular, and extra curricular activities during their entire course.

First year Co-ordinator

Name : Shamnad M. - 9495805914

Class	Name of Class Advisor	Ph. No:
S1S2 CS	Jubi E.	9496555827
S1S2 ECA	Rajesh P.	9388856436
S1S2 ECB	Revathy Nath H.A.	9447318908
S1S2 EE	Saritha M.	9447241548
S1S2 ME	Sony R.	9447865695
S1S2 IT	Remya R.	9495903496

2.4. Academic Software

College uses an Academic Software for recording Academic Activities. The webportal id is www.prnassistant.org. Parents can monitor the academic data of their ward through the login username and password provided for them. The academic data includes attendance, internal marks, assignment marks, university marks etc. Parents shall contact respective class advisors / tutors for getting username and password, and also in case any difficulty in logging in the software. Teachers enter the attendance of students immediately after engaging a period. Also the marks of internal exams, assignments etc. are entered after evaluation, so that parents can view them through their log-in. From this semester onwards attendance, marks etc. of students will be send as SMS to parents. Parents are adviced to contact Class advisors / tutors in case they do not get the SMS properly.

2.5. Students Council

The college has a Students' Union, an elected body from the students with the office bearers in various posts. Its objectives are

- To enable the students in effective delivering of duties, taking responsibilities and observing the rights of citizenship.
- To promote opportunities for the development of character, leadership, efficiency, knowledge and spirit of service among the students.
- To encourage sports, arts and other cultural, educational and recreational activities that are incidental and conducive to the above objectives.
- To work for the general welfare of the student community.

The term of the council is generally for one year from the date from which it assumes office or till the date of declaration of the elections to the council in the subsequent year. The college also has sectional associations in each department.

2.6. Fees B.Tech

S.I. No	Items of Fees	Govt. Quota	Manage-ment Quota	NRI	SC/ST OEC
1	Tuition Fee	35000	65000	100000	35000
2	Admission Fees (one time)	250	250	250	250
3	Establishment Fees	2000	2000	2000	-
4	Students Activity Fund	1000	1000	1000	1000
5	Caution Deposit (one time)	5000	5000	5000	5000
6	KTU Administration Fees	1000	1000	1000	1000
7	Library & Laboratory Fees	2000	2000	2000	-
8	Semester Fee	500	500	500	-
9	Exam Fee (6x200) 6 Papers	1200	1200	1200	-
10	PTA	5500	5500	5500	2500
11	ID Card & Academic Software	400	400	400	400
12	Co-Operative Society	55	55	55	55
13	Palcement Cell	1000	1000	1000	1000

M.Tech

S.I. No	Items of Fees	Govt. Quota	Manage-ment Quota
1	Tuition Fee	45000	55000
2	Admission Fees (one time)	250	250
3	Establishment Fees	2000	2000
4	Students Activity Fund	1000	1000
5	Caution Deposit (one time)	5000	5000
6	KTU Administration Fees	1000	1000
7	Library & Laboratory Fees	2000	2000
8	Semester Fee	500	500
9	Exam Fee (6x200) 6 Papers	1200	1200

10	PTA	5500	5500
11	ID Card & Academic Software	400	400
12	Co-Operative Society	55	5555
13	Palcement Cell	1000	1000

2.7. Discipline, Conduct and Behaviour

1. All students should follow the uniform dress code of the college inside the campus. Dress properly and neatly, befitting to an engineering student.(sec 2.12 for dress code)
2. Behavior of the students, both within and outside the college premises should be decent and befitting to a professional institution.
3. The student should move silently when proceeding from one class without disturbing classes at work.
4. No student shall leave the class before the class is dispersed or without the permission of the teacher-in-charge of the class.
5. Students are prohibited from organizing or attending meetings on the college campus, distributing notices and collecting money for any purpose without the prior permission of the Principal.
6. Any student,
   - who is persistently insubordinate,
   - who is habitually irregular in attendance or inattentive to his work in the class
   - who is repeatedly or willfully mischievous, or obscene in word or act,
   - who is guilty of malpractice at examinations and
   - who indulges in movements which lead to communal ill feelings or enmity will be punished according to the recommendations of the college council.
7. Students should observe strict silence in library and internet lab. They should not make any disturbance to others.
8. Scribbling or etching on drawing boards, desks and writing on the wall are strictly prohibited.
9. Students should not misplace articles, furniture or books in the classrooms, laboratories or library.
10. Under any circumstance, no student or staff or outsider is permitted to enter the classroom while classes are going on, without the permission of the staff member concerned.

11. Any type of ragging, teasing, torturing, or misbehavior to any student is strictly prohibited. Legal actions will be taken against those students who are found guilty of ragging as per the pre-vailing laws and directions of Honourable Courts.

    The code of conduct of students stipulated by the Kerala Technological University is given under the section 6.6.23.

2.8. Anti-Ragging Committee

Definition of Ragging

"Any disorderly conduct whether by words spoken or written or by an act which has effect of teasing, treating or handling with rudeness any other student, indulging in rowdy or indisciplined activities which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in a fresher or a junior student or asking the students to do any act or perform something which such student will not do in the ordinary course and which has the effect of causing or generating a scene of shame or embarrassment so as to adversely affect the physique or psyche of a fresher or junior student."

An anti-ragging committee has been constituted in the college for preventing ragging on the campus, as per the orders of the Hon. Supreme Court vide order Slp(c) Nos-24296-24299/2004 dated 16-5-2007 and the subsequent guide lines issued by the University. The present structure of the committee is as follows.

Principal (Chairman), with the following members:

- All Head of the Departments
- One faculty incharge
- Staff member in charge of Students' Union
- Staff member in charge of the Students' Grievance Redressal Cell
- One Lady representative from the staff
- Other members will be nominated as per the norms.

2.9. Prohibitions

1. Organizational politics in any form is banned on the campus subject to the orders of the Honourable High Court and the University guidelines. Similarly, the following are also banned inside the campus.
2. Smoking,
3. use of alcohol and other intoxicant materials,
4. use of vehicles
5. use of plastics
6. use of mobile phone

2.10. Class Timings

Monday to Thursday:

1st Period	09.10	-	10.10 AM
2nd Period	10.10	-	11.10 AM
3rd Period	11.20	-	12.15 AM
Break			
4th Period	01.05	-	02.00 PM
5th Period	02.00	-	02.55 PM
6th Period	03.05	-	04.05 PM

Friday:

1st Period	09.10	-	10.00 AM
2nd Period	10.00	-	10.50 AM
3rd Period	11.00	-	11.50 AM
4th Period	11.50	-	12.40 PM
Break			
5th Period	02.20	-	03.10 PM
6th Period	03.10	-	04.05 PM

2.11. Scholarships and Stipends

The students belonging to SC/ST/OEC and SEBC category are eligible for fee concession/stipend/lump sum grant etc. as per the norms stipulated by the Govt. of Kerala.

Types of Scholarship

(i) MCM - Minority Cum Merit Scholarship

(ii) Fisherman Scholarship

(iii) Central Sector Scholarship

(iv) Merit Scholarship

(v) Muslim Girls Scholarship

(vi) Fee Waiver Scheme

(vii) Stipend for SC/ST candidate

2.12. Dress Code

All students must wear the uniform and indentity card strictly. It is cream colour shirt and ash colour pants for boys, cream colour top and ash colour bot-tom for girls. In workshop and machines laboratories they should wear dark blue overcoats and closed shoes. Chappals and other fashion footwears are not allowed there.

2.13. Identity Card

An identity card with photograph will be issued to all students. Students should wear the same when they are on the campus and must produce the same for inspection.

3. DEPARTMENTS AND LABORATORIES

3.1. Electronics and Communication Engineering Department

Vision of the Department

To mould high quality promising and creative engineering professionals in the field of electronics and communication for better living and future of the global society.

Mission of the department

1. Rigorous assessment and analysis of the quality and performance of the faculty, students and facilities and their timely rectification measures.

2.Frequent updation of the course contents relavant to the changer, demand and need of the society.

3.Provide every facility and training to equip students to excellent technical, personal and social life to emerge as a real proffessional leader.

Department of Electronics & Communication Engineering, has over the years developed into a full fledged department. For exploring this fast developing engineering field,to the maximum extent possible, this department has taken all measures to make available the best facilities. The various laboratories under this department are listed below.

1. Electronic Circuits and Digital Laboratory
2. Micro Processor and Advanced Micro Processor Laboratory
3. Communication and Microwave Laboratory
4. Digital Signal Processing and Project Laboratory

All the above laboratories are equipped with modern equipments required at the degree level.

Department of Electronics & Communication has conducted National Conference on emerging trends in Electronics and Communication Engineering, from March 22 - 23, 2016

3.2. Electrical and Electronics Engineering Department

Vision of the department

To be the innovative global leader in Technical Education and Research by providing excellent education in Electrical and Electronics Engineering.

Mission of the department

To produce high quality professionals in Electrical and Electronics Engineering who have serious concerns on Engineering fundamendals Technological advancements professional ethics and social value system.

This is a well established department, and ever since its commencement, the students bagged top ranks in all university examinations. In order to train the students about the basic ideas of Electricity and its technological developments, this department facilitates the following laboratories.

1. Basic Electrical Engineering Laboratory
2. Electrical Machines Laboratory
3. Electrical Measurements Laboratory
4. Power Electronics Laboratory
5. Advanced Electrical Engineering Laboratory
6. Project Laboratory

Depatment of Electrical and Electronics has conducted National Conference on Future Technologies in Power, Control and Communication Systems from March 10 - 12, 2016.

3.3. Computer Science and Engineering Department

Vision of the department

To become a global leader in Computer Science Education and Research

Mission of the department

Mission is to provide quality education and research in Computer Science, to create a unique learning environment equiped to face different challenges in industry and to produce graduates with technical skills and leadership abilities to fulfill the needs of society in various fields of Computer Science and Engineering.

This department is all set to keep pace with the latest developments in the field of computer science and engineering. It emphasizes on nurturing the potential of students and above all plays a vital role in carving out software and hardware intellectuals excelling in innova-tion, creativity, and quality. This department is well equipped with the following labs.

1. Programming Laboratory
2. Internet Laboratory
3. Hardware/Networking Laboratory
4. Project Laboratory

Depatment of Computer Science Information Technology has conducted National Conference on Advances in Informatics and Computer Technologies from March 30 - 31, 2016.

3.4. Information Technology Department

Vision of the department

Vision is to emerge as a center of excellence research and education in the field of information technology

Mission of the department

Mission is to impart quality education in Information Technology to mould engineers with competent technical and analytical skills innovative research capabilities, leadership potential and in still in them high standards of integrity, discipline and ethics to work with commitment for the progress of the society

The Department of Information Technology lays emphasis to elicit revolutionary software professionals so as to meet the demands of the fast changing IT field. The laboratories under this department are equipped to train the students in a view to refine their skills as per the current trends. The various laboratories under this department are

1. Systems and Application Laboratory
2. Internet Laboratory
3. Multimedia Laboratory

Depatment of Computer Science and Information Technology has conducted National Conference on Advances in Informatics and Computer Technologies from March 30 - 31, 2016.

3.5. Mechanical Engineering Department

This department provides sound theoretical background as well as good practical exposure to the students. It has well experienced faculty. The B.Tech course in this discipline was started in the year 2011 The following laboratories under this department are

1. Fluid Mechanics Lab
2. Hydraulic Machinery Lab
3. Thermal Engineering Lab
4. Metrology and Measurements Lab
5. HMT Lab
6. CAD- CAM Lab

3.6. Mechanical and Electrical Workshops

In addition to the above department laboratories, the college is having Mechanical and Electrical Workshops to train the students in carpentry, fitting, sheet metal works, welding, foundary, electrical wiring and electronics component handling & soldering practices.

4. OTHER FACILITIES

4.1. Library

Libraries are the backbone of any civilized society and heart of any academic institution .The central library of our college provides all kinds of services to cater to the information needs of the academic community of the college. It is functioning in the administrative block of the college . The carpet area of the college library is about 405.63 sqm. Reading Space is 162.74 sqm It is well equipped, well furnished, computerized and RFID enabled. It operates in three floors . Reference and Periodical sections are housed in ground floor. Stack room, and various sections such as book bank, literature, reports, CD-ROMS and digital library for e-journal access are functioning in the 1st floor. The Central library of College of Engineering Perumon acquires a prominent place among the students and faculty. The Library has a collection of books of nearly 13,000 volumes of 4200 titles and 35 printed journals. It includes a good collection of books and journals in the areas of Electronics, Computer Science, Electrical and Mechanical Engineering and related fields including Science, Mathematics and Management. New titles are added from time to time in order to ensure that students are provided with updated study materials. The library also maintains around 2000 volumes of literature collection includes Malayalam and English books. Reference section includes many valuable reference materials and copies of the most essential general books which can also be borrowed on over night issue basis. Our reference collection also includes dictionaries, encyclopaedias, and study materials for competitive exams such as GATE and IES. The library maintains a book bank collection, only for SC/ST students (3books per student per semester) is functioning in the library. The library is equipped with RFID based library security system for round the clock protection of library books. The library has been automated with an open source library software called KOHA. Books are classified according to Dewey Decimal classification scheme and are catalogued according to Anglo American Cataloguing rules II , with local variation.

4.2. Computer and Internet Facilities

Computer Center provides internet and intranet facilities to all users in the institute. For the network services, centre has the high end computational servers on which accounts are given to students, staff and faculty of the departments. College of Engineering Perumon has an fiber optic network over the whole campus routed and Managed by UTM appliances.

The college computing facilities are also used for conducting various online tests. Online journals like IEEE, Springer etc are available in the Computer Center. The Computer Center is open from 9.00 am to 4.00 pm on all working days and caters the needs of all staffs and students of the college.

The institute has a 24 x 7 Wi-Fi facility in the college campus for the students and faculty members to avail internet connection at any place in the college. It provides students the facilities of e-mail, net surfing, up/down loading of web based applications and helps them in preparing projects & seminars presentations.

Users of the computer centre enjoy vistas of information superhighway through 8 mbps Broadband connectivity provided by BSNL and 100MBPS leased line connectivity provided by National Knowledge Network via rail tel.

4.3 Placement Cell

A placement cell is effectively functioning in this college. Leading multi national companies visit the college every year for recruitments. This cell undertakes various training and personality development programs in a regular fashion. The placement cell publicizes the employment opportunities and makes available information about higher education.

4.3.1. Placement History

Students of this college have been placed in leading multi national companies like

TCS, INFOSYS, WIPRO, CTS, SATYAM, HCL, L&T INFOTECH, SIEMENS, HUAWEI, SYNTEL, CARITOR, CSC INDIA, TATAELXI, NEST, UST, IBS, SUNTEC, EARNEST & YOUNG, SUBEX, ACCENTURE, IBM, QBURST etc.

The following are the placement history:

Year 2004 : 54
Year 2005 : 81
Year 2006 : 82
Year 2007 : 112
Year 2008 : 86
Year 2009 : 91
Year 2010 : 27
Year 2011 : 103
Year 2012 : 50
Year 2013 : 50
Year 2014 : 70
Year 2015 : 54

4.4. Talks, Seminars and Exhibitions

Talks, seminars and exhibitions are conducted regularly by the various department associations, as mentioned in the following section.

4.5. Department Associations

Four associations are functioning in the college under the various departments as below.

4.5.1. EARNEST

The Electronics and Communication Engg. Department Students Association named as EARNEST was formed with the intention of cultivating interest in science and technology among the students. It organizes various programs like technical seminars, paper presentations, personality development programs etc.

The association has conducted various programs right from the beginning of its journey.

For the year2014, the association has conducted various programs such as seminars, technical talks, quiz and so on. There is an immense support for these programs from the faculty side and from the student's part. We were able to bring up various technically and non-technically talented students through our ventures.

We have conducted a seminar on the topic "Advanced Electronic World"

which was conducted on behalf of EARNEST and was run by person from prestigious institutions.

We are hoping to have more and more enrichable program to be got conducted for the upcoming years on the banner of EARNEST

We have conducted a Technical Expo “Open House 2016” on March 22-23, 2016.

4.5.2. ASCI

The Computer Science and Information Technology Department Students Association. It organizes lectures, seminars and technical talks by distinguished personalities from various streams. It also host short term courses, work shops, exhibitions, quizzes, paper presentations, code debugging, gaming and many more. The event “FINESTRA 14” was organized on 12th November 2014 as part of CS/IT association programs. The event was inaugurated by Dr.Z A Zoya Principal CP and it was remarkable by the release of news letter-14 and website hosting.The official URL of the website was www.ascicep.com. Inaugural session was preceeded by debugging and quiz competition.

We have conducted a Technical Expo “ADVIB 2016” on March 30-31, 2016.

4.5.3. DYUTHI

DYUTHI, is a formal association of Electrical and Electronics Engg. Department of CEP, which is very much experimental in all the walks of electrical engg. Dyuthi conducts various organized lectures, seminars,technical talks by eminent personalities, workshops, short tem courses, exhibitions etc. and otherprgrammes which are very much essential for the students to enhance their knowledge and conductsIndustrial visits to various organizations. The last year, activities of Dyuthi includes, conduct of an openhouse programme (Tech Arena - technical exhibition) at our College, release of News Letter 2014 (by Dr.Vijayaraghavan, Prof. IIT Madras), seminar on Energy conservation, by Er. Saidali, KSEB etc. Mind Shock –2013 – Technical quiz, led by Dr. B Premlet, TKM College of Engg. Orientation programme for First Yearsby Prof. Vivekanandan and many more

We have conducted a Technical Expo “VIDHYUTH ’16 ” on March 10-12, 2016.

4.5.4. TRAMS

The association for the department of Mechanical Engineering titled ‘The

Royal Association of Mechanical Students' (TRAMS) was founded on 18th March 2013 by Professor (Dr.) Shaji Senadhipan (former Pricipal CEP).

TRAMS organised Lectures, Seminars and workshops with the aid of college on different aspects mainly the recent development and carrier prospects in mechanical engineers, hence enabling students to realise their true potential as students of engineering. Auto psych 2k14 is an automotive exhibition which is the second part of the auto psych franchise organised by the Royal Association students in association with the kerala motor vehicle department. The event was conducted on 17th, 18th and 19th of October 2014 at Asramam Ground, Kollam.

The expo featured exhibition of vintage cars, super model cars, Vitage bikes and super bikes. The expo had stalls of maruthi suzuki, KTM, KSRTC, Kerala police department and YESS. The event was inaugurated by shri. N K Premachandran M P and the cultural event was inaugurated by shi P.K. Gurudasan MLA with the presence of Kollam Mayor Smt. Prasanna Earnest and Dr. Z A Zoya principal College of Engineering Perumon.

Apart from the various exhibition there were certain cultural events. On 17th October there was the CEP nite conducted by college students and the bikes stunt show by Road Hackers. On the second day there was bike stunt show by Ghost Ryders, the no.1 stunt show in india and on the final day, the highlight event was the proshow by famous playback singer Haricharan. The event concluded on 19th october 2014 at 9.00 pm. The programme coordinator was Mr. Vishnu R, ME7 and the staff coordinator was Mr. Thulaseedharan R, Asst. Professor Mechanical Dept.

4.6. Parent Teacher Association

Parent Teacher Association (PTA) is actively functioning in the college. The objectives of the association are:

- To work for the welfare of the students and the institution.
- To offer constructive suggestions on various issues for the smooth and successful functioning of the college.
- To promote better participation of the parents in the various programs of the college and to establish better liaison with the teacher.
- All parents/guardians of the students on the rolls of the college and staff members are the members of the association. It is compulsory for a parent/

guardian of a student on the rolls of the college to be a member of PTA. The executive committee of the PTA consists of

1. President : Dr. Z. A. Zoya (Principal) 9447150400
2. Vice President : Mr.D.Vijaya Chandran 9846297660
3. Secretary : Mr.Sivathanu.L 9447281862

Executive Members from Parent Side

1. Mr. R. Laxminarayanan 0474-2793514
2. Mr. Satheesan Pillai 9446527767
3. Mr. V.Prasanna Kumar 9895334347
4. Mr. Wilson A.T. 9496409810

Executive Members from Teachers Side

1. Mrs.Bindu Prakash (Assoc. Prof., EEE) 9847831272
2. Mr.Bejoy Abraham (Assoc. Prof., CSE) 9847830442

Non Teaching Member (As per the approval of the General Body)

1. Mr.Sivanandan.G (TM in EEE) 9495122516

The PTA now owns 8 college buses and two contract bus for managing its operation. The PTA plays a decisive role, as a supporting body, for the overall development of the college for ensuring smooth functioning of the college.

4.7. College Buses

At present eight buses, operated by the college PTA for the convenience of students and staff. The first bus operates between Puthoor & College via Pavitreswaram, Cheerangavu, Mukkada. The second bus operate between Kallumthazham & College via Karicode, Keralapuram, Perumpuzha, Elampalloor. Bus no. III operate from Bharanicavu to College via Kadapuzha, Chittumala, Perayam, Mukkada. Bus no. IV runs between Sankara mangalam (Chavara) & College via Santhikulangara, Ramankulangara, Kaval, Collectorate, High School Jn. and College. Bus no. V run between Kottarakkara & College via Neduvathoor, Ezhucone, Arumurikkada. Bus no. VI run between Kottiyam & College via Thattamala, Madan Nada, College Jn, KSRTC Bus Stand, High School Jn. Bus no. VII run between Kannanalloor & College via Ayathil, Chemmamukku, Ashramam, KSRTC Stand. Bus no. VIII run between Parippally & College via Chathannur, Pallimukku, Reserve Camp, High School Jn. The service of college buses

are controlled by a committee which include student members also. Any complaints regarding the bus operation can be reported to the bus committee. Students and staff who are using college buses should remit the bus fee every semester, calculated based on the working days of that semester. A bus pass will be issued based on the remittance of the bus fee for both students & staff and which should be kept with them while travelling by college bus. Rules are over leafed in the bus pass. The students and staff who are using the college bus without bus pass will be punished. The decisions of the Principal will be final in this matter.

4.7.1.Bus Timings

Bus Route - 1 (Puthur to College)

Driver Name :Gangadharan Pillai Mob: 9526385733

Boarding Point	Time	
	To college	From college
Puthur	8.15 AM	5.10 PM
Pavithreswaram	8.20 AM	5.00 PM
Cheerangavu	8.30 AM	4.50 PM
Mukkada	8.45 AM	4.35 PM
College	9.00 AM	4.20 PM

Bus Route -2 (Kallumthazham to College)

Driver Name : Sureshbabu Mob: 9847527253

Boarding Point	Time	
	To college	From college
Kallumthazham	8.00 AM	5.20 PM
Karicode	8.05 AM	5.15 PM
Keralapuram	8.10 AM	5.10 PM
Perumpuzha	8.15 AM	5.05 PM
Elampalloor	8.20 AM	5.00 PM
College	9.00 AM	4.20 PM

Bus Route - 3 (Bharanicavu to College)

Driver Name : Suresh Surendran Mob: 9947341526

Boarding Point	Time	
	To college	From college
Bharanicavu	8.00 AM	5.20 PM
Kadapuzha	8.10 AM	5.10 PM
Chittumala	8.20 AM	5.00 PM
Perayam	8.25 AM	4.55 PM
Mukkada	8.30 AM	4.50 PM
College	9.00 AM	4.20 PM

Bus Route - 4 (Sangaramangalam to College)

Driver Name : Sureshbabu Mob: 9847527253

Boarding Point	Time	
	To college	From college
Sangaramangalam	8.05 AM	5.15 PM
Sakthikulangara	8.15 AM	5.10 PM
Ramankulangara	8.20 AM	5.05 PM
Kaval	8.25 AM	5.00 PM
Collectorate	8.30 AM	4.50 PM
High School Junction	8.35 AM	4.45 PM
College	9.00 AM	4.20 PM

Bus Route - 5 (Kottarakkara to College)

Driver Name : Ayyappan Pillai Mob: 9526271912

Boarding Point	Time	
	To college	From college
KSRTC Stand Kottarakkara	8.00 AM	5.20 PM
Neduvathur	8.05 AM	5.15 PM
Ezhukone	8.10 AM	5.10 PM
Arumurikkada	8.15 AM	5.05 PM
College	9.00 AM	4.20 PM

Bus Route - 6 (Kottiyam to College)

Driver Name : Vijayan V. Mob: 9020445657

Boarding Point	Time	
	To college	From college
Kottiyam	8.05 AM	5.20 PM
Thattamala	8.10 AM	5.15 PM
Madannada	8.15 AM	5.10 PM
College Junction	8.20 AM	5.05 PM
KSRTC Bus stand	8.25 AM	5.00 PM
High School Junction	8.30 AM	4.50 PM
College	9.00 AM	4.20 PM

Bus Route - 7 (Kannanalloor to College)

Driver Name : Vijayan Pillai Mob: 9633020637

Boarding Point	Time	
	To college	From college
Kannanalloor	8.00 AM	5.10 PM
Ayathil	8.15 AM	5.05 PM
Chemmamukku	8.20 AM	5.00 PM
Ashramam	8.25 AM	4.55 PM
KSRTC Stand	8.30 AM	4.50 PM
College	9.00 AM	4.20 PM

Bus Route - 8 (Parippally to College)

Driver Name : Rajendra Babu Mob: 9495067745

Boarding Point	Time	
	To college	From college
Parippally	7.50 AM	5.20 AM
Chathannur	8.00 AM	5.10 PM
Pallimukku	8.15 AM	4.55 PM
Reserve Camp	8.20 AM	4.50 PM
High School Junction	8.25 AM	4.45 PM
College	9.00 AM	4.20 PM

4.8. Centralised Students' Grievance Redressal Cell

A Centralised Confidential Students Grievance Redressal Cell has been constituted to redress the grievances and complaints of the students as per the direction of the Govt. of Kerala. The committee consists of the following members. A womens' forum is functioning within the cell as per the direction of the Govt. of Kerala for taking up issues related to the women separately. Students should represent their grievances and complaints, if any, in writing to the General Convener.

Womens' Forum

The womens' forum will also act as an independent body for co-ordinating various activities related to the overall welfare of the woman.

4.9. Co-operative Society

Co-operative Society, registered as per the Co-op Act, is functioning in the college with an objective to have a common forum for various welfare activities of the whole staff and students of the college. A store is functioning in full swing under the society, which cater the needs of the staff and the students in respect of all academic stationeries. A reprographic center is also functioning well under this society, attached to the store.

Board of Directors of the Co-operative Society

1. Dr. Z.A. Zoya (Principal) - President
2. Mrs. Jaseena. A - Vice President
3. Mr. Venu P. (TM in ECE) - Secretary

The present committee members are Mr. Sudheer V.R., Mrs. Shameena. M and Mr. Afzal A L

4.10.National Service Scheme (NSS)

National Service Scheme (NSS) has emerged as a powerful and dynamic youth movement in the country. The NSS is acting as a catalyst to build up the right way of students leadership in an institution. The college has implemented the NSS. The main aim of the scheme is to provide opportunities to teachers and students for gaining valuable practical experiences of community service.

4.11.Chapters of Professional bodies

4.11.1.Indian Society for Technical Education (ISTE)

Indian Society for Technical Education (ISTE) is a premier national society

for teachers and students of the technical education system. The major objective of the ISTE is to assist and contribute to the production and development of top quality professional engineers and technocrats needed by our nation. This college has institutional membership of this body. A student chapter of ISTE is also functioning well in the college. This chapter is conducting different training programs, seminars, talks, etc. which would enhance the professional knowledge of the students. These programs will aid the students to get equipped with technical excellence, innovation, leadership quality, organizational skills, sharp logic etc and to mould themselves into successful engineers. Mr. Sudheer V.R., Asst. Prof. Dept. of Electronics & Communication Engg. is the staff in charge for ISTE faculty chapter. Mrs. Aseena. A, Asst. Prof. Dept. of Electronics & Communication Engg. is the staff in charge for ISTE student chapter.

4.11.2. IEEE Chapter

The motto of the Institution of Electrical and Electronics Engineers (IEEE), USA is to create an awareness on the budding engineers on the latest technological innovations. The student chapter of IEEE is functioning well in the College.

4.12. College Gymnasium

A healthy body keeps you dynamically fit and energizes you in all your academic and co-curricular activities. A gymnasium is functional inside the campus with adequate facilities.

4.13. Computer Society of India

Computer Society of India (CSI) is the first and largest body of computer professionals in India. CSI is a non-profit organization and its members are committed to the advancement of theory and practice of Computer Engineering and Technology Systems.

The seed for the Computer Society of India (CSI) was first sown in the year 1965 with a handful of IT enthusiasts who were a computer user group and felt the need to organize their activities. They also wanted to share their knowledge and exchange ideas on what they felt was a fast emerging sector. Today the CSI takes pride in being the largest and most professionally managed association of and for IT professionals in India. The purposes of the Society are scientific and educational directed towards the advancement of the theory and practice of computer science & IT.

4.14 COMMITTEES FOR THE ACADEMIC YEAR (2016-17)

SL No	Name of the Committee	Name of Chairman/ Co-ordinator/Convener	Name of Members
1	University Exam Committee	Joshi (ME)	Jesna (EC) Saritha (EE) Ratheesh (CS)
2	Project Committee	Remya R Nair Vinu Vijayan (civil)	Jijo Balakrishnan (EEE) Bijukumar Abhilash R.
3	PTA	Sivathanu.L (ECE) (Secretary)	Bindhu J.S. (HOD,CS) Bindhu Prakash (HOD,EEE) Vinod Kumar (CS)
4	Purchase Committee	Principal	All HODS
5	Placement Cell	Bindhu J.S. (CSE)	Sofia A. (EEE), Praveen(IT) Suneer (ME), Dhanya (ECE)
6	College bus Committee	Syamkumar G. (ME)	Sivathanu L. (ECE), Anoop S (CSE), SujeeshG., Shefeer.B, Suma S., Archa (EC)
7	Canteen Committee	Sivathanu.L (ECE)	Shefeer B, Vinodkumar Sumadevi P.
8	NSS Unit	Rajesh P. (ECE) Smitha (Maths)	Anu Chandran (EC)
9	Hostel Committee	Vishnu Priya (ECE)	Deepa K. Daniel (IT) Dheepa Jacop, Suresh V.L.
10	ISO Committee	Dr.Kamalakannan (ME)	Uma Mohan (Civil) Anjali Sapna (ECE), Ratheesh S. (CSE) Saritha M. (EEE)
11	Alumni Association	Dhanya (EC)	Ajith.A,Surya S.R., Arun C.
12	Sports	Sunilkumar S (Phy.Ed)	Pradeep S R, Prasanth S.R. Vishnulal S.
13	Brochure	Ajish S. (CSE)	Seena R., Suma S., Salu
14	Antiragging Committee	Thulaseedharan R (ME)	Anoop.S (IT), Smitha C.S., Vinodkumar Uma Mohan, Arun C. Pillai

15	College Magazine	Santhosh B.S. (ECE)	Venu.P, Mahadevan, Sajeer
16	Tour Committee	Rajesh P. (ECE)	Rajesh (ME), Divya (EE), Soumya (IT)
17	AICTE Application preparation team	Suneer K.S. (ME)	Seena R. (ECE), Devi Dath (CS), Saritha M. (EEE), Uma Mohan (Civil)
18	Attendance Software committee	Rajesh A.V (EEE)	Shamnad M., Archa (EC) Deepa K. Daniel
19	Arts Committee	Ratheesh (CS)	Bijukumar G, Prasanth S R
20	Staff Advisor	Jijo Balakrishnan (EE)	
21	Housekeeping committee	Remya R Nair (Asst. Eng.)	Anju (EC), Vishnulal, Remya R. (IT) Shafeer.B, Rajesh (ME)
22	Library committee	Suja rani (IT)	Librarians
23	Ethics committee	Arun C. (ECE)	Rajesh A V, Revathy (EC) , Anoop.S, Syamkumar (ME), Devi Dath (CS)
24	Women's forum	Edwina G. Rodrigues (EEE)	Sowmya K.S Smitha (librarian)
25	Accreditation Committee	Vineeth R (ECE)	Faculty from all departments
26	Network Administration & Website updation Committee	Praveen K. Wilson (IT)	Sajeer S., Roshni J. Rajesh A.V., Anju V. Gopal Joshi S.S., Remya, Vinod
27	IIIC Committee	Ajith A. (ECE)	Shamnad M. (ME), Ajish S. Anoop S.
28	First Year Co-Ordinator	Sahmnad M. (ME) Smitha R. (Maths)	
29	Counselling Committee	Jesna (ECE)	Tutors from all departments
30	ISTE	Riju (Maths)	Faculty members from all departments

* The Committee are not final subject to change

- Principal and Administrative Officer will be ex-officio members in all committees/wherever required.

5. HISTORY OF ACADEMIC EXCELLENCE

Right from the first batch itself, the college has been rated high for its academic excellence among the various colleges under the Cochin University of Science & Technology. The various ranks bagged by the students of this college in the B-Tech. examinations are as follows.

Year	Name	Branch	Rank
2004	Anu G.	EEE	I
	Sunila Susan Thomas	EEE	II
	Sreejith S.	EEE	III
	Sudhin Dinesh	CSE	III
	Arun A.	EEE	I
	Nisha	CSE	I
2005	Aneeshya Raveendran	EEE	II
	Solymol K.C.	EEE	III
	Mala J.B.	IT	III
	Dony C.S.	EEE	I
	Arun Babu	EEE	II
	John Samuel	CSE	II
2006	Nadia	IT	II
	Aswathy Raj	EEE	III
	Helen Sherly	IT	III
	Deepa Chandran	ECE	I
2007	Divya Vijay	EEE	I
	Remya S. Nair	IT	III
	Deepa P.S.	CSE	I
2008	Bhagya S.	IT	III
	Lakshmi S.	EEE	III
2009	Rainu Boban	CSE	III
	Aneesh Kumar A.S.	EEE	III
2010	Neomi Nelin Nicholas	IT	III
2011	Anuga G.	IT	II
	Jincy George	EEE	II
	Ajina P John	ECE	III
2012	Anu S. Lal	IT	II
2013	Resmi Chandran	IT	III
2014	Athira K.R.	M.Tech	III

The 2012 leading media of our state has also rated the academic excellence of our college as high based on their surveys.

6. KERALA TECHNOLOGICAL UNIVERSITY ORDINANCE /REGULATIONS/RULES FOR B.TECH/ B.TECH HONOURS

6.1 Admission to Bachelor of Technology / B.Tech. / B.Tech. (Honours)

1. Eligibility for admission to the B.Tech., programme, admission policy and procedure shall be decided from time to time by following the guidelines issued by the Government of Kerala and the Government of India and other statutory body such as AICTE.

2. Subject to Clause 6.1(1), Admission to B.Tech., shall be based on the guidelines given by the State and Central Governments on reservation. Candidates for admission to B.Tech., programme shall have passed the Higher Secondary Examination, Kerala or 12th Standard V.H.S.E., C.B.S.E., I.S.C or any other examination considered equivalent to the above mentioned ones. Other eligibility criteria for admission is currently prescribed by the Government of Kerala through Government orders which is based on the entrance examination conducted by the Commission for Entrance Examinations, Government of Kerala and the marks in the qualifying examination subject to the relaxations allowed for backward classes and other communities as specified from time to time.

3. The Branches of study and number of students admitted are to be based on the approval by the All India Council for Technical Education and the Kerala Technological University.

4. Notwithstanding all that is stated above, the admission policy may be modified from time to time by the University, particularly to confirm to directions from the Government of Kerala and the Government of India.

5. The B.Tech., / B.Tech. (Honours) programme is a credit based programme. The duration of the B. Tech / B. Tech (Honours) programme will normally be four academic years spanning 8 semesters. The maximum duration shall be six academic years spanning 12 semesters.

6.2. Examination

1. At the end of the semester, end semester examination will be conducted in all lecture based courses offered in the semester and will normally be of three hours duration, unless otherwise specified. Supplementary examinations shall be conducted before the commencement of the next semester, for students who are eligible and have registered for them.

2. Students, who have completed a course but could not write the end semester examination for valid reasons like illness or personal exigencies, are allowed to write the supplementary examination or the end semester examination at the next opportunity and earn the credits without having to register for the course again provided they meet other eligibility criteria.

3. The main eligibility criteria for the end semester examination are attendance in the course, internal marks and no pending disciplinary action. The minimum attendance for appearing for the end semester examination is 75% in each course. Further, the internal evaluation marks in the course should be 45% or above. Students who do not meet these eligibility criteria are awarded an FE grade and have to register for the course again.

4. Students who could not write the end semester examination due to health reasons or other exigencies can register for the supplementary examination, with theapproval of the principal provided they have 45% or above marks in the internal evaluations for the course. Candidates who received F grade can also write the supplementary examination. Grades awarded in the supplementary examination will be taken as the end semester grades in these courses.

6.3. Eligibility for Award of Degree

The award of B. Tech. / B. Tech. (Honours) degree shall be based on the recommendation of the Academic Committee and the approval of the Board of Governors and in accordance with the academic regulations, if any, issued for the said purpose by the University.

Award of B. Tech. Degree

A student will be eligible for the award of B. Tech. Degree of the University on satisfying the following requirements.

i) Earned credits for all the core courses and the Project.
ii) Earned the required minimum credits as specified in the curriculum for the branch of study.
iii) No pending disciplinary action.

6.4. Fee charged by the University

Fee charged for the programme shall be decided by the University from time to time and informed to all concerned for compliance.

6.5. Discipline of the student – Action against breach of discipline

Every college shall have a Student's Welfare Committee and a Disciplinary Action Committee, constituted by the Principal of the college. Each college should have a Grievance Redressal and Appeals Committee constituted by the Principal to address the grievances of the students and to consider their appeals on any decisions made by the college.

6.6. Breach of guidelines and unfair practices in Examinations

These are viewed seriously and appropriate actions are to be taken by the colleges as detailed in 6.6.23

6.6.1 Language of Instruction and Examination.

Unless otherwise stated, the language of instruction and examinations shall be English.

6.6.2 Academic Calendar.

The University shall publish in its website the academic calendar for every academic semester indicating the commencement of the semester and beginning of instruction. It will specify the course registration and enrolment dates, the schedule for mandatory internal tests for theory courses, dates by which laboratory/practical evaluations are to be completed, date for finalization of internal marks, last instruction day in the semester, planned schedule of end semester examinations and result declaration as well as approved holidays falling within the semester. Schedules for the supplementary examinations and result declaration dates are to be included in the calendar. Summer course schedule and result declaration have also to be indicated in the calendar.

6.6.3 B. Tech. Programme Structure

i) B. Tech. / B. Tech. (Honours) programme in all branches of study is structured on a credit based system following the semester pattern with continuous evaluation allowing flexibility for students to decide on the duration of programme completion.

ii) The duration for the B. Tech. /B. Tech. (Honours) programme in all branches of study, will normally be 8 semesters.

iii) The maximum duration shall be six academic years spanning 12 semesters.

iv) Each semester shall have 72 instructional days, followed by end semester examinations.

v) A student can opt for B.Tech. (Honours) at the end of the fourth semester.

vi) The curriculum of any branch of the B. Tech. programme is designed to have a minimum of 180 academic credits and 2 additional pass/fail credits, for the award of the degree.

vii) The University follows Credit System and Credits are apportioned among the following knowledge segments.

B.Tech. Programme.

Knowledge Segments	Credits
Basic Sciences	10 [8 Theory+ 2 Labs]
Mathematics	16
Humanities	9
Basic Engineering	29 [25 Theory +4 Labs]
Professional Engineering	89 [80 Theory +9 Labs]
Electives	15
Seminar	2

Comprehensive Viva	2	
Design Project	2	
Project	6	
Total Academic Credits:	**180**	
Student's Activities	2	[Audit-Pass/Fail]
Total credits for B.Tech. Degree	182	

Credits are assigned to courses based on the following general pattern.

One credit for each lecture hour per week for one semester
One credit for each tutorial hour per week for one semester
One credit for each laboratory/ practical session of 2 or 3 hrs, per week for one semester

viii) In a semester normally up to six lecture based courses and three laboratory/ practical courses, carrying a maximum credit of 26, could be offered.

ix) University may allow students to transfer credits they have earned at other Universities and Academic Institutions, as per the guidelines given by the Academic Committee and approved by the Board of Governors.

x) Student Activities Points:
To be an engineer capable of competing globally, in addition to technical knowledge and skills, students should develop excellent soft skills, nurture team work and leadership qualities and have an entrepreneurial and trail blazing outlook. To achieve this, in addition to academics, students are to actively engage in co-curricular and extracurricular activities. For such activities, points are allotted. On getting a minimum of 100 activity points the student passes the course and earns 2 credits which do not count for the CGPA but mandatory for the award of the degree. Listing of these activities and the maximum points that could be earned by engaging in them are given at the end of this document. Additional activities could be included in the list with the approval of the Academic Committee.

6.6.4 Curriculum, List of Courses and Syllabi

i) Every branch of study in the B.Tech., programme will have a curriculum, list of courses, syllabi and course plans approved by the Academic Committee of the University.
ii) Courses are categorized as Core Theory (CT), Core Practice (CP) and Electives (EL).
iii) Each course has a course number. Course number includes the offering department or knowledge segment code and a three digit number. Knowledge segment code is used when a course is offered by any one or more departments with the same course content and syllabus. Details on this are given under Rule, RU-1.

6.6.5 Faculty Advisor/Counsellor

All students shall have faculty advisors whose role will be:-
To guide and help students on academics
To monitor their progress in academics and advise them
To counsel them and hand-hold them in any difficulty

6.6.6 Course Registration and Enrolment

It is mandatory for students to register for the courses they want to attend in a semester. Students admitted freshly to the first semester, are advised to register for all courses listed for the semester. However they do not have to enrol for the semester. All other students are required to register at the end of the semester for the courses they desire to take in the coming semester. They have to enrol for these courses at the beginning of the new semester, based on the previous semester results. This allows them to make changes in the list of courses already registered for. Before enrolment, students should clear all dues including any fees to be paid and should not have any disciplinary issues pending. The dates for registration and enrolment will be given in the academic calendar. Any late registration or enrolment, allowed up to 7 working days from the stipulated date, will attract a late fee.
A student can withdraw from a course or substitute one already registered by another on valid reasons with the approval of the faculty advisor. However this has to be done within seven working days from the commencement of the semester. The maximum number of credits a student can register in a semester is limited to 26

6.6.7 Course Completion and Earning of Credits

Students registered and later enrolled for a course have to attend the course regularly and meet the attendance rules of the university [RU-2] and appear for all the internal evaluation procedures for the completion of the course. Credits for the course are earned only on getting a pass grade in the composite evaluation.

6.6.8 Core courses, Prerequisites and Electives

All courses listed in the curriculum, other than the electives, are core courses. Earning credits in the core courses is mandatory for the B. Tech. degree. For electives, failure to earn credits does not necessarily require repeating the course. Instead another approved elective is permitted as a replacement course by the faculty advisor concerned. For some courses there could be a prerequisite course completion requirement for registration.

6.6.9 Summer Courses

Students who could not earn the required minimum credits at the end

of the second or fourth semester have two options to continue with the studies. They may register again for the courses, when they are offered in the next academic year. However, there is also a provision to run summer courses in failed courses for these students who may register and attend the course and write the final examination. This provision is only for students who have got 45% or more in the internal evaluation for the courses they attended in the regular semester.

Students should have 75% attendance in the summer course to write the examination. For the final grading their internal evaluation marks obtained in the regular semester in which they had undergone the course shall be applicable. Summer courses are to be conducted for a minimum of 20 contact hours for each course. Summer courses are to be offered only at the end of the second and fourth semesters for the courses covered till that semester. They will be conducted either by all colleges or only by some, depending on the number of students registering for them. Details of summer courses planned will be announced by the colleges after the declaration of the even semester results. Final examination for summer courses will be conducted by the University. Based on the availability of faculty and the number of students opting for courses, it will be the prerogative of the colleges to decide on the summer courses to be offered.

Options for the fifth and higher semesters

For higher semesters, i.e., fifth semester onwards, summer courses are not offered. Failed students who have less than 45% marks in internal assessments have to register again for the course in the regular semester in which it is offered and complete the course as per the regulations and appear for the end semester examination. Failed students having 45% marks or more in internal assessments have the option to register again for the course as mentioned above or register only for the end semester examination without attending the course again. A separate registration format will be available for this. This option is available in all semesters.

6.6.10 Contact Courses

If a student has to earn credits only just for one course to qualify for the degree after completing eight semesters of study, the college concerned may offer a contact course on a written request by the student. The contact course is considered as fresh registration and is to be offered by the teacher concerned who shall conduct the internal evaluation procedures and allot the marks as per the regulations. Minimum contact hours for the course shall be 20. The final examination will be conducted by the college and shall be monitored by the external academic auditor. Question paper for the

examination will be given by the Controller of Examination. No grade above C shall be given for a contact course.

6.6.11 Academic Assessment/Evaluation

Academic Evaluation of Courses

University follows a continuous academic evaluation procedure.

Academic evaluation procedure and corresponding weights are as follows:-

a) For theory courses: - 1/3rd weightage for internal evaluation and 2/3rd for end semester examination.

For convenience, the maximum marks for internal evaluation and end semester examination for theory courses are fixed as 50 and 100 respectively.

Scheme of evaluation is as follows.

i) Two internal tests each of 20 marks and of one hour duration. (Internally by the College)
ii) Tutorials/Assignments/Mini Projects carrying 10 marks. (Internally by the College)
iii) End Semester examination carrying 100 marks. (Conducted by the University)

All the above evaluations are mandatory requirements to earn credits. Students who have missed either the first or the second test can register with the consent of the faculty and the Head of the Department (HOD) concerned for a retest which shall be conducted soon after the completion of the second test, but before the end semester examination. The re-test will cover both first and second test course plans. Those who have missed both the tests are not eligible to appear for the end semester examination. However if one misses both tests due to medical reasons or other personal exigencies, based on genuine evidence, a single test of 2 hour duration for 40 marks will be conducted covering the whole syllabus, before the end semester examinations. Decision on this will be taken by the Principal and verified by the external academic auditor.

b) For Laboratory /Practical /Workshop courses
   i) Practical records /Outputs 60 marks (Internally by the College)
   ii) Regular class Viva 10 marks (Internally by the College)

iii) Final written test/quiz 30 marks (Internally by the College)

All the above assessments are mandatory to earn credits. If not, the student has to complete the course/assessments during his free time in consultation with the faculty members. On completion of these, grades will be assigned. In case the Practical /Laboratory/Workshop courses are not completed in the semester, grade I (incomplete) will be awarded against the course and the final grade will

be given only after the completion of the course/assessments.

c) Comprehensive Examination

As students appear for placements from seventh semester onwards, comprehensive examination is to be completed in the sixth semester. This examination will be a written cum oral examination covering broadly all courses so far completed [RU-5].

d) Seminar

Each student has to give a seminar on a professional topic of current interest in consultation with the faculty member in charge of the seminar in the Department. The seminar will be evaluated based on RU-6

e) Design Project

Each student or a group of students has to take up a design project. The project topic could be arrived at in consultation with any faculty member in the department. The Evaluation of the project is to be done in two stages. Two project progress evaluations each carrying 20 marks and a final report evaluation and presentation of the project for 60 marks. The project supervisor and two other faculty members from the same or any other department, nominated by the Head of the Department form the evaluation board.

f) Final Semester Project

Students, either individually or in a small batch not exceeding four, have to do a project approved by their faculty supervisor.

Evaluation scheme is given below:-

i) Two progress assessments 20% by the faculty supervisor/s
ii) Final Project Report 30% by the Assessment Board
iii) Project presentation and Viva 50% by the Assessment Board

If the project work is not completed satisfactorily, the student has to put in more work and appear again for assessment on a specified date, not earlier than one month after the first evaluation. If the student fails in the project, a fresh registration for the project for one semester is mandatory.

The project assessment board shall consist of the following members.

Chairman: Head of the Department

Members: Project supervisor/s of the student
One faculty member from the Department
One faculty member from a sister Department
An external expert, either from an academic/research institute or industry

6.6.12 Eligibility to Continue

A student has to earn a minimum number of credits in a semester to be eligible to register for the new courses offered in the next semester. In odd

semesters if this requirement is not met, the student is to be forewarned and allowed to continue to the next even semester. However at the end of even semesters this requirement will be strictly implemented. Summer courses are offered to those who do not satisfy this norm after the 2nd as well as the 4th semesters. Students who do not meet this requirement are not permitted to register for new courses in the higher semesters. They have to register for the failed courses in normal semesters in which they are offered subject to the limitations imposed by the ordinances and course timetable.

Action plan, for dealing with course arrears in theory courses at the end of each semester to continue with the programme, is given below. Faculty advisors shall monitor advice and support the students in this. Students should be informed about the minimum cumulative credits requirement to register for higher semester courses.

Eligibility Criteria for Registering for Higher Semester Courses

Semester Credits	Allotted Credits	Cumulative	Minimum cumulative credits required to register for courses in higher semesters
First	24	24	Not insisted
Second	23	47	35
Third	24	71	Not insisted
Fourth	23	94	80
Fifth	23	117	Not insisted
Sixth	23	140	126
Seventh	22	162	Not insisted
Eighth	18	180	

6.6.13 Course Committees and Class Committees

These committees are to be in place in each college affiliated to the University.

a) Course Committee

This is for common courses (electives are excluded) offered to students admitted for the B. Tech. programme irrespective of their branch of study. Each of such courses will have a course committee constituted by the Principal of the college.

The chairman of the course committee shall be a senior faculty member not offering the course.

Members:-

i) All teachers offering the course.
ii) Four student representatives nominated by the Principal.

b) Class Committee

Beginning from the third semester, all branches of study will have class committees for every semester constituted by the respective Heads of Departments.
The chairman of the committee shall be a senior faculty member who does not offer any course during that semester.

Members:-

i) All faculty members teaching courses in that semester.
ii) Two student representatives nominated by the head of the Department.

The course committees and class committees shall meet at least thrice in a semester – the first at the beginning of the semester, the second and the third after the first and the second internal tests respectively. Both committees should monitor the conduct of the courses, adherence to the course plan and time schedule, completion of the syllabus, standards of internal tests, evaluation process and difficulties faced by the students and take suitable remedial actions at the appropriate time. At the end of the semester, the committee should meet without student representatives to review the conduct of the course and finalize the internal assessment marks and approve them.

6.6.14 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. A student earns credits for a course if the grade is P or above.

6.6.15 Award of Grades

Grading is based on the % marks obtained by the student in a course, as given in 6.6.16
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).

6.6.16 Grades and Grade Points

Grades and Grade Points as per UGC guidelines is to be followed by the University

Grades		Grade Point (GP)	% of Total Marks obtained in the course
O	(Outstanding)	10	90% and above
A+	(Excellent)	9	85% and above but less than 90%
A	(Very Good)	8	80% and above but less than 85%
B+	(Good)	7	70% and above but less than 80%
B	(Above Average)	6	60% and above but less than 70%
C	(Average)	5	50% and above but less than 60%
P	(Pass)	4	45% and above but less than 50%
F	(Fail)	0	Less than 45%
FE		0	Failed due to eligibility criteria [7-o]
I			Course Incomplete

SGPA and CGPA are calculated based on the above grading norms and are explained at 6.8.1

6.6.17 Academic Auditing

The University shall have a detailed academic auditing procedure in place comprising of an internal academic auditing cell within the colleges and an external academic auditing for each college. The internal academic auditing cell in each college shall oversee and monitor all the academic activities including all internal evaluations and examinations. This cell is to

prepare academic audit statements for each semester at regular intervals. These reports are to be presented to the external academic auditor approved by the University, who will use it as a reference for his independent auditing and for the final report to the University.

Academic auditing shall cover:-

i) Course delivery covering syllabus, adherence to course plan, quality of question papers for internal examinations, internal evaluation, laboratory experiments, practical assignments, mini projects and conduct of practical classes and their evaluation.
ii) Co-curricular and Extra-curricular activities available for students, their organization and the mechanism of monitoring of activities points earned by the students.
iii) Academic functioning of the college encompassing students, faculty and college administration covering punctuality, attendance, discipline, academic environment, academic accountability, academic achievements and benchmarking.

6.6.18 Break of Study

A student may break study for a maximum duration of two semesters, preferably in one academic year, to initiate start-up ventures, product development etc. This is however permitted only on successfully completing the courses listed out in the first four semesters. Request for this with ample evidence to the seriousness of the venture should be forwarded to the college principal for approval. [RU-3]

Break of study on serious health reasons is also permitted with the approval of the college Principal. [RU-3]

All such cases of break of study are to be reported to the University. In both the cases, the maximum duration for completing the B. Tech. programme will still be twelve semesters.

6.6.19 Revaluation and Grade Improvement

There is no provision for revaluation of the end semester answer books or for improving the grade.

However, the student is permitted to check the answer books of the end semester examination after the results are declared. Any discrepancy in evaluation could be brought to the notice of the teacher concerned who will initiate appropriate action on this. The decision of the Controller of Examination shall be final on this.

6.6.20 Grade Cards

Students who have written the end semester examination will be given the grade cards for the registered courses, in every semester by the respective colleges. On earning the required credits for the degree, a consolidated grade sheet for the B. Tech programme will be given by the University.

6.6.21 B. Tech Degree

B.Tech. degree will not have any classifications like distinction or first class.

6.6.22 B. Tech. (Honours)

Accredited departments in institutions, having at least two post graduate programmes, may offer B. Tech. (Honours). It should be noted that students with a CGPA above 8 at the end of the fourth semester and having no credit arrears only are eligible for this option. As only selected institutions may have this provision, students cannot demand this or move later to an institute where this is available. Students have to earn 12 additional credits to get B. Tech (Honours). Furthermore their CGPA at the end of the programme should be 8 or higher. Those who opted for B. Tech (Honours) but unable to earn the required additional credits in 8 semesters or whose final CGPA is less than 8 shall automatically fall back to the B. Tech. programme. However, additional course credits and the grades thus far earned by them will be shown in the grade card but not included for the CGPA.

6.6.23 Academic Discipline and Malpractices in Examinations

Every student is required to observe discipline and decorous behaviour. Any act of indiscipline, misbehaviour and unfair practice in examinations will be referred to the Disciplinary Action Committee (DAC). Malpractices in examinations shall be viewed seriously and any such incident observed or reported by a faculty member or an invigilator associated with the examinations shall be reported to the Principal who in turn shall refer it to DAC. On the basis of the report and evidence available or gathered, DAC shall immediately initiate an enquiry giving the concerned student a chance to explain his/her case. Based on this the committee shall recommend the course of action in line with the guidelines formulated for this by the Controller of Examination of the University and forward it to the Principal for action.

Actions are to be based on the severity of the offence and are to be dealt with, on a course basis. Guidelines on this shall be given by the Controller of Examination which is to be followed by the Disciplinary Action Committee of the college.

The student may appeal to the Grievances and Appeals Committee for a relook on the matter. Based on the committee's report, the Principal shall take a final decision on the matter.

DAC shall be headed by a department head and shall have three other faculty members drawn from different departments as members. In case of malpractices in end semester examinations, the report given by the college DAC and the action taken by the Principal shall be intimated to the Controller of Examination of the University

6.6.24 Student's Welfare Committee

Every college shall have a Student's Welfare Committee, constituted by the Principal of the college. This committee shall have at least three faculty members as members and the chairman shall be a senior faculty member in the rank of a Professor. This committee is entrusted with the task of looking after the welfare of the students by taking appropriate steps with the concurrence of the principal.

6.6.25 Grievances and Appeals Committee

Each college should have a Grievances Redress Committee constituted by the Principal to address the grievances of the students and to consider their appeals on any decisions made by the college. This committee consisting of at least three faculty members and chaired by a senior professor shall look into student's grievances and appeals and give its recommendations to the Principal for action.

6.7 Amendment to Ordinance/ Regulations/Rules

Notwithstanding all that has been stated above, the University has the right to modify any of the above Ordinance/Rules/regulations from time to time.

RULES:

RU-1 Course Code and Course Number

Each course is identified by a course code and a three digit number. The twoletter code refers to the department offering the course or the knowledge segment of the course. The knowledge segment code is used when the course is to be offered by different departments either individually or together but having the same syllabus and course plan.

Course Number: MA 101 - This refers to a course in Mathematics with the course number 101.
Course Number: BE 102 - This refers to a course in Basic Engineering.

Course Number is a three digit number and the first digit refers to the Academic year in which the course is normally offered, i.e. 1, 2, 3, or 4 for the B. Tech. Programme of four year duration. Of the other two digits, the last digit identifies whether the course is offered normally in the odd (odd number), even (even number) or in both the semesters (zero). The middle number could be any digit.

MA 101 is a course in Mathematics offered in the first semester.
EE 344 is a course in Electrical Engineering offered in the sixth semester.
PH 110 is a course in Physics offered both the first and second semesters.
BE 102 is a course in Basic Engineering offered by one or many departments.

These course numbers are to be given in the curriculum and syllabi.

RU-2 Attendance

Attendance is marked for each course. While 75% attendance is mandatory for writing the end semester examination in that course, students are expected to have 100% attendance. However under unavoidable circumstances students are permitted to take leave. Leave is normally sanctioned for any approved activity taken up by students outside the college covering sports and other extracurricular activities. Leave is also permitted on medical grounds or on personal exigencies. Leave of absence for all these is limited to 25% of the academic contact hours for the course.

In case of long illness or major personal tragedies/contingencies the college Principal can relax the minimum attendance requirement to 60%, to write the end semester examination. This is permitted for one or more courses registered in the semester. Principal shall keep all records which led to his decision on attendance, for verification by the Academic Auditor. However this concession is applicable only to any two semesters during the entire programme. In case of prolonged illness, break of study is permitted as per RU-3.

RU-3 Break of Study

A student is permitted to have a break of study.

i) In case of accident or serious illness needing prolonged hospitalization and rest.
ii) In case the student has a bright idea and would like to initiate a start-up venture or develop a new product.
iii) In case of any personal reasons that need a break in study.

For break of study due to illness, student should submit all necessary medical reports together with the recommendation of the

doctor treating him giving definite reasons for break of study and its duration. Before joining back the student should submit the fitness certificate from the doctor who treated him.

Students who want to initiate a start-up venture or a product development, have to submit a project report, clearly indicating the purpose, action plan, technical details, funding details and future plans to the college Principal. The Principal shall evaluate the proposal by constituting an expert team consisting of a technocrat and a bank executive and take an appropriate decision based on the team's recommendation. In the semester system followed by the University, break of study for an academic year is preferred over a semester break.

Students who want a break in study due to personal reasons shall convince the Principal on the genuine need for it by giving authentic evidence for the same.

RU-4 Leave of Absence

Students who want to take leave under RU2 have to submit a leave letter to the teacher conducting the course. This letter is to be forwarded to the Head of the Department with recommendation of the teacher indicating the total leave of absence the student has so far availed. Leave is to be sanctioned by the Head of the Department. For medical leave over three days, medical certificate indicating the need for leave is required. After any medical leave exceeding five instruction days, on rejoining, the student has to produce the fitness certificate given by the doctor.

RU-5 Comprehensive Examination

This examination consists of two parts. Part one a written test and the other an oral one.

The written examination shall be objective type of 1 hour duration and shall have 50 marks and is to be conducted by the concerned department. Chairman of the oral examination board shall be a senior faculty in the department and the members include two other faculty members of the department and an external expert from another academic institute or an industry. Oral examination shall carry 50 marks. Comprehensive examination may be conducted any time during the 6^{th} semester with sufficient notice given to the students.

RU-6 Seminar

Students have to prepare a detailed report on the topic of the seminar and submit it to the teacher concerned. The seminar is to be of 20

minutes duration with another 5 minutes given for questions and answers. All students in the class have to attend the seminar without fail. Evaluation will be based on the report, seminar presentation as well as on the ability of the student to answer the questions put forward. Faculty member in charge of the seminar and another faculty member in the department nominated by the Head of the Department are the evaluators for the seminar. Distribution of marks for the seminar is as follows.

Marks for the report: 30%
Presentation: 40%
Ability to answer questions on the topic: 30%

RU-7 Ragging

Ragging of any nature is a criminal and non-bailable offence. Involvement in ragging shall lead to stringent punishment, including imprisonment as per the law of the land. A student, whose involvement in ragging is established, shall be summarily dismissed from the college. Each student of the Institute, along with his/her parent, is required to give an undertaking in this regard and the same is to be submitted at the time of registration.

6.8 Addendum:-

6.8.1 Calculation of SGPA/CGPA

Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) are calculated as follows.

SGPA = £(Ci×GPi)/£Ci where Ci is the credit assigned for a course and GPi is the grade point for that course. Summation is done for all courses registered by the student in the semester. Here the failed courses are also accounted.

CGPA = £(Ci×GPi)/£Ci where Ci is the credit assigned for a course and GPi is the grade point for that course. Summation is done for all courses registered by the student during all the semesters for which the CGPA is needed. Here the failed courses are also accounted. CGPA of all courses passed may also be given.

CGPA for the B. Tech programme is arrived at by considering all course credits that are needed for the degree and their respective grade points.

6.8.2 Student Activity Points

Activities that a student can engage in and the maximum quantum of points that can be earned from them are listed below.

i) National Level Activities

Code	Name of activity	Max. Activity Points	Minimum Duration
NA1	N S O	70	Two Semesters
NA2	N C C	70	Two Semesters
NA3	N S S	70	Two Semesters

ii) College Level Activities

CA1	Active Member/Office bearer of Professional Societies (Student Chapters)	30/40	Four Semesters
CA2	Elected Office bearer of Student forums	30	Two semesters
CA3	Member/Captain- College Athletic/ Games teams	20/30	Two Semesters
CA3	Executive Member of Student Clubs	20	Two Semesters
CA4	Volunteer for important College functions	20	Two Semesters
CA5	Committee member/ Organizer of Tech Fest/Cultural Fest/ Conference	20/30	Two Semesters
CA6	Placed within top three in Paper presentation/debate/ cultural competitions etc	30	
CA7	Placed within top three in State level Sports/Games/	30	

Additional 20 points are given for CA3/CA7 if the achievement is at the national level.

iii) Entrepreneurship

EA1	Any Creative Project execution	40
EA2	Awards for Projects	60
EA3	Initiation of Start-ups	60
EA4	Attracted Venture Capital	80
EA5	Filed a Patent	80
EA6	Completed Prototype Development	80
iv)	Self Initiatives	
SA1	Attend a National Conference	20
SA2	Attend an Int. National Conference	30

SA3	Published/ got an Award for a Technical paper	30/40
SA4	Organiser of student level Technical Conf/Competition	30
SA5	Foreign language skills	50
SA6	Online courses taken& completed	50

6.9 EXAMINATION FEE

The approved **Fee structure** for both **B.Tech** and **M.Tech** is as follows:

a) Student administration fee: **Rs. 1000/-** the student (one time fee to be collected at the time of admission.

b) Examination fee: **Rs. 500/-** per semester + **Rs. 200/-** per theory paper

c) Late fee : **Rs. 500/-**

7. KERALA TECHNOLOGICAL UNIVERSITY CURRICULAM

7.1 SEMESTER I (Common for all branches)

Slot	Course No.	Subject	L-T-P	Hours	Credits
A	MA101	Calculus	3-1-0	4	4
B	PH100	Engineering Physics	3-1-0	4	4
(1/2)	CY100	Engineering Chemistry	3-1-0	4	4
C	BE100	Engineering Mechanics	3-1-0	4	4
(1/2)	BE110	Engineering Graphics	1-1-3	5	3
D	BE101-0X	Introduction to..... Engineering	2-1-0	3	3
E	BE103	Introduction to Sustainable Engineering	2-0-1	3	3
F	CE100	Basics of Civil Engineering	2-1-0	3	3
(1/4)	ME100	Basics of Mechanical Engineering	2-1-0	3	3
	EE100	Basics of Electrical Engineering	2-1-0	3	3
	EC100	Basics of Electronics Engineering	2-1-0	3	3
S	PH110	Engineering Physics Lab	0-0-2	2	1
(1/2)	CY110	Engineering Chemistry Lab	0-0-2	2	1
T	CE110/	Basic Engineering Workshops	0-0-2	2	1
(2/4)	ME110/ EE110/	(CS110 for CS and related branches and CH110 for CH and related	+ 0-0-2	2	1

	EC110/ CS110/ CH110	branches only)			
U		U100 Language lab/ CAD Practice/ Bridge courses/ Micro Projects etc	0-0-(2/3)	(2/3)	
				30	**24/23**
V		V100 Entrepreneurship/TBI/NCC/ NSS/ Physical Edn. etc	0-0-2	2	Activity points

Notes:

1. Basic Engineering course of the parent branch included as Introduction to _____ Engineering. (3 credits)

List of Courses offered under BE 101-0X and Branches associated with each course

1. **BE101-01 Introduction to Civil Engineering**

   Civil Engineering

2. **BE101-02 Introduction to Mechanical Engineering Sciences**

   Aeronautical Engineering, Automobile Engineering, Food Technology, Industrial Engineering, Mechanical Engineering, Mechanical Engineering (Automobile), Mechanical Engineering (Production), Mechatronics, Metallurgy, Naval Architecture & Ship Building, Production Engineering.

3. **BE101-03 Introduction to Electrical Engineering**

   Electrical & Electronics Engineering

4. **BE101-04 Introduction to Electronics Engineering**

   Applied Electronics & Instrumentation Engineering, Biomedical Engineering, Electronics & Biomedical Engineering, Electronics, Electronics & Communication Engineering, Electronics & Communication Engineering, Electronic & Instrumentation Engineering, Instrumentation & Control Engineering.

5. **BE101-05 Introduction to Computing and Problem Solving**

   Computer Science & Engineering, Information Technology.

6. **BE101-06 Introduction to Chemical Engineering**

   Biotechnology/Biotechnology & Biochemical Engineering, Chemical Engineering.

2. Institutions can recommend **one of four** other Basic Engineering courses offered during this semester for every branch. However, the basic course selected should exclude the one corresponding to their branch of specialization. eg. Student who took Introduction to Civil Engineering should not take Basics of

Civil Engineering; student who took Introduction to Electrical Engineering should not take Basics of Electrical Engineering

3. The six basic engineering workshops will be connected with the Introductory or Basics of Engineering courses offered. The students should attend **two** workshops in Semester 1 and **two** in Semester 2.
For example, students opting *Introduction to Civil Engineering* or Basics of Civil Engineering should attend the *Civil Engineering Workshop*, students opting *Introduction to Mechanical Engineering* or Basics of Mechanical Engineering should attend the *Mechanical Engineering Workshop*, students opting *Introduction to Chemical Engineering* should attend the *Chemical Engineering Workshop* and students opting *Introduction to Computing and Problem Solving* should attend the *Computer Science Workshop* etc. In addition, the students should attend one more workshop course in Semester 1, corresponding to the other Basic Engineering course they had been assigned by the institution. The workshop courses corresponding to both introductory and basic courses are same. However, the institutions may allot exercises or experiments listed in the syllabus based on the contents of corresponding theory course.

4. Engineering Physics and Engineering Chemistry shall be offered in both semesters. Institutions can advise students belonging to about 50% of the number of branches in the institution to opt for Engineering Physics in S1 and Engineering Chemistry in S2 and vice versa. Students opting for Engineering Physics in S1 should attend Engineering Physics Lab in S1 and students opting for Engineering Chemistry in S1 should opt for Engineering Chemistry Lab in S1.

5. Engineering Mechanics and Engineering Graphics shall be offered in both semesters. Institutions can advise students belonging to about 50% of number of branches in the institution to opt for Engineering Mechanics in Semester 1 and Engineering Graphics in Semester 2 and vice versa.
6. It may be noted that for items 4 and 5 above, all students belonging to a particular branch of study must be assigned the same course during one semester. For example, all students belonging to Electrical and Electronics Engineering in an institution may be assigned Engineering Physics and Engineering Physics lab, while all students in Electronics and Communication Engineering branch may be assigned Engineering Chemistry and Chemistry lab. Likewise, all students in Civil Engineering branch may be assigned Engineering Graphics, while all students in Mechanical Engineering branch may be allotted the Engineering Mechanics in Semester 1 and vice versa in Semester 2.

7. For **Course U**, the Institutions should conduct **diagnostic tests** to identify the training requirements of each student and advise them to attend the suitable programme. The students who excel in all diagnostic tests can be assigned **Micro projects** under the guidance of faculty members. The Classes for which BE110 Engineering Graphics is offered under slot C may be divided into two

batches and these batches shall attend CAD practice lab and Language lab in alternate weeks.

8. **Course V** is for earning activity points outside academic hours, the details are covered in rules and regulations of KTU.

7.2 SEMESTER II (Common for all branches)

Slot	Course No.	Subject	L-T-P	Hours	Credits
A	MA102	Differential Equations	3-1-0	4	4
B	PH100	Engineering Physics	3-1-0	4	4
(1/2)	CY100	Engineering Chemistry	3-1-0	4	4
C	BE100	Engineering Mechanics	3-1-0	4	4
(1/2)	BE110	Engineering Graphics	1-1-3	5	3
D	BE102	Design & Engineering	2-0-2	4	3
	CE 100	Basics of Civil Engineering	2-1-0	3	3
E, F	ME 100	Basics of Mechanical Engineering	2-1-0	3	3
(2/4)	EE 100	Basics of Electrical Engineering	2-1-0	3	3
	EC 100	Basics of Electronics Engineering	2-1-0	3	3
	CS 100	Computer Programming (Only for CSE and IT Branches)	2-1-0	3	3
S	PH110	Engineering Physics Lab	0-0-2	2	1
(1/2)	CY110	Engineering Chemistry Lab	0-0-2	2	1
T	CE110/ ME110/ EC110/EE110	Basic Engineering Workshops	0-0-2 +	2	1
(2/4)	CS120	Computer Programming lab (only for CSE & IT Branches)	0-0-2	2	1
U		U100 Language lab / CAD Practice/ Bridge courses/ Micro Projects etc	0-0-(1/2)	(1/2)	
				30	**24/23**
V		V100 Entrepreneurship/TBI/NCC/ NSS/ Physical Edn. etc	0-0-2	2	Activity points

Note 1: Institutions can assign **two of four** of Basics of Engineering courses not already taken by the student in the previous semester and the corresponding.
Workshop courses in Semester 2. CS 100 Basics of Computer Programming & CS120 Computer Programming Lab are mandatory for Computer Science & Engineering and Information Technology branches. Other branches are not allowed to opt these courses.
Note 2: **For Course U**, the classes for which BE110 Engineering Graphics is offered under slot C may be divided into two batches and these batches shall attend CAD Practice lab & Language Lab in alternate weeks.

7.3 BRANCH: *Computer Science &Engineering*

SEMESTER - 3

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA201	Linear Algebra & Complex Analysis	3-1-0	4	A
CS201	Discrete Computational Structures	3-1-0	4	B
CS203	Switching Theory and Logic Design	3-1-0	4	C
CS205	Data Structures	3-1-0	4	D
CS207	Electronics Devices & Circuits	3-0-0	3	E
HS210/ HS200	Life Skills/Business Economics	2-0-2/ 3-0-0	3	F
CS231	Data Structures Lab	0-0-3	1	S
CS233	Electronics Circuits Lab	0-0-3	1	T

Total Credits =24 Hours: 28/29
Cumulative Credits= 71

SEMESTER - 4

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA202	Probability Distributions, Transforms and Numerical Methods	3-1-0	4	A
CS202	Computer Organization and Architecture	3-1-0	4	B
CS204	Operating Systems	3-1-0	4	C
CS206	Object Oriented Design and Programming	2-1-0	3	D
CS208	Principles of Database Design	2-1-0	3	E
HS200/ HS210	Business Economics/Life Skills	3-0-0/ 2-0-2	3	**F**
CS232	Free and Open Source Software Lab	0-0-3	1	S
CS234	Digital Systems Lab	0-0-3	1	T

Total Credits =23 Hours 28/27
Cumulative Credits= 94

SEMESTER - 5

Course Code	Course Name	L-T-P	Credits	Exam Slot
CS301	Theory of Computation	3-1-0	4	A
CS303	System Software	2-1-0	3	B
CS305	Microprocessors and Microcontrollers	2-1-0	3	C
CS307	Data Communication	3-0-0	3	D
CS309	Graph Theory and Combinatorics	2-0-2	3	E
	Elective 1	3-0-0	3	F
CS341	Design Project	0-1-2	2	S
CS331	System Software Lab	0-0-3	1	T
CS333	Application Software Development Lab	0-0-3	1	U

Total Credits =23 Hours: 29

Cumulative Credits= 117

Elective 1:-
1. CS361 Soft Computing
2. CS363 Signals and Systems
3. CS365 Optimization Techniques
4. CS367 Logic for Computer Science
5. CS369 Digital System Testing & Testable Design

SEMESTER - 6

Course Code	Course Name	L-T-P	Credits	Exam Slot
CS302	Design and Analysis of Algorithms	3-1-0	4	A
CS304	Compiler Design	3-0-0	3	B
CS306	Computer Networks	3-0-0	3	C
CS308	Software Engineering and Project Management	3-0-0	3	D
HS300	Principles of Management	3-0-0	3	E
	Elective 2	3-0-0	3	F
CS332	Microprocessor Lab	0-0-3	1	S
CS334	Network Programming Lab	0-0-3	1	T
CS352	Comprehensive Exam	0-1-1	2	U

Total Credits =23 Hours: 27

Cumulative Credits= 140

Elective 2:-

1. CS362 Computer Vision
2. CS364 Mobile Computing
3. CS366 Natural Language Processing
4. CS368 Web Technologies
5. CS372 High Performance Computing

SEMESTER 7

Course Code	Course Name	L-T-P	Credits	Exam Slot
CS401	Computer Graphics	4-0-0	4	A
CS403	Programming Paradigms	3-0-0	3	B
CS405	Computer System Architecture	3-0-0	3	C
CS407	Distributed Computing	3-0-0	3	D
CS409	Cryptography and Network Security	3-0-0	3	E
	Elective 3	3-0-0	3	F
CS451	Seminar & Project Preliminary	0-1-4	2	S
CS431	Compiler Design Lab	0-0-3	1	T

Total Credits = 22 Hours : 27

Cumulative Credits = 162

Elective 1 :-
1. CS461 Computational Geometry
2. CS463 Digital Image Processing
3. CS465 Bio Informatics
4. CS467 Machine Learning
5. CS469 Computational Complexity

SEMESTER 8

Course Code	Course Name	L-T-P	Credits	Exam Slot
CS402	Data Mining and Ware Housing	3-0-0	3	A
CS404	Embedded Systems	3-0-0	3	B
	Elective 4	3-0-0	3	C
	Elective 5 (Non Departmental)	3-0-0	3	D
CS492	Project		6	

Total Credits = 18 Hours : 30

Cumulative Credits = 180

Elective 1 :-
1. CS462 Fuzzy Set Theory and Applications
2. CS464 Artificial Intelligence
3. CS466 Data Science
4. CS468 Cloud Computing
5. CS472 Principles of Information Security

7.4 BRANCH: *Electrical & Electronics Engineering*

SEMESTER - 3

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA201	Linear Algebra & Complex Analysis	3-1-0	4	A
EE201	Circuits and Networks	3-1-0	4	B
EE203	Analog Electronic Circuits	3-1-0	4	C
EE205	DC Machines and Transformers	3-1-0	4	D
EE207	Computer Programming	2-1-0	3	E
HS200/ HS210	Business Economics/Life Skills	3-0-0/ 2-0-2	3	F
EE231	Electronic Circuits Lab	0-0-3	1	S
EE233	Programming Lab	0-0-3	1	T

Total Credits =24 Hours: 28/29

Cumulative Credits= 71

SEMESTER - 4

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA202	Probability Distributions, Transforms and Numerical Methods	3-1-0	4	A
EE202	Synchronous and Induction Machines	3-1-0	4	B
EE204	Digital Electronics and Logic Design	2-1-0	3	C
EE206	Material Science	3-0-0	3	D
EE208	Measurements and Instrumentation	3-1-0	4	E
HS210/ HS200	Life Skills/Business Economics	2-0-2/ 3-0-0	3	F
EE232	Electrical Machines Lab I	0-0-3	1	S
EE234	Circuits and Measurements Lab	0-0-3	1	T

Total Credits =23 Hours 28/27

Cumulative Credits= 94

SEMESTER - 5

Course Code	Course Name	L-T-P	Credits	Exam Slot
EE301	Power Generation, Transmission and Protection	3-1-0	4	A
EE303	Linear Control Systems	2-1-0	3	B
EE305	Power Electronics	3-0-0	3	C
EE307	Signals and Systems	3-0-0	3	D
EE309	Microprocessor and Embedded Systems	2-1-0	3	E
	Elective 1	3-0-0	3	F
EE341	Design Project	0-1-2	2	S
EE331	Digital Circuits and Embedded Systems Lab	0-0-3	1	T
EE333	Electrical Machines Lab II	0-0-3	1	U

Total Credits =23 Hours: 28

Cumulative Credits= 117

Elective 1:-
1. EE361 Object Oriented Programming
2. EE363 Computer Organization and Architecture
3. EE365 Digital System Design
4. EE367 New and Renewable Energy Systems
5. EE369 High Voltage Engineering

SEMESTER - 6

Course Code	***Course Name***	***L-T-P***	***Credits***	***Exam Slot***
EE302	Electromagnetics	2-1-0	3	A
EE304	Advanced Control Theory	3-1-0	4	B
EE306	Power System Analysis	3-0-0	3	C
EE308	Electric Drives	3-0-0	3	D
HS300	Principles of Management	3-0-0	3	E
	Elective 2	3-0-0	3	F
EE332	Systems and Control Lab	0-0-3	1	S
EE334	Power Electronics & Drives Lab	0-0-3	1	T
EE352	Comprehensive Exam	0-1-1	2	U

Total Credits =23 Hours: 27
Cumulative Credits= 140

Elective 2:-

1. EE362 Data Structures and Algorithms
2. EE364 Switched Mode Power Converters
3. EE366 Illumination Technology
4. EE368 Soft Computing
5. EE372 Biomedical Instrumentation

SEMESTER 7

Course Code	Course Name	L-T-P	Credits	Exam Slot
EE401	Electronic Communation	2-1-0	3	A
EE403	Distributed Generation and Smart Grids	3-0-0	3	B
EE405	Electrical System Design	3-0-0	3	C
EE407	Digital Signal Processing	3-0-0	3	D
EE409	Electrical Machine Design	3-0-0	3	E
	Elective 3	3-0-0	3	F
EE451	Seminar & Project Preliminary	0-1-4	2	S
EE431	Power System Lab	0-0-3	1	T

Total Credits = 22 Hours : 27

Cumulative Credits = 162

Elective 1 :-
1. EE461 Modern Operating Systems
2. EE463 Computer Aided Power Systems Analysis
3. EE465 Powerquality
4. EE467 Nonlinear Control Systems
5. EE469 Electric and Hybrid Vehicles

SEMESTER 8

Course Code	Course Name	L-T-P	Credits	Exam Slot
EE402	Special Electric Machines	3-0-0	3	A
EE404	Industrial Instrumentation & Automation	3-0-0	3	B
	Elective 4	3-0-0	3	C
	Elective 5 (Non Departmental)	3-0-0	3	D
EE492	Project		6	

Total Credits = 18 Hours : 30

Cumulative Credits = 180

Elective 1 :-
1. EE462 Design of Digital Control Systems
2. EE464 FACTS
3. EE466 Digital Image Processing
4. EE468 Computer Networks
5. EE472 Internet of Things
6. EE474 Energy Management and Auditing

7.5 BRANCH: *Electronics & Communication Engineering*

SEMESTER - 3

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA201	Linear Algebra & Complex Analysis	3-1-0	4	A
EC201	Network Theory	3-1-0	4	B
EC203	Solid State Devices	3-1-0	4	C
EC205	Electronic Circuits	3-1-0	4	D
EC207	Logic Circuit Design	3-0-0	3	E
HS200/ HS210	Business Economics/Life Skills	3-0-0/ 2-0-2	3	F
EC231	Electronic Devices & Circuits Lab	0-0-3	1	S
EC223	Electronic Design Automation Lab	0-0-3	1	T

Total Credits =24 Hours: 28/29
Cumulative Credits= 71

SEMESTER - 4

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA204	Probability, Random Processes and Numerical Methods	3-1-0	4	A
EC202	Signals & Systems	3-1-0	4	B
EC204	Analog Integrated Circuits	4-0-0	4	C
EC206	Computer Organization	3-0-0	3	D
EC208	Analog Communication Engineering	3-0-0	3	E
HS210/ HS200	Life Skills/Business Economics	2-0-2/ 3-0-0	3	F
EC232	Analog Integrated Circuits Lab	0-0-3	1	S
EC230	Logic Circuit Design Lab	0-0-3	1	T

Total Credits =23 Hours 27/28
Cumulative Credits= 94

SEMESTER - 5

Course Code	Course Name	L-T-P	Credits	Exam Slot
EC301	Digital Signal Processing	3-1-0	4	A
EC303	Applied Electromagnetic Theory	3-0-0	3	B
EC305	Microprocessors & Microcontrollers	3-0-0	3	C
EC307	Power Electronics & Instrumentation	3-0-0	3	D
HS300	Principles of Management	3-0-0	3	E
	Elective 1	3-0-0	3	F
EC341	Design Project	0-1-2	2	S
EC333	Digital Signal Processing Lab	0-0-3	1	T
EC335	Power Electronics & Instrumentation Lab	0-0-3	1	U

Total Credits =23 Hours: 28

Cumulative Credits= 117

Elective 1:- 1. EC361 Digital System Design

2. EC363 Optimization Techniques

3. EC365 Biomedical Engineering

4. EC360 Soft Computing

SEMESTER - 6

Course Code	Course Name	L-T-P	Credits	Exam Slot
EC302	Digital Communication	4-0-0	4	A
EC304	VLSI	3-0-0	3	B
EC306	Antenna & Wave Propagation	3-0-0	3	C
EC308	Embedded Systems	3-0-0	3	D
EC312	Object Oriented Programming	3-0-0	3	E
	Elective 2	3-0-0	3	F
EC332	Communication Engg Lab (Analog & Digital)	0-0-3	1	S
EC334	Microcontroller Lab	0-0-3	1	T
EC352	Comprehensive Exam	0-1-1	2	U

Total Credits =23 Hours 27

Cumulative Credits= 140

Elective 2:-

1. EC362 Modelling & Simulation of Communication Systems
2. EC364 Computer Vision
3. EC366 Real Time Operating Systems
4. EC368 Robotics
5. EC370 Digital Image Processing

SEMESTER 7

Course Code	Course Name	L-T-P	Credits	Exam Slot
EC401	Information Theory & Coding	4-0-0	4	A
EC403	Microwave & Radar Engineering	3-0-0	3	B
EC405	Optical Communication	3-0-0	3	C
EC407	Computer Communication	3-0-0	3	D
EC409	Control Systems	3-0-0	3	E
	Elective 3	3-0-0	3	F
EC451	Seminar & Project Preliminary	0-1-4	2	S
EC431	Communication System Lab Optical & Microwave)	0-0-3	1	T

Total Credits = 22 Hours : 27

Cumulative Credits = 162

Elective 1 :-
1. EC461 Microwave Devices and Circuit
2. EC463 Speech and Audio Processing
3. EC465 MEMS
4. EC467 Pattern Recognition
5. EC469 Opto Electronics Devices

SEMESTER 8

Course Code	Course Name	L-T-P	Credits	Exam Slot
EC402	Nano Electronics	3-0-0	3	A
EC404	Advanced Communication Systems	3-0-0	3	B
	Elective 4	3-0-0	3	C
	Elective 5 (Non Department)	3-0-0	3	D
EC492	Project		6	

Total Credits = 18 Hours : 30

Cumulative Credits = 180

Elective 1 :-
1. EC462 Mixed Signal Circuit Design
2. EC464 Low Power VLSI Design
3. EC466 Cyber Security
4. EC468 Secure Communication
5. EC472 Integrated Optics & Photonic Systems

7.6 BRANCH: *Information Technology*

SEMESTER - 3

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA201	Linear Algebra & Complex Analysis	3-1-0	4	A
CS201	Discrete Computational Structures	3-1-0	4	B
IT201	Digital System Design	3-1-0	4	C
CS205	Data Structures	3-1-0	4	D
IT203	Data Communication	3-0-0	3	E
HS200/ HS210	Business Economics/Life Skills	3-0-0/ 2-0-2	3	F
CS231	Data Structures Lab	0-0-3	1	S
IT231	Digital Circuits Lab	0-0-3	1	T

Total Credits =24 Hours: 28/29

Cumulative Credits= 71

SEMESTER - 4

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA202	Probability Distributions, Transforms and Numerical Methods	3-1-0	4	A
CS202	Computer Organization and Architecture	3-1-0	4	B
IT202	Algorithm Analysis & Design	4-0-0	4	C
IT204	Object Oriented Techniques	3-0-0	3	D
CS208	Principles of Data Base Design	3-0-0	3	E
HS210/ HS200	Life Skills/Business Economics	2-0-2/ 3-0-0	3	F
IT232	Object Oriented Programming Lab	0-0-3	1	S
IT234	Algorithm Design Lab	0-0-3	1	T

Total Credits =23 Hours 28/27

Cumulative Credits= 94

SEMESTER - 5

Course Code	Course Name	L-T-P	Credits	Exam Slot
IT301	Software Architecture & Design Patterns	3-1-0	4	A
IT303	Theory of Computation	3-0-0	3	B
CS305	Microprocessors & Microcontrollers	2-1-0	3	C
IT305	Operating Systems	3-0-0	3	D
IT307	Computer Networks	3-0-0	3	E
	Elective 1	3-0-0	3	F
IT341	Design Project	0-1-2	2	S
IT331	Microcontroller Lab	0-0-3	1	T
IT333	Database Lab	0-0-3	1	U

Total Credits =23 Hours: 28

Cumulative Credits= 117

Elective 1:-
1. IT361 Graph Theory
2. IT363 UNIX Shell Programming
3. IT365 Computer Architecture & Parallel Processing
4. IT367 Computer Graphics & Multimedia
5. MA361 Random Process and Queuing Theory

SEMESTER - 6

Course Code	Course Name	L-T-P	Credits	Exam Slot
IT302	Internet Technology	4-0-0	4	A
CS304	Compiler Design	2-1-0	3	B
IT304	Information Retrieval	3-0-0	3	C
IT306	Distributed Systems	3-0-0	3	D
HS300	Principles of Management	3-0-0	3	E
	Elective 2	3-0-0	3	F
IT332	Internet Technology Lab	0-0-3	1	S
IT334	Computer Networks Lab	0-0-3	1	T
IT352	Comprehensive Exam	0-1-1	2	U

Total Credits =23 Hours: 27

Cumulative Credits= 140

Elective 2:-

1. IT362 Data Warehousing & Mining
2. IT364 Software Testing & Quality Assurance
3. IT366 Advanced DBMS
4. IT368 Information Theory & Coding
5. MA362 Abstract Algebra and Number Theory

SEMESTER 7

Course Code	Course Name	L-T-P	Credits	Exam Slot
IT401	Embedded System	4-0-0	4	A
IT403	Mobile Computing	3-0-0	3	B
IT405	Internet Working withTCP/IP	3-0-0	3	C
IT407	Knowledge Engineering	3-0-0	3	D
IT409	Web Application Development	3-0-0	3	E
	Elective 3	3-0-0	3	F
IT451	Seminar & Project Preliminary	0-1-4	2	S
IT431	Web Application Lab	0-0-3	1	T

Total Credits = 22 Hours : 27

Cumulative Credits = 162

Elective 1 :-
1. IT461 Software Project Management
2. IT463 Semantic Web
3. IT465 Cyber Forensics
4. IT467 Machine Learning

SEMESTER 8

Course Code	Course Name	L-T-P	Credits	Exam Slot
IT402	Cryptography & Cyber Security	3-0-0	3	A
IT404	Data Analytics	3-0-0	3	B
	Elective 4	3-0-0	3	C
	Elective 5 (Non Departmental)	3-0-0	3	D
IT492	Project		6	

Total Credits = 18 Hours : 30

Cumulative Credits = 180

Elective 1 :-
1. IT462 Internet of Thing
2. CS468 Cloud Computing
3. IT464 Evolutionary Computing
4. IT466 Adhoc & Sensor Networks
5. IT468 Service Oriented Architecture

7.7 BRANCH: *Mechanical Engineering*

SEMESTER - 3

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA201	Linear Algebra & Complex Analysis	3-1-0	4	A
ME201	Mechanics of Solids	3-1-0	4	B
ME203	Mechanics of Fluids	3-1-0	4	C
ME205	Thermodynamics	3-1-0	4	D
ME210	Metallurgy and Materials Engineering	3-0-0	3	E
HS200/ HS210	Business Economics/Life Skills	3-0-0/ 2-0-2	3	F
ME231	Computer Aided Machine Drawing Lab	0-0-3	1	S
CE230	Material Testing Lab	0-0-3	1	T

Total Credits =24 Hours: 28/29

Cumulative Credits= 71

SEMESTER - 4

Course Code	*Course Name*	*L-T-P*	*Credits*	*Exam Slot*
MA202	Probability Distributions, Transforms and Numerical Methods	3-1-0	4	A
ME202	Advanced Mechanics of Solids	3-1-0	4	B
ME204	Thermal Engineering	3-1-0	4	C
ME206	Fluid Machinery	2-1-0	3	D
ME220	Manufacturing Technology	3-0-0	3	E
HS210/ HS200	Life Skills/Business Economics	2-0-2/ 3-0-0	3	F
ME232	Thermal Engineering Lab	0-0-3	1	S
ME230	Fluid Mechanics & Machines Lab	0-0-3	1	T

Total Credits =23 Hours 28/27

Cumulative Credits= 94

SEMESTER - 5

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME301	Mechanics of Machinery	3-1-0	4	A
ME303	Machine Tools & Digital Manufacturing	3-0-0	3	B
ME305	Computer Programming & Numerical Methods	2-0-1	3	C
EE311	Electrical Drives & Control for Automation	3-0-0	3	D
HS300	Principles of Management	3-0-0	3	E
	Elective 1	3-0-0	3	F
ME341	Design Project	0-1-2	2	S
EE335	Electrical and Electronics Lab	0-0-3	1	T
ME331	Manufacturing Technology Lab I	0-0-3	1	U

Total Credits =23 Hours: 28

Cumulative Credits= 117

Elective 1:-
1. ME361 Advanced Fluid Mechanics
2. ME363 Composite Materials and Mechanics
3. ME365 Advanced Metal Casting
4. ME367 Non-Destructive Testing
5. ME369 Tribology
6. ME371 Nuclear Engineering
7. ME373 Human Relations Management

SEMESTER - 6

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME302	Heat & Mass Transfer	3-1-0	4	A
ME304	Dynamics of Machinery	2-1-0	3	B
ME306	Advanced Manufacturing Technology	3-0-0	3	C
ME308	Computer Aided Design and Analysis	3-0-0	3	D
ME312	Metrology and Instrumentation	3-0-0	3	E
	Elective 2	3-0-0	3	F
ME332	Computer Aided Design & Analysis Lab	0-0-3	1	S
ME334	Manufacturing Technology Lab II	0-0-3	1	T
ME352	Comprehensive Exam	0-1-1	2	U

Total Credits =23 Hours 27

Cumulative Credits= 140

Elective 2:-

1. ME362 Control System Engineering
2. ME364 Turbo Machinery
3. ME366 Advanced Metal Joining Technology
4. ME368 Marketing Management
5. ME372 Operations Research
6. ME374 Theory of Vibration
7. ME376 Maintenance Engineering

SEMESTER 7

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME401	Design of Machine Elements I	3-1-0	4	A
ME403	Distributed Generation and Smart Grids	3-0-0	3	B
ME405	Electrical System Design	2-1-0	3	C
ME407	Digital Signal Processing	3-0-0	3	D
ME409	Electrical Machine Design	2-1-0	3	E
	Elective 3	3-0-0	3	F
ME451	Seminar & Project Preliminary	0-1-4	2	S
ME431	Power System Lab	0-0-3	1	T

Total Credits = 22 Hours : 27 Cumulative Credits = 162

Elective 1 :-
1. ME461 Aerospace Engineering
2. ME463 Automobiel Engineering
3. ME465 Industrial Hydraulics
4. IE 306 Supply Chain and Logistics Management
5. ME467 Crygenic Engineering
6. ME469 Finite Element Analysis
7. ME471 Optimization Techniques

SEMESTER 8

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME402	Design of Machine Elements II	3-0-0	3	A
ME404	Industrial Engineering	3-0-0	3	B
	Elective 4	3-0-0	3	C
	Elective 5 (Non Departmental)	3-0-0	3	D
ME492	Project		6	

Total Credits = 18 Hours : 30 Cumulative Credits = 180

Elective 1 :-
1. ME462 Propulsion Engineering
2. ME464 Robotics and Automation
3. ME466 Computational Fluid Dynamics
4. ME468 Nanotechnology
5. ME472 Failure Analysis and Design
6. ME474 Micro and Nano Manufactoring
7. ME476 Material Handling & Facilities Planning

8. KERALA TECHNOLOGICAL UNIVERSITY M. TECH ACADEMIC ORDINANCES, REGULATIONS AND RULES

8.1 Ordinances

O-1 Candidates who have been awarded or qualified for the award of the Bachelor's degree in Engineering / Technology, from an Institution approved by AICTE are eligible for admission to the M. Tech . Programme.

O-2 Candidates who have the Associate Membership of Professional Bodies that are approved by the University and have qualified in GATE shall also be eligible for admission to the M. Tech. programme.

O-3 The reservation policy of the Government of Kerala and the Government of India shall be followed in admission to the M. Tech. programme.

O-4 All admission will be governed by the procedure laid down for this by the Director of Technical Education, Kerala and the Government of Kerala.

O-5 Notwithstanding all that is stated above, the admission policy may be modified from time to time by the University, particularly to confirm to directions from the Government of Kerala and the Government of India.

O-6 The normal duration of the M. Tech programme, including the project work, shall be four semesters.

O-7 The award of the M. Tech. Degree shall be in accordance with the regulations of the University.

8.2 Regulations

RE-1 Admission to the M. Tech. Programme

R.1.1 Candidates qualified in Graduate Aptitude Test in Engineering (GATE) and admitted to the M. Tech. programme are eligible to receive Half Time Teaching Assistantship (HTTA) as per the rules of the All India Council for Technical Education (AICTE)/ Ministry of Human Resource Development (MHRD).

R.1.2 Sponsored candidates from Industries, R&D organizations, National Laboratories as well as Educational Institutions, with a bachelor's degree in engineering are eligible for admission to the M. Tech. programme.

R.1.3 Foreign nationals whose applications are received through Indian Council of Cultural Relations, Government of India are also eligible for admission to the M. Tech. programme.

R.1.4 Announcements for M. Tech. Programmes will be made by the DTE, Government of Kerala.

R.1.5 Selection of candidates for the M. Tech programme will be done centrally or monitored by the Directorate of Technical Education as per the guidelines given on this by the Government of Kerala

R.1.6 The number of candidates to be admitted to each M. Tech stream will be as per the approval on this given by the All India Council for Technical Education..

R.1.7 Admission will be complete only on meeting all the other requirements mentioned in the letter of admission and on payment of the fees.

RE-2 Language of Instruction

Unless otherwise stated, the language of instruction shall be English.

RE-3 Post Graduate Programme Clusters

The University shall identify clusters of colleges offering M. Tech programmes in different streams and allow them to formulate procedures for the smooth conduct of all academic activities associated with the M. Tech programme, in line with the regulations of the University. These clusters shall have academic autonomy, regulated by a Cluster Post Graduate Board [CPGB] consisting of all the principals of the colleges in the cluster. The Chairman of CPGB shall be an eminent academician nominated by the Vice Chancellor. The CPGB will be responsible for allacademic matters including the curriculum, syllabi, course plans, internal evaluations, end semester examinations, grading as well as declaration of results for all streams of M. Tech.programme offered by the colleges in the cluster. It will also formulate guidelines for addressing malpractices rules for those aspects that are not covered in this document.

RE-4 Academic Calendar

The University shall publish the academic calendar for every academic semester / academic year indicating the commencement of semesters, period of instruction, course registration date(s), enrolment date(s), last dates for enrolment, dates for completing laboratory/practical evaluations, last instruction day in the semester, planned schedule of semester examinations and official holidays in the semester/academic year. The colleges concerned have to publish their academic calendar in line with the University academic calendar indicating other details they propose to conduct in each semester.

RE-5 Specialization Streams in M. Tech. Programme

The M. Tech. programme streams offered by each cluster as well as the eligibility of candidates of different B. Tech. branches or having other qualifications, for each of them shall be approved by the CPGB.

RE-6 M. Tech. Programme Structure

RE-6.1 The M. Tech programme in all streams of specialization will be structured on a credit based system following the semester pattern with continuous evaluation.

RE-6.2 The University permits regular as well as external registration (part time) for those in employment.

RE-6.3 The duration for the M. Tech. programme in all streams of specialization will normally be 4 semesters. The maximum duration is 6 semesters.

RE-6.3.1 Students admitted on external registration have to complete the programme within six semesters. The maximum duration for them will be 7 semesters.

RE-6.3.2 The University permits a regular student to change over to external registration during the programme, under specific circumstances like initiating a start up venture or to take up a job.

RE-6.4 Each semester shall have a minimum of 72 instruction days followed by the end semester examination.

RE-6.5 A common course structure for the M. Tech programmes in all streams of specialization is to be followed and consists of the following.

Core Courses
Elective Courses
Laboratory Courses
Seminar
Project

RE-6.6 Every stream of specialisation in the M. Tech. programme will have a curriculum and syllabi for the courses. The curriculum should be so drawn up that the minimum number of credits for successful completion of the M. Tech. programme in any stream of specialization is not less than 68 and not more than 72.

RE-6.7 Credits are assigned as follows, for one semester

1 credit for each lecture hour per week
1 credit for each tutorial hour per week
1 credit for each laboratory/ practical of 2 / 3 hours per week
2 credits for the seminar
2 credits for Mini Project
6 credits for Project in the 3rd Semester
12 credits for Project in the 4th Semester

RE-6.8 A pass is mandatory in all core courses. In case of failure in an elective course, there is the provision to choose another elective listed in the curriculum.

RE-6.9 On their request, CPGB shall examine the academic records and permit candidates with B. Tech (Honours) who have earned credits for any relevant graduate level courses to transfer credits towards the M. Tech. programme. Candidates who received B. Tech (Honours) degree just prior to their M. Tech admission are permitted to transfer up to 9 credits. For those who received the B. Tech (Honours) degree within three years prior to their M. Tech. admission are permitted to transfer up to 6 credits.

RE-6.10The maximum number of lecture based courses and laboratory courses in any semester shall not exceed 5 and 2 respectively. The maximum credits in a semester shall be 22.

RE-6.11 Programme duration

The normal duration of the programme shall be four semesters.

In case of prolonged illness or other personal exigencies, the university may allow a student who has earned credits for at least one semester, to extend the programme up to the maximum duration of six semesters. Students who have earned credits for the courses listed in the first two semesters are permitted to transfer their registration as external candidates if they take up a job. However, they have to complete the programme within six semesters.

RE-7 Course Registration and Enrolment

All students have to register for the courses they desire to attend in a semester. Newly admitted students are advised to register for all courses offered in the first semester. They do not have to enrol for the semester. All other students are required to register at the end of the semester for the they desire to take in the coming semester. Later they have to enrol for these courses in the new

semester based on the results in the previous semester. This allows them to makeminor changes in the list of courses already registered for. Before enrolment, students should clear all dues including any fees to be paid and should not have any disciplinary issues pending. The dates for registration and enrolment will be given in the academic calendar. Any late registration or enrolment, allowed only up to 7 working days from the commencement of the semester, will attract a late registration/enrolment fee as decided by the CPGB.

A student can drop a course or substitute one already registered for by another, for valid reasons with the approval of the faculty advisor. However this has to be done within 7 working days from the commencement of the semester.

The maximum number of credits a student can register for in a semester is limited to 24.

RE-8 Recommended Credit distribution over the semesters

First Semester	: 20 to 23 credits
Second Semester	: 18 to 19 credits
Third Semester	: 14 credits
Fourth Semester	: 12 credits [Project]

RE-9 Academic Assessment/Evaluation

The University follows a continuous academic evaluation procedure.

RE-9.1 Assessment procedure and corresponding weights recommended are as follows:-

For theory courses

i) Two internal tests, each having 20%
ii) Tutorials/Assignments having 10%
iii) End Semester examination having 50%

All the above are mandatory requirements to earn credits.
Students who have missed either the first or the second test can register with the consent of faculty member and the Head of the Department concerned for a re-test which shall be conducted soon after the completion of the second test and before the end semester examination. The re-test will cover both the first and the second test course plans. If a student misses both the scheduled tests, there is no provision for any retests and zero marks will be given for each test. In case of serious illness and where the attendance is above 70% the

Principal may permit the conduct of the tests for a student based on his application and other relevant medical reports with the approval of the CPGB.

For Laboratory /Practical courses	
i) Practical Records /outputs	40%
ii) Regular Class Viva-Voce	20%
iii) Final Test (Objective)	40%

RE-10 Course completion and earning of credits

Students registered and later enrolled for a course have to attend the course regularly and meet the attendance rules of the University and appear for all the internal evaluation procedures for the completion of the course. However, earning of credits is only on completion of the end semester/supplementary examination and on getting a pass grade. Students, who had completed a course but could not write the end semester/supplementary examination for genuine health reasons or personal exigencies, are permitted to write the semester examination at the next opportunity and earn credits without undergoing the course again. Failed candidates having more than 50% marks in their internals can also avail of this option. However, those who are not allowed to appear for the semester examination for want of attendance or for other disciplinar reasons and failed candidates with less than 50% internal marks, have to register and undergo the course again, whenever it is offered, to earn the credits.

RE-11 End Semester and Supplementary Examinations

At the end of the semester, the end semester examination will be conducted in all courses offered in the semester and will be of three hours duration unless otherwise specified. Supplementary examinations are to be conducted for eligible candidates registered for them, before the commencement of the next semester.

RE-11.1 Eligibility to write the End Semester Examination

Eligibility criteria to appear for the semester examination are the attendance requirements in the course and having no pending disciplinary action. The minimum attendance for appearing for the semester examination is 85% in each course.

RE-11.2 Eligibility to write the Supplementary Examination

Only failed students and those who could not write the semester examination due to health reasons or other personal

exigencies that are approved by the Principal can register for the supplementary examination. Grades awarded in the supplementary examination will be taken as the semester grades in these courses.

RE-12 Eligibility to continue

A student has to earn a minimum number of credits in a semester to register for higher semester courses. The CPGB shall formulate the rules on this and spell out the procedure to proceed with the programme.

Failed students who have more than 50% marks in the internal course evaluation are permitted to write the semester examination without registering and undergoing the course. Those with less than 50% in internal course evaluation have to register again for the course, attend the classes and earn the credits.

RE-13 Seminar

Students have to register for the seminar and select a topic in consultation with any faculty member offering courses for the programme. A detailed write-up on the topic of the seminar is to be prepared in the prescribed format given by the Department. The seminar shall be of 30 minutes duration and a committee with the Head of the department as the chairman and two faculty members from the department as members shall evaluate the seminar based on the coverage of the topic, presentation and ability to answer the questions put forward by the committee.

RE-14 Project work

Project work is to be carried out in the third and fourth semesters. Project work is to be evaluated both in the third and the fourth semesters. Based on these evaluations the grade is finalised in the fourth semester.

Project evaluation weights shall be as follows:-

For convenience the marks are allotted as follows.

Total marks for the Project: 150

In the 3rd Semester:- Marks: 50

Project Progress evaluation:
Progress evaluation by the Project Supervisor :20 Marks
Presentation and evaluation by the committee : 30 Marks

In the 4th Semester : Mraks:100

Project evaluation by the supervisor/s :	30 Marks
Evaluation by the External expert :	30 Marks
Presentation & evaluation by the Committee :	40 Marks

RE-15 Faculty Advisor, Course Committee and Class Committee

RE-15.1 Faculty Advisor

The Head of the Department offering the M. Tech. programme shall nominate senior faculty members as faculty advisors who shall advise the students in academic matters and support them in their studies. Their role is to help the students in matters both academic and personal. A faculty advisor may support a group of students in a semester.

RE-15.2 Course Committee and Class Committee are to be in place for all M. Tech. programs in the college.

RE-15.3 Course Committee

This is for common courses (electives are excluded) offered to students admitted for the M. Tech. programme irrespective of their stream of specialization. Each of such courses will have a course committee constituted by the Principal of the college.

The Chairman of the course committee shall be either the Head of the Department or a senior faculty member not offering the course.

Members:-

i) All teachers offering the course.
ii) Two to four student representatives nominated by the Principal from the M. Tech. streams associated with the course.

RE-15.4 Class Committee

All M. Tech streams of specialization will have class committees for each semester, constituted by the respective Heads of Departments.

The Chairman of the committee shall be a senior faculty member who does not offer any course for that stream in that semester.

Members:-

i) All faculty members teaching courses for the stream in that semester.
ii) Two student representatives nominated by the Head of the Department, from the stream.

The course committees and class committees shall meet at least thrice in a semester - one in the beginning and one at the middle of the semester and one after the semester examinations. These committees should monitor the conduct of the courses, adherence to the course plan and time schedule, completion of the syllabus, standards of internal tests and evaluation process and difficulties faced by the students and take suitable remedial actions at the appropriate time. After the end semester examination, the committee should meet and finalize the results. A report on the student performance in each course should be prepared and submitted to the CPGB.

RE-16 Award of Grades

Grading is based on the marks obtained by the student in a course.

The grade card will only show the grades against the courses the student has registered.

The semester grade card will show the grade for each registered course,Semester Grade Point Average (SGPA) for the semester as well as Cumulative Grade Point Average (CGPA).

RE-17 Grades and Grade Points

Grades and Grade Points as per UGC guidelines are to be followed by the University

Grades	Grade Point	% of Total Marks obtained in the course
O	10	90% and above
A+	9	85% and above but less than 90%
A	8	80% and above but less than 85%
B+	7	70% and above but less than 80%
B	6	60% and above but less than 70%
C	5	50% and above but less than 60%
P	4	45% and above but less than 50%
F	0	Less than 45%
FA	0	Failed due to lack of attendance
I		Course Incomplete

Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) are calculated based on the above grading norms and are explained at 8.4

RE-18 Academic Auditing

The University shall have a detailed academic auditing procedure in place comprising of an internal academic auditing cell within the college and an external academic auditing for each college. The internal academic auditing cell in each college shall oversee and monitor all academic activities including all internal evaluations and semester examinations. This cell is to prepare academic audit statements for each semester at regular intervals of four weeks of instruction. These reports are to be presented to the external academic auditor appointed by the University, who will use it as a reference for his independent auditing and for thefinal report to the University.

Academic auditing will cover:-

i) Course delivery covering syllabus, adherence to course plan, quality of question papers for internal examinations, internal evaluation, laboratory experiments, practical assignments, mini projects, conduct of practical classes and their evaluation. Semester examination and academic performance of the students.
ii) Co-curricular and Extra-curricular activities available for students, and their organization.
iii) Academic functioning of the college encompassing students, faculty and college administration covering punctuality, attendance, discipline, academic environment, academic accountability, academic achievements and benchmarking.

RE-19 Revaluation and Grade improvement

There is no provision for revaluation of the semester answer books or for improving the grade. Students are permitted to check the answer books of the semester examination, after the results are declared. Any discrepancies in evaluation could be brought to the notice of the teacher concerned who will initiate appropriate action on this and report to the CPGB for a final decision on this.

RE-20 Grade Cards

Students who have written the semester examination will be given the grade cards for the registered courses, in every semester by the

respective colleges. On earning the required credits for the degree, a consolidated grade sheet for the M. Tech programme will be issued by the University on the recommendation of the respective CPGB.

The M. Tech. degree will not have any classification like distinction or first class.

RE-21 Discipline

Every student is expected to observe discipline and decorous behaviour.

Any act of indiscipline, misbehaviour including unfair practice in examinations will be referred to a Welfare and Discipline Committee of the college which shall make a detailed enquiry on the matter and recommend on the course of action to be taken and forward it to the Principal/Dean for action. The student can appeal to the Principal whose decision on the matter shall be final.

RE-22 Award of M. Tech. Degree

A student will be eligible for the award of M. Tech. Degree of the University on meeting the following requirements;

i) Registered and earned the minimum credits, as prescribed in the curriculum, for the stream of specialization.

ii) No pending disciplinary action.

RE-23 Grievances and Appeals Committee

Each college in the cluster should have a Grievances Redress Committee constituted by the Principal to address the grievances of the students and to consider their appeals on any decisions made by the college. This committee consisting of at least three faculty members and chaired by a senior professor shall look into student's grievances and appeals and recommend the course of action to be taken to solve them, to the Principal.
The Principal shall take appropriate actions based on this.

RE-24 Amendments to Regulations
Notwithstanding all that has been stated above, the University has the right to modify any of the above regulations from time to time.

8.3 RULES :-

RU-1 Attendance

Attendance is marked for each course. 85% attendance is mandatory for writing the semester examination in a course. Students who get PTTA or Scholarships from the Central or State Governments or any other agencies are expected to have 100 % attendance. However, under unavoidable circumstances students are permitted to take leave. Leave is normally sanctioned for any approved activity taken up by students outside the college covering sports and other extracurricular activities. Leave is alsopermitted on medical grounds or on personal exigencies. Leave of absence for all these is limited to 15 % of the academic contact hours for the course.

In case of long illness or major personal tragedies/exigencies the Principal can relax the minimum attendance requirement to 70%, to write the semester examination. This is permitted for one or more courses registered in the semester. The Principal shall keep all records which led to his decision on attendance, for verification by the Academic Auditor. However this concession is applicable only to any one semester during the entire programme. In case of prolonged illness, break of study is permitted up to two semesters which could extend the programme up to six semesters, the maximum permitted by the regulations.

RU-2 Leave of Absence

Students who desire to take leave under RU1 have to apply for it to the teacher conducting the course. This application together with any supporting documents like doctor's certificate or other relevant information is to be forwarded to the Head of the Department with the recommendation of the teacher indicating the total leave of absence the student has so faravailed. Approval for leave is to be given by the head of the department. After any prolonged medical leave, normally exceeding five instruction days, on rejoining, the student has to produce the fitness certificate given by the doctor.

RU-3 Malpractices in Examinations

Every college in the cluster should have an Academic Disciplinary Action Committee [ADAC] constituted by the Principal of the college. Malpractices in examinations shall be viewed seriously. Any such incident seen/reported by a faculty member or an invigilator associated with examinations shall be reported to the Principal who in turn shall refer it to ADAC. On the basis of the report and the evidence available

or gathered, ADAC shall immediately initiate an enquiry giving the student a chance to explain his case. Based on this the committee shall recommend the course of action in line with the guidelines formulated for this by the CPGB for action by the Principal. In case of disputes a student can appeal to the CPGB and its decision on the matter shall be final.

RU- 4 Project Evaluation

Normally students are expected to do the project within the college. However they are permitted to do the project in an industry or in a government research institute under a qualified supervisor from that organization. Progress of the project work is to be evaluated at the end of the third semester. For this a committee headed by the head of the department with two other faculty members in the area of the project, of which one shall be the project supervisor. If the project is done outside the college, the external supervisor associated with the student will also be a member of the committee. Final evaluation of the project will be taken up only on completion of the project in the fourth semester. This shall be done by a committee constituted for the purpose by the principal of the college. The concerned head of the department shall be the chairman of this committee. It shall have two senior faculty members from the same department, project supervisor and the external supervisor, if any, of the student and an external expert either from an academic/R&D organization or from Industry as members. Final project grading shall take into account the progress evaluation done in the third semester and the project evaluation in the fourth semester. If the quantum of work done by the candidate is found to be unsatisfactory, the committee may extend the duration of the project up to one more semester, giving reasons for this in writing to the student. Normally further extension will not be granted and there shall be no provision to register again for the project.

RU-5 Project work outside the College

While students are expected to do their projects in their colleges, provision is available for them to do it outside the college either in an industry or in an institute of repute. This is only possible in the fourth semester and the topic of investigation should be in line with the project part planned in the 3rd semester. Student should apply for this through the project supervisor indicating the reason for this well in advance, preferably at the beginning of the 3rd semester. The application for this shall include the following:-

Topic of the Project:
Project work plan in the 3rd Semester:
Reason for doing the project outside:
Institution/Organization where the project is to be done:
External Supervisor – Name :
Designation :
Qualifications :
Experience :
Letter of consent of the External Supervisor as well as from the organization
This application is to be vetted by a departmental committee constituted for the same by the Principal and based on the recommendation of the committee the student is permitted to do the project outside the college. The same committee should ensure the progress of the work periodically and keep a record of this.

8.4 Calculation of SGPA/CGPA

Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) are calculated as follows.

SGPA = £(Ci×GPi)/£Ci where Ci is the credit assigned for a course and GPi is the grade point for that course. Summation is done for all courses registered by the student in the semester. Here the failed courses are also accounted.

CGPA = £(Ci×GPi)/£Ci where Ci is the credit assigned for a course and GPi is the grade point for that course. Summation is done for all courses registered by the student during all the semesters for which the CGPA is needed. Here the failed courses are also accounted. CGPA of all courses

M.Tech Programme Credit Assignment
M.Tech COMPUTER AND INFORMATION SCIENCE

SEMESTER I

Exam Slot	Course NO:	NAME	L-T-P	Internal mark	End semester Exam		Credits
					Marks	Duration (hrs)	
A	01CI6111	Mathematical Foundations of Computer Science	4-0-0	50	50	3	4
B	01CI6121	Advance Data Structure and Algorithms	4-0-0	50	50	3	4
C	01CI6131	Advance Software Engineering	4-0-0	50	50	3	4
D	01CI6141	Advanced Database Technology	3-0-0	50	50	3	3
E	01CI6151	Elective-1	3-0-0	50	50	3	3
	01CI6161	Research Methodology	1-1-0	100	0	0	2
	01CI6171	Seminar	0-0-2	100	0	0	2
	01CI6181	Advanced Data Structure and Algorithms Laboratory	0-0-2	100	0	0	1
							23

ELECTIVE-1

Exam Slot	COURSE NUMBER	NAME
E	01CI6151(1)	Information Security
E	01CI6151(2)	Modern Computing Paradigms
E	01CI6151(3)	Image Processing
E	01CI6151(4)	Advanced Computer Networks
E	01CI6151(5)	Advanced Computer Graphics

Semester-2(Credits: 19)

Exam Slot	Course NO:	NAME	L-T-P	Internal mark	End semester Exam		Credits
					Marks	Duration(hrs)	
A	**01CI6112**	**Advanced Data Mining**	4-0-0	50	50	3	4
B	**01CI6122**	**Information Retrieval**	3-0-0	50	50	3	3
C	**01CI6132**	**Advanced Operating System Design**	3-0-0	50	50	3	3
D	**01CI6142**	**Elective-2**	3-0-0	50	50	3	3
E	**01CI6152**	**Elective-3**	3-0-0	50	50	3	3
	01CI6162	**Mini Project**	0-0-4	100	0	0	2
	01CI6172	Advanced DBMS Laboratory	0-0-2	100	0	0	1
							19

ELECTIVE-2

Exam Slot	COURSE NUMBER	NAME
D	**01CI6142(1)**	**Computer Vision**
D	**01CI6142(2)**	Wireless Communication and Networking
D	**01CI6142(3)**	**Advanced Topics in Distributed Systems**
D	**01CI6142(4)**	**Parallel Algorithms**
D	**01CI6142(5)**	**Soft Computing**

ELECTIVE-3

Exam Slot	COURSE NUMBER	NAME
E	01CI6152(1)	Advanced Graph Theory
E	01CI6152(2)	Computational Linguistics
E	01CI6152(3)	Network security
E	01CI6152(4)	Advanced Compiler Design
E	01CI6152(5)	Decision Support Systems

Semester-3: (Credits: 14)

Exam Slot	Course NO:	NAME	L-T-P	Internal mark	End semester Exam		Credits
					Marks	Duration (hrs)	
A	01CI7113	Elective-4	3-0-0	50	50	3	3
B	01CI7123	Elective-5	3-0-0	50	50	3	3
	01CI7133	Seminar	0-0-2	100	0	0	2
	01CI7143	Project(Phase-1)	0-0-8	50	0	0	6
							14

ELECTIVE 4

Exam Slot	COURSE NUMBER	NAME
A	01CI7113(1)	Cloud Computing
A	01CI7113(2)	Machine Learning
A	01CI7113(3)	Advanced Numerical Techniques
A	01CI7113(4)	Ad hoc and sensor networks
A	01CI7113(5)	Bio informatics

ELECTIVE 5

Exam Slot	COURSE NUMBER	NAME
B	**01CI7123(1)**	**Software Quality Assurance and Testing**
B	**01CI7123(2)**	**Data Compression**
B	**01CI7123(3)**	**Computational Geometry**
B	**01CI7123(4)**	**Medical Imaging**
B	**01CI7123(5)**	**Big Data Analytics**

Semester: 4(Credits: 12)

Exam Slot	Course NO:	NAME	L-T-P	Internal mark	End semester Exam		Credits
					Marks	Duration (hrs)	
	01CI7114	**Project(Phase-2)**	0-0-21	100	0	0	12

Total 68

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar July 2016– July 2017

(B.Tech, B.Arch, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)
Please see separate Academic Calendar for MBA

Day	July 2016		August 2016		September 2016	
Mon			1	Commencement of Classes		
Tue			2	Karkadaka Vavu		
Wed			3			
Thu			4		1	Publish Attendance
Fri	1		5	Course Committee/Class Committee Meeting	2	
Sat	2		6		3	
Sun	3		7		4	
Mon	4		8		5	
Tue	5		9	Registration Ends	6	
Wed	6	Id-ul-Fitr	10	Report Registration details to KTU	7	Test 1 to be completed
Thu	7		11		8	
Fri	8		12		9	
Sat	9		13		10	Onam Vacation Begins
Sun	10		14		11	
Mon	11		15	Independence Day	12	Bakrid
Tue	12		16		13	1st Onam
Wed	13		17		14	Thiruvonam
Thu	14		18		15	3rd Onam
Fri	15		19		16	Sree Narayana Guru Jayanthi
Sat	16		20		17	
Sun	17		21		18	
Mon	18		22		19	Re-Opening
Tue	19		23		20	Course Committee/Class Committee Meeting
Wed	20		24	Sreekrishna Jayanthi	21	Sree Narayana Guru Samadhi Day
Thu	21		25		22	Publish Test 1 Marks
Fri	22		26		23	
Sat	23		27		24	
Sun	24		28	Birthday of Ayyankali	25	
Mon	25		29		26	
Tue	26		30		27	
Wed	27	Registration Starts	31		28	
Thu	28				29	
Fri	29				30	
Sat	30					
Sun	31					

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar July 2016– July 2017

Day	October 2016		November 2016		December 2016	
Mon						
Tue			1			
Wed			2			
Thu			3		1	
Fri			4		2	S1/S3 Exam
Sat	1		5		3	
Sun	2	Gandhi Jayanthi	6		4	
Mon	3		7		5	S3/S1 Exam
Tue	4		8		6	
Wed	5		9		7	S3/S1 Exam
Thu	6		10		8	
Fri	7	Publish Attendance	11		9	S3/S1 Exam
Sat	8		12		10	
Sun	9		13		11	
Mon	10	Mahanavami	14		12	Milad-i-Sherif
Tue	11	Vijayadasami	15		13	
Wed	12	Muharram	16		14	S3/S1 Exam
Thu	13		17		15	
Fri	14		18		16	S3/S1 Exam
Sat	15		19	College Level Arts Festival to be completed	17	Arts & Tech Fests Week
Sun	16		20		18	
Mon	17		21	Course Committee/Class Committee Meeting	19	
Tue	18		22		20	
Wed	19		23	Last date for evaluation of Jury/ Practicals	21	
Thu	20		24	Classes End, Publish Internal Marks	22	
Fri	21	Test 2 to be completed	25	Publish Attendance	23	
Sat	22		26		24	Christmas Vacation Begins
Sun	23		27		25	Christmas
Mon	24		28	Forward Attendance & Internal Marks to KTU	26	
Tue	25		29		27	
Wed	26		30		28	
Thu	27				29	
Fri	28	Publish Test 2 Marks			30	
Sat	29	Deepavali			31	
Sun	30					
Mon	31					

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar July 2016– July 2017

Day	January 2017		February 2017		March 2017	
Mon						
Tue						
Wed			1		1	
Thu			2		2	
Fri			3		3	
Sat			4		4	
Sun	1		5		5	
Mon	2	Mannam Jayanthi	6		6	
Tue	3	Registration starts	7		7	
Wed	4	Commencement of S2 & S4 Classes	8		8	
Thu	5		9	Test 1 to be completed	9	
Fri	6		10	Course Committee/Class Committee Meeting	10	Test 2 to be completed
Sat	7		11		11	
Sun	8		12		12	
Mon	9	Course Committee/Class Committee Meeting	13		13	
Tue	10		14		14	
Wed	11	Registration Ends	15	Publish Test 1 Marks	15	
Thu	12		16		16	Publish Test 2 Marks
Fri	13	Tech Fest	17		17	
Sat	14		18		18	
Sun	15		19		19	
Mon	16		20		20	
Tue	17		21		21	
Wed	18		22		22	
Thu	19		23		23	
Fri	20		24	Maha Shivratri	24	
Sat	21		25		25	
Sun	22		26		26	
Mon	23		27		27	
Tue	24		28		28	
Wed	25				29	
Thu	26	Republic Day			30	
Fri	27				31	
Sat	28					
Sun	29					
Mon	30					
Tue	31	Publish Attendance				

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar July 2016– July 2017

Day	April 2017		May 2017		June 2017		July 2017	
Mon								
Tue								
Wed								
Thu					1			
Fri					2			
Sat	1				3		1	
Sun	2				4		2	
Mon	3		1	May Day	5		3	
Tue	4		2	S4 Exam	6		4	
Wed	5		3	S2 Exam	7		5	
Thu	6		4	S4 Exam	8		6	
Fri	7		5	S2 Exam	9		7	
Sat	8	College Level Sports Meet to be completed	6		10		8	
Sun	9		7		11		9	
Mon	10		8	S2 Exam	12	Registration for Supplementary Examination	10	
Tue	11		9	S4 Exam	13		11	
Wed	12	Course Committee/Class Committee Meeting	10	S2 Exam	14		12	
Thu	13	Maundy Thursday	11	S4 Exam	15		13	
Fri	14	Good Friday, Vishu, Dr. Ambedkar Jayanthi	12	S2 Exam	16	Registration for Supplementary Examination Ends	14	
Sat	15		13		17		15	
Sun	16	Easter	14		18		16	
Mon	17	Publish Internal Marks, Summer Course Registration	15	S4 Exam	19		17	
Tue	18		16	S2 Exam	20		18	
Wed	19		17	S2 Exam	21		19	
Thu	20	Last date for evaluation of Jury/Practicals	18		22		20	
Fri	21	Classes End, Publish Attendance	19		23	Report eligibility of students attendance Summer Course to KTU	21	
Sat	22		20	Sports Week	24		22	
Sun	23		21		25		23	Karkadaka Vavu
Mon	24	Forward Attendance & Internal Marks to KTU	22		26	Id-ul-Fitr	24	
Tue	25		23	Summer Course Starts for S1, S2, S3 & S4	27		25	
Wed	26		24		28		26	
Thu	27	S4 Exam	25		29	Supplementary Examination Starts	27	
Fri	28	S2 Exam	26		30		28	
Sat	29		27				29	
Sun	30		28				30	
Mon			29				31	
Tue			30					
Wed			31					

9. STAFF MEMBERS

Principal

Prof. (Dr.) Z A Zoya MTech, PhD Ph : 0474-2550400 (O), 9447150400 (M)

9.1 ELECTRONICS AND COMMUNICATION

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Sri.Sudheer V R	Asst.Prof	M.Tech, PhD*	9447461211
2	Sri.Sivathanu L	Asst.Prof	M.Tech	9447281862
3	Smt.Anjali Swapna	Asst.Prof	M.Tech	9547488471
4	Sri.Ajith A	Asst.Prof	M.Tech	9995295599
5	Smt.Seena R	Asst.Prof	M.Tech	9495351004
6	Sri.Rajesh P	Asst.Prof	M.Tech	9388856436
7	Smt.Dhanya M	Asst.Prof	M.Tech	9447013719
8	Smt.Shemeena M	Asst.Prof	M.Tech	9446382096
9	Smt.Aseena A	Asst.Prof	M.Tech	9446182857
10	Smt.Archa A B	Asst.Prof	M.Tech	9947061894
11	Sri.Santhosh B S	Asst.Prof	M.Tech	9496746236
12	Sri.Mukundakumar M	Asst.Prof	M.Tech *	9496815496
13	Sri.Surjith S	Asst.Prof	M.Tech *	9745108232
14	Smt.Revathy Nath H A	Asst.Prof	M.Tech	9447318908
15	Sri.Vineeth R	Asst.Prof	M.Tech	9447773772
16	Smt.Anju V Gopal	Asst.Prof	M.Tech	9447958242
17	Smt.Vishnupriya L	Asst.Prof	M.Tech	9995105871
18	Smt.Jesna K A	Asst.Prof	M.Tech	9847658626
19	Sri.Arun C	Asst.Prof	M.Tech	9895725722
		LAB STAFF		
20	Sri.Shefeer B	Instructor		9995181505
21	Sri.Anu Chandran	Instructor		9605080805
22	Sri.Venu P	Tradesman		9846501790
23	Smt.Suma S	Tradesman		8129375603
24	Smt.Reshma R S	Tradesman		9526325984

9.2 COMPUTER SCIENCE

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Dheeba Jacob	Assoc.Prof	M.Tech, PhD	9442009711
2	Sri.Bejoy Abraham	Assoc.Prof	M.Tech, PhD*	9841830442
3	Smt.Bindhu J S	Asst.Prof	M.Tech, Phd*	9446916880
4	Sri.Afzal A L	Asst.Prof	M.Tech, Phd*	9447246553
5	Sri.Ajish S	Asst.Prof	M.Tech	9447789825
6	Smt.Biji Nair	Asst.Prof	M.Tech, Phd*	9400430262
7	Smt.Soumya T	Asst.Prof	M.Tech, Phd*	9446178245

8	Sri.Ratheesh S	Asst.Prof	M.Tech	8547427518
9	Smt.Ameera Beegom J	Asst.Prof	M.Tech*	9605238271
10	Smt.Jooby E	Asst.Prof	M.Tech*	9496555827
11	Smt.Devi Dath	Asst.Prof	M.Tech	9447342666

LAB STAFF

12	Smt.Roshni J Philip	Computer Programmer	9995225085
13	Sri.Sajeer S	Hardware Instructor	9847525885
14	Sri.Vinodkumar T	Tradesman	9895533264
15	Sri.Arun C Pillai	Tradesman	9895463735

9.3 INFORMATION TECHNOLOGY

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Smt.Surya S R	Asst.Prof	M.Tech, PhD*	9446556505
2	Smt.Suja Vijayan	Asst.Prof	M.Tech*	9846372722
3	Sri.Praveen K Wilson	Asst.Prof	M.Tech, Phd*	9447322541
4	Smt.Sujarani M S	Asst.Prof	M.Tech	9495918218
5	Smt.Remya R	Asst.Prof	M.Tech	9495903496
6	Smt.Sowmya K S	Asst.Prof	M.Tech	8547359491
7	Sri.Anoop S	Asst.Prof	M.Tech, Phd*	9446747253
8	Smt.Deepa K Daniel	Asst.Prof	M.Tech	8891174195

9.4 ELECTRICAL AND ELECTRONICS ENGINEERING

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Smt.Bindu Prakash	Assoc.Prof	M.Tech ,Phd*	9847831272
2	Smt.Sofiya A	Asst.Prof	M. Tech	9745506884
3	Sri. Jijo Balakrishnan	Asst. Prof.	M. Tech	9447791375
4	Smt.Deepa M U	Asst.Prof	M. Tech	9946184969
5	Sri.Santhosh Raj R	Asst.Prof	M. Tech *	9497621339
6	Smt.Jasna Basheer	Asst.Prof	M. Tech	9496332274
7	Edwina Rodrijues	Asst. Prof.	M. Tech	9526391325
8	Smt.Saritha M	Asst.Prof	M. Tech	9447241548
9	Smt. Viji Chandran	Asst.Prof	M. Tech	9446567807
10	Divyamol K.C.	Asst.Prof.	M. Tech	9645936366

LAB STAFF

11	Sri.Bijukumar G	Instructor	9447430001
12	Sri.Vishnulal S	Tradesman	9946535020
13	Sri.Salu D S	Tradesman	9497271497
14	Sri.Sudheendran T S	Tradesman	9995079599

9.5 CIVIL

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Smt.Uma Mohan	Asst.Prof	M.Tech	9497362043
2	Smt. Vinu Vijayan	Asst.Prof	M.Tech	9446910156

9.6 MECHANICAL

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Sri. Satheesh Kumar M	Asst.Prof	M.Tech, Phd*	9447283160
2	Sri.Thulaseedharan R	Asst.Prof	M.Tech,M.Phil	9846748607
3	Sri. Shamnad M	Asst.Prof	M.Tech	9495805914
4	Smt.Sony R	Asst.Prof	M.Tech	9447865695
5	Sri.Syamkumar G	Asst.Prof	M.Tech	9544458782
6	Sri. Suneer K S	Asst.Prof	M.Tech	9446639190
7	Sri. Joshy S.S.	Asst.Prof	M.Tech	8547088961
8	Sri.Sudeep Dinesh	Asst.Prof	M.Tech	9746930925
9	Sri. Rajesh R.	Asst. Prof	M.Tech	9496811489
	LAB STAFF			
10	Sri. Mahadevan	Instructor		9746250183
11	Sri.Sujeesh G	Tradesman		9446025047
12	Sri.Praveen Prakash	Tradesman		9400801166
13	Sri.Suresh V L	Tradesman		9048243675

9.7 MATHEMATICS

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Smt.Smitha R	Asst.Prof	MSc,M.Phil,NET	9446944537
2	Smt.Jesmala David Raj	Asst.Prof	MSc,NET	9946793560
3.	Riju	Asst.Prof	MSc, NET	9995714873

9.8 PHYSICAL EDUCATION

Sl.No.	NAME	Designation	Phone No.
1	Dr.Sunilkumar S	Asst.Prof Phy.Ed.	8089499242

9.9 LIBRARY

Sl.No.	NAME	Designation	Qualification	Phone No.
1	Sri.Anzar A	Librarian Gr.IV	MLISc, UGC-NET	9037723730
2	Sri.Reji Tomlal	Librarian Gr.IV	MLISc, MBA	8547326197
3	Smt.Smitha Rani J	Librarian Gr.IV	MLISc	9744578747

9.10 ADMIN STAFF

Sl.No.	NAME	Designation	Phone No.
1	Smt. Ambika P.K.	Jr. Superintendent	9446118584
2	Sri.Sujith K S	Assistant Gr I	9447865183
3	Sri. Shafi Shereef	Assistant Gr II	8891451068
4	Smt. Anjana Sivan	Assistant Gr II	9447245930
5	Sri. Nidheesh M.V.	Assistant Gr II	9745831585
6	Sri. Jofin V.F.	Assistant Gr II	9497454247
7	Smt.Sumadevi P	Assistant Gr II	9645642171
8	Smt.Remya R Nair	Asst.Engineer	9544553671
9	Sri.Abhilah R	Overseer	9497362055
10	Sri.Niyas S	Electrican -cum-plumber	8086136212
11	Sri.Sajeev R	Peon	9447181015
12	Sri.Vijayankutty	Security	9961786974
13	Sri.Balachandran Pillai	Security	9847147013
14	Sri.Ajesh S	Security	8907414924
15	Sri.Rejith R	Security	9995891937
16	Sri. Shine S. Pillai	Security	9645803357
17	Sri. Jayakumar S.	Security	9446289105
18	Sri.Syamkumar S	Driver-cum -attender	9633646517
19	Smt.Jayasreekumari.P	Sweepers	9446107502
20	Smt.Satheebhai S	Sweepers	9605921014
21	Smt.Sujatha L	Sweepers	
22	Smt.Neethu V	Sweepers	9544655428
23	Smt.Sheela R	Sweepers	
24	Smt. Mini P.	Sweepers	9605133315

9.12 BUS DRIVERS

Sl.No.	NAME	Designation	Phone No.
1	Gangadharan Pillai	Bus Driver	9526385733
2	Suresh Babu	Bus Driver	9847527253
3	Suresh Surendran	Bus Driver	9947341526
4	Gopalakrishnan	Bus Driver	9562218183
5	Ayyappan Pillai	Bus Driver	9526271912
6	Vijayan V.	Bus Driver	9020445657
7.	Vijayan Pillai	Bus Driver	9633020637
8.	Rajendra Babu	Bus Driver	9495067745
9.	Hubald	Bus Driver	9446932507
10.	Soman S.	Bus Driver	9562110162
11.	Rajendranathan Pillai	Bus Driver	9495892680
12.	Soman G.	Bus Driver	9446363730

* Under-going.

10. LIST OF ENGINEERING COLLEGES IN KERALA

10.1 . Colleges Under CAPE

1.	College of Engg. Perumon, Kollam	0474-2550500
2.	College of Engg. Kidangoor, Kottayam	0482-2255056
3.	College of Engg., Vadakara, Kozhikode	0496-2536125
4.	College of Engg. Thalassery, Kannur	0490-2307190
5.	College of Engg. Trikkaripur, Kasaragod	04997-250377
6.	College of Engg. and Management, Punnapra	0477-2266711
7.	College of Engg. Pathanapuram	0475-2022810
8.	College of Engg. Aranmula	0468-2319131

10.2. College Under NIT

9.	National Institute of Technology, Kozhikode	0495-2286100

10.3 Colleges Under Directorate of Technical Education, Kerala

10.	College of Engg.,TVM	0471-2515504
11.	Govt. Engg. College Barton Hill, TVM	0471 -2300485
12.	RIT, Kottayam	0481 -2507763
13.	Govt. Engg. College, Thrissur	0487-2334144
14.	Govt. Engg. College, Sreekrishnapuram	04926-260350
15.	Govt. Engg. College, Kannur	0497-2780226
16.	Govt. Engg. College, Kozhikode	0495-2383220
17.	Govt Engg. College, Wayanad	04935-241267
18.	Govt. Engg. College, Idukki	04862-233250
19.	T.K.M. College of Engg., Kollam	0474-2712024
20.	M.A. College of Engg., kothamangalam	0485-2822363
21.	N.S.S. College of Engg., Palakkad	0491-2555255

10.4. Colleges Under IHRD

22.	College of Engg., Adoor	04734-424078
23.	College of Engg., Chengannur	0479-2454125

24. College of Engg., Pathanamthitta	0469-2677890
25. College of Engg., Karunagappally	0476-2629650
26. College of Engg., Poonjar	0482-2275420
27. College of Engg.,Attingal	0477-2266711
28. Model Engg. College, Ernakulam	0484-2575370
29. College of Engg. Cherthala	0478-2553416
30. College of Engg. Kottarakkara	0474-2453300

10.5. Colleges Under LBS

31. LBS College of Engg., Kasaragod	04994-250290
32. LBS Institute of Tech. For Women, TVM	0471-2349232

10.6. College Under KSRTC

33. SCT College of Engg., Pappanamcode, TVM	0471-2490572

10.7. College Under University of Kerala

34. University College of Engg., TVM	0471-2417574

10.8. Colleges Under Cochin University of Science &Technology

35. School of Engg., Trikkakkara	0484-2556187
36. Cochin University School of Engg. Kuttanad	0477-2707500

10.9. College Under MG University

37. University College of Engg. Thodupuzha	04862 -25622

10.10. College Under University of Calicut

38. Calicut University Inst.of Engg.&Tech.Kozhikode	0494 -2400223

10.11. Colleges Under Kerala Agricultural University

39. College of Diary Sciences Technology, Mannuthy	0487-2372861
40. KCAET, Thavanur, Malappuram	0494-2686214

10.12. College Under Center for Continuing Education

41. College of Engg., Munnar	04865-230606

10.13 Department of Space, Government of India

Indian Institute Of Space Science And Technology (IIST)	0471-256-8462

Appendix I

Guidelines to achieve growth in life

1. Continuous improvement result in growth
2. To have improvement, we shold know our shortcomings. (Retrospection)
3. Examinations, Competitions, Interviews etc help us in Restrospection. Besides, get the guidance/advice of friends (Analysis)
4. Once the shortcomings are identified, Work hard to overcome it. (Rectification)

Tackling an Exam

1. Three weeks ahead to the examinatios, Segregate the Topics Formulae into two categories.
2. Category 1 should cover all the Top Priority Topics & Formulae (Refer Previous 3 years Question papers - Both Series & University Exam.)
3. Category 2 should cover all the remaining Topics & Fourmulae
4. Repeat the procedure for all Subjects.
5. Prepare a Time- Table by giving more priority for Category 1.
6. Once each topic is prepared thoroughly, mark it properly.
7. Drink enough water and sleep for a minimum of 6 hours.
8. Before leaving to the examination centre, have a check for Instruments, Required Statistical Tables, ID Card & Hall Ticket. Besides revise the topic in Category 1
9. Be seated in the hall 10 minutes prior to the examination.
10. Thorough & Ordered preparation will help us to get ride of Tensions & Worries.

Test your GD Skills

The Group Discussion forms an integral part of a company's selection process. As in a football games, where we play like a team, passing the ball to each member and aim for a common goal, GDis also a team work, where we share our views. Here are some of the most improtant personally traits that a candidate should posses to excel at a GD.

Knowledge, Initiative & Assertiveness	- Qualities of Leader
Listening & Flexibility	- Qualities of a Manager
Reasoning & Creativity	- Qualities of an Engineer

Refer

www.gdpi.ascenteducation.com

Face an Interview

Conventional Questions.

1. Siginificant achievement in your life.
2. What is your Career objective?
3. Most challenging moment in your career? How did you get it resolved?
4. Where do you see yourselved after 10 years?
5. What are your strenghts and weaknesses.
6. Differentiate Hobbies & Interests / Creativity & Innovation.
7. What things give you the greatest satisfaction at work.
8. What kind of things do you feel most confident in doing.
9. What things frestrate you the most? How do you usually cope with them?
10. Describe yourself as aperson?

COLLEGE OF ENGINEERING
PERUMON
KOLLAM - 691 601

UNDERTAKING BY THE STUDENT

(to be Submitted at the time of Admission/Registration to a course)

I do hereby give the undertaking that I will fully comply with the provisions envisaged in the Kerala Technological University Students (Conduct and Disciplinary), in its letter and spirit and I am fullyt aware of the disciplinary actions which can be against me, if I fail to comply with the provisions of this code.

Signature :

Name of Student :

Course / Semester to which admission or registration is sought :

Admn. of (if allotted) :

Date :