

## COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY ACADEMIC PROSPECTUS 2015

**INDEX** 

CHAPTER 1 PAGE 2

THE UNIVERSITY - A PRELUDE

**CHAPTER 2 PAGE 4** 

TEACHING DEPARTMENTS/ SCHOOLS/CENTRES/ RECOGNIZED INSTITUTIONS - AN OVERVIEW OF THE ACADEMIC SCENARIO

**CHAPTER 3 PAGE 43** 

ACADEMIC AND STUDENT SERVICES - GLIMPSES

CHAPTER 4 PAGE 52

ACADEMIC PROGRAMMES OF THE UNIVERSITY – FOSTERING EXCELLENCE

**CHAPTER 5 PAGE 63** 

ELIGIBILITY CRITERIA – A READYRECKONER

**CHAPTER 6 PAGE 98** 

ADMISSION PROCEDURE – GENERAL INSTRUCTIONS

**CHAPTER 7 PAGE 112** 

INTERNATIONAL CANDIDATES – READ THIS FIRST

**CHAPTER 8 PAGE 118** 

CHILDREN OF INDIAN WORKERS IN GULF COUNTRIES – NOTE THIS

**CHAPTER 9 PAGE 120** 

CHOOSING TEST SUBJECTS - A OUICK REFERENCE TABLE

CHAPTER 10 PAGE 121

**RESERVATIONS – JUST & FAIR** 

CHAPTER 11 PAGE 133

SCHEDULE OF FEES – PLAN YOUR EXPENSES

CHAPTER 12 PAGE 141

REFUND OF FEES - RULES ARE IMPORTANT

CHAPTER 13 PAGE 142

FEE CONCESSIONS - CHECK ELIGIBILITY

CHAPTER 14 PAGE 143

**HOSTEL FACILITIES - YOU WILL ENJOY IT** 

CHAPTER 15 PAGE 145

**CAMPUS DISCIPLINE - INEVITABLE** 

**CHAPTER 16 PAGE 146** 

PARENT TEACHER ASSOCIATION – BRIDGING RELATIONSHIPS

CHAPTER 17 PAGE 147

**HOW TO REACH CUSAT – THE WAY TO SUCCESS** 

CHAPTER 18 PAGE 148

TEST CENTRES – WE ARE NEAR YOU

CHAPTER 19 PAGE 149

COUNSELLING / ADMISSION INTIMATIONS – BE AWARE & ALERT

CHAPTER 20 PAGE 149

**IMPORTANT DATES - ALWAYS REMEMBER** 



### **Chapter 1**

# The University – A Prelude COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

Cochin University P O
Ph: +91-484 - 2575396
Kochi-682 022
Fax: +91-484-2577595
Kerala
Email: registrar@cusat.ac.in
India
Website: www.cusat.nic.in , www.cusat.ac.in

CHANCELLOR	JUSTICE SHRI. P SATHASIVAM THE HONOURABLE GOVERNOR OF KERALA
PRO - CHANCELLOR	SHRI. P.K.ABDU RABB, MINISTER FOR EDUCATION, GOVT. OF KERALA
VICE - CHANCELLOR	DR. J LETHA
PRO - VICE-CHANCELLOR	DR. K POULOSE JACOB
REGISTRAR	DR. DAVID PETER S
FINANCE OFFICER	SRI. SEBASTIAN OUSEPH
CONTROLLER OF EXAMINATIONS	DR. A B BHASI

#### THE VISION

Cochin University of Science and Technology (CUSAT) occupy a unique place in the academic map of Asia as a premier institution for higher learning. The University's motto 'Tejaswinavadhitamastu' meaning 'may the wisdom accrued deify us both - the teacher and the taught - and percolate to the universe in its totality' which is taken from the Vedas, the ancient scriptures of the land, well epitomizes the ideals and philosophy of the University.

CUSAT offers programmes across a spectrum of disciplines in frontier areas ranging from engineering, science and technology to humanities, law and management. The pursuit of excellence through these programmes has given CUSAT a national and international acclaim. The academic diversity evidenced in the curricula ranging from traditional courses in science to the most advanced programmes in technology



and research is the unique strength of CUSAT. It is this strength which makes the University a highly sought-after institution worldwide for academic collaborations and exchange programmes.

Besides, Kochi's pleasant, sunny weather accentuated by the cool breeze from the Arabian Sea offers visitors from any continent a benign atmosphere for academic pursuits.

#### 44 YEARS IN PURSUIT OF EXCELLENCE

The establishment of the erstwhile University of Cochin in 1971 was a commitment from the Government of Kerala towards the new scientific policy resolution adopted by the Central Government on 4th March 1958. The birth of the new University was with the specific purpose of "development of higher education with particular emphasis on post-graduate studies and research in applied science, technology, industry and commerce". The University of Cochin was later reorganized as Cochin University of Science and Technology (CUSAT) in February 1986, redefining its objectives as "the promotion of graduate and post graduate studies and advanced research in applied science, technology, industry, commerce, management and social sciences."

Cast in the mould of a federal University, distinctly different from other Universities in the State, today CUSAT is a premier Science and Technology University of the country. While striving to live up to the expectations of the society, the University has made quantum leaps in its academic pursuits and has spread its wings far and wide to encompass new and emerging frontiers across the academic horizon.

True to the legacy of being the friendliest state with avowed dedication to education, CUSAT is home for students from across the globe. The University rises to the expectations of student community by offering very specialized courses in Naval Architecture, Polymer Science & Rubber Technology, Photonics, Marine Sciences, Safety & Fire Engineering, Marine Engineering etc. apart from a host of traditional science and engineering courses. The University takes pride in the fact that it has an envious record in campus selection and is a favourite destination for many renowned MNCs for recruitment. Many of its alumni adorn key positions in a number of highly acclaimed R & D institutions and corporates in India and abroad. This pool of highly successful and talented alumni is a living testimony to the academic excellence of this University.



### Chapter 2

## TEACHING DEPARTMENTS/SCHOOLS/CENTRES/ RECOGNIZED INSTITUTIONS (AN OVERVIEW OF THE ACADEMIC SCENARIO)

The Syndicate, Academic Council and Senate are the principal Authorities of the University. All academic programmes are structured under nine Faculties viz. Science, Engineering, Technology, Social Sciences, Environmental Studies, Humanities, Law, Marine Science and Medical Science & Technology which are constantly monitored and upgraded by the respective Boards of Studies comprising of highly experienced and qualified experts.

There are 28 teaching Departments/Schools, 33 auxiliary centres and 9 student/academic service centres functioning in the University.

#### TEACHING DEPARTMENTS/SCHOOLS

CUSAT has at present 28 Departments of study and research offering Graduate and Post Graduate programmes across a wide spectrum of disciplines in frontier areas of Engineering, Science, Technology, Humanities, Law& Management.

During the last four decades of its existence, CUSAT has registered a steady growth and has earned recognition as one of the highly reputed and internationally acclaimed Indian Universities. The University has academic links and exchange programmes with several institutions across the globe. The emergence of CUSAT as the single Indian University to be chosen for long-term financial assistance by the Government of Netherlands under the MHO programme eloquently testifies to its proud record of academic achievements and strengths.

#### CENTRE OF EXCELLENCE

In recognition of the strength, achievements and acclaim in the area of LASERs and Optoelectronics, the University was selected by the UGC in 2002 for the establishment of a 'Centre of Excellence in Lasers and Optoelectronic Science' with the aim of producing and sustaining superior quality of education and research.

#### **CENTRES**

To encourage and promote collaborative, multi-disciplinary interaction, centres in specialized thematic areas have been established by the University. Conceived as umbrella organizations for inter-faculty interaction and joint enterprises, aimed at wholesome integration, assimilation and dissemination of knowledge beyond all sectarian confines, these Centres are expected to engage themselves in unfettered intellectual pursuits.



#### PARTNERS IN PROGRESS

Driven by its passion to venture beyond the beaten track, CUSAT has identified selected institutions of eminence as 'Partners in Progress'. Also, it has accorded the status of 'Recognized Institution' to a host of professional institutions, national laboratories and research organizations of repute in the State. This has catalysed the spread of quality education and has paved the way for healthy interaction between academicians and scientists.

#### THE CAMPUS

There are three separate campuses, two in Ernakulam District and one at Pulinkunnoo in Alappuzha District.

#### MAIN (Thrikkakara) CAMPUS (Cochin University P O, Kochi-682 022)

The Main Campus is located in Ernakulam District just 1 km off the National Highway 47 at South Kalamassery. About 180 acres in extent, it houses the Administrative Office & majority of the academic Departments / Schools. University Library, Students Amenity Centre, the student hostels, staff quarters and many student service centres are located in this campus.

#### MARINE (Lakeside) CAMPUS (Near Fine Arts Hall, Fine Arts Avenue, Kochi – 682 016)

The Lakeside Campus, 12 km away from the Main Campus, has an idyllic setting in the heart of the City on the estuarine water front. The School of Marine Sciences and the School of Industrial Fisheries are located in this campus.

#### <u>PULINKUNNOO CAMPUS (Pulincunnu P O, Alappuzha, Pin – 688 504)</u>

The Pulinkunnoo Campus in Kuttanadu (Alleppey District) is about 75 km away from the Main Campus. The enrapturing scenic beauty of this campus surrounded by the serene picturesque backwaters of Kuttanadu is to be seen to be believed. The Pulinkunnoo Campus is home to the Cochin University College of Engineering, Kuttanadu (CUCEK).



### TEACHING DEPARTMENTS

## CUSAT is academically structured into the 9 faculties viz. Engineering, Environmental Studies, Science, Humanities, Law, Marine Science, Medical Sciences & Technology and Social Sciences & Technology

1	Cochin University College of Engineering Kuttanad
2	School of Engineering
3	KunjaliMarakkar School of Marine Engineering
4	Department of Ship Technology
5	Department of Instrumentation
6	Department of Electronics
7	Department of Computer Applications
8	Department of Computer Science
9	International School of Photonics
10	Department of Polymer Science & Rubber Technology
11	Department of Mathematics
12	Department of Physics
13	Department of Statistics
14	Department of Applied Chemistry

15	Department of Biotechnology
16	School of Marine Sciences
17	Department of Marine Biology, Microbiology & Biochemistry
18	Department of Chemical Oceanography
19	Department of Physical Oceanography
20	Department of Marine Geology & Geophysics
21	School of Environmental Studies
22	Department of Atmospheric Sciences
23	School of Industrial Fisheries
24	Department of Applied Economics
25	School of Legal Studies
26	School of Management Studies
27	Department of Hindi
28	Department of English and Foreign Languages



#### 1. COCHIN UNIVERSITY COLLEGE OF ENGINEERING KUTTANAD (CUCEK), PULINKUNNOO CAMPUS, Ph: 0477-2707500

Cochin University College of Engineering Kuttanad was established in 1999 and owned by Cochin University of Science and Technology. It is situated in a serene and beautiful 42 acre campus in Pulincunnoo, Kuttanad, the rice bowl of Kerala in Alappuzha district, which is about 75 Km away from the main campus at Thrikkakara. It is the only campus of CUSAT functioning outside Ernakulam District. It offers B.Tech programmes in Computer Science, Electrical & Electronics, Electronics and Communication, Information Technology, Mechanical Engineering, Civil Engg. and M.C.A. Many of the faculty members have refined and sharpened their knowledge through rigorous research activities and published their findings in various national and international science and technical journals.

#### 2. SCHOOL OF ENGINEERING, THRIKKAKARA (SOE), THRIKKAKARA CAMPUS, Ph:0484-2862750, 2556187, 2544745

School of Engineering was established in 1979 for offering part-time M.Tech. Programmes in the major disciplines of engineering viz.Civil, Mechanical, Electrical and Chemical Engineering for practicing Engineers in and around Cochin. The School introduced B.Tech. Programmes in Civil Engineering, Mechanical Engineering, Electronics and Communication Engineering, Computer Science & Engineering and Information Technology in 1995, which turned out to be a milestone in the growth of the School. B.Tech. in Safety and Fire Engineering was added in 1996 and Electrical & Electronics Engineering in 2003.

The School offers M.Tech. Full-time Programmes in Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Information Technology, Mechanical Engineering and in Health Safety and Environment Management. It also offers M.Tech programme (part time) in Civil Engineering, Electrical & Electronics Engineering, Mechanical Engineering and in Chemical Engineering in every alternate years.

Research activities were introduced in School of Engineering in 1981 with Ph.D. Programmes. The School has already produced 53 Ph.Ds and more than 250 candidates have registered as research students at present.

School of Engineering is one of the 19 institutions in the State of Kerala selected for funding under Technical Education Quality Improvement Programme (TEQIP –II).

School of Engineering has been well accepted as a research Centre. A number of research projects have been sanctioned to the School by agencies like DST, Central Water Commission, ISRO, AICTE, Coir Board, Kerala State Coir Corporation, etc. These have helped to establish fully equipped laboratories and promote research activities. The research community of the School has published papers in international/national journals.



#### 3. KUNJALI MARAKKAR SCHOOL OF MARINE ENGINEERING (KMSME), THRIKKAKARA CAMPUS, (Ph. 0484-2576606, 2862721)

The School offers the prestigious B.Tech. programme in Marine Engineering since 2003. The programme is designed as per the norms prescribed by the Directorate General of Shipping, Government of India and is approved by the AICTE. The course curriculum is in conformity with international standards laid down by the International Maritime Organization (IMO), a special agency of United Nations Organization. The School is assessed and certified by the quality management standards, ISO 9001-2008 and also rated as "Outstanding" by the statutory grading agency, CARE. The Ship-in-Campus established in the School complex offers state of the art facility catering hands-on-job experience for Marine Engineering students for the running and maintenance of a ship's machinery. Students are further getting trained in Full Mission Engine Room Simulator Lab. which is also installed in the School. School Library is stocked with over 6000 books of original publication in all the subjects relevant for Marine Engineering studies.

B.Tech. Marine Engineering course is a full time compulsory residential programme. Therefore, the students' hostel is located within the campus in a most hygienic and student friendly atmosphere. The hostel mess run by the School itself is provided with the most modern kitchen and other facilities so as to ensure hygienic and nutritious food to the students. The school and hostel facilities are under continuous surveillance and periodic inspection by Directorate General of Shipping, Government of India. Students are provided with Merchant Navy Cadets' Uniform for attending classes and boiler suits, safety shoes and helmet for workshop use. Physical training is compulsory for the cadets and is given by trained personnel. Uniforms for PT are also provided to the students.

The present annual intake in B.Tech. Marine Engineering is 80, through Common Admission Test conducted by the University on All India basis. The School also provides short term pre-requisite statutory courses in Engine Room Simulator for the students appearing for Competency examination in Class IV and Class II conducted by the Directorate General of Shipping. A full time two year (4 semester) M Tech programme in Marine Engineering with an annual intake of maximum 18 students started from the academic year 2014.

#### 4. DEPARTMENT OF SHIP TECHNOLOGY, THRIKKAKARA CAMPUS, (Ph. 0484- 2575714, 2862581)

The Department is one of the pioneers in the field of Naval Architecture education in the country. It was established in 1974, in technical collaboration with Rostock University, Germany. It has over the years established a firm foothold and name in ship building and other associated industries by producing a dynamic generation of Naval Architects to meet the requirements of Indian Shipbuilding Industry, Ship Classification Societies, R&D Organizations, the Indian Navy and other related Institutions.



In 2003, an academic collaboration was started with Chosun University, South Korea whereby exchange of students and faculty members take place between this Department and School of Aerospace and Naval Architecture, Chosun University. The course contents conform to international standards of similar Bachelor Degree programmes. The Indo-German Academic Exchange Programme, which the Department sustained till the mid-nineties enabled direct exposure to the latest concepts and techniques in Naval Architecture. The Department maintains active collaboration and interaction with many Universities abroad, IIT Chennai, IIT Kharagpur, and various Shipyards and classification societies in India, students as well as faculty members from all over the country and from abroad.

The students obtain practical knowledge from all these sources through regular visits and training programmes. It's highly qualified team of faculty members has published more than 150 research papers in technical journals of national and international repute. The B.Tech. (Naval Architecture & Ship Building) course is recognized by the Ministry of Surface Transport, Government of India for eligibility to the M.O.T. Certificate Examination. This course has also been accredited by the Royal Institute of Naval Architects (RINA), UK in 1994, as satisfying the Engineering Council (UK) requirements for the registration at stage I of Chartered Engineer Section. The Indian Navy has identified this Department as a Centre for Training in Naval Architecture and Ship Building. Cadets from Indian Navy are admitted to our B Tech programme every year.

M.Tech programme in Computer Aided Structural Analysis and Design (CASAD) was successfully launched by the Department in Academic Year 1995-96. The duration of the course is 4 semesters, where the first two semesters are fully devoted for the course work and the last two for the project work. The project works are carried out in house and also at various organizations such as SERC, ISRO, NPOL, EMRC etc. The Department commenced Ph.D .programme in 1996. The research areas by and large fall into the following categories:

- Structures (Marine and Civil)
- Naval Architecture (Shipbuilding, Computer Applications)
- Ship / Marine Hydrodynamics
- Ship Stability
- Ship Recycling



#### 5. DEPARTMENT OF INSTRUMENTATION, THRIKKAKARA CAMPUS, (0484-2862351, 2575008)

The Department of Instrumentation was established in the year 1995. Though it is a relatively young teaching and research department, it has a long history of evolution as it was derived from the University Science Instrumentation Centre (USIC). USIC was established in the University in 1978 as a service department with assistance from UGC. USIC has been extending instrumentation services to various science and technology departments of the University by way of design and fabrication, glass blowing, carpentry work etc. It has been carrying out consultancy work for other academic institutions, R & D organizations and industries as well. The Centre was elevated to the status of an academic department in the year 1995. From 1999 onwards, the Department is offering four years (8 semesters) B.Tech course in Instrumentation Technology. M.Sc Degree course in Instrumentation was started in 2011.

The Department has a very active research programmes in the areas of Instrumentation and Applied Physics. The Department has implemented several research projects sponsored by external funding agencies like DST, DAE, UGC, AICTE, KSCSTE and TWAS. It has been the venue for many a national symposia and the faculty members have published several research papers in reputed national and international journals. The Department extends instrumentation services to all sister Departments. It also offers consultancy for the design/fabrication of experimental systems for teaching/research, calibration/industrial applications.

#### 6. DEPARTMENT OF ELECTRONICS, THRIKKAKARA CAMPUS, (Ph. 0484-2862321, 2576418)

The Department of Electronics was established in 1975, as a post-graduate Department with Masters and Ph.D. Programmes in frontier field of Electronics. Post-graduate programmes include M. Sc. Electronics and M. Tech. Electronics with specializations in Microwave & Radar Electronics and Digital Electronics. The doctoral programmes are mainly in the fields such as Underwater Acoustics, Ocean Electronics, Microwave Propagation & Antennas, Microwave Material Studies, Microwave Image Processing, Pattern Recognition, Microprocessor applications and signal processing display devices. External agencies like the DST, ISRO, AICTE, DOE, DRDO, DOD, CSIR, NRB, MoES, DIT and the State Government are supporting this Department through various Research Projects and Research Fellowships.

The Department has well equipped laboratories in signal processing, microwave electronics, ocean electronics, intelligent machines and systems and Microprocessor Research for carrying out research work at M.Tech and Ph.D levels. The Department was chosen for special assistance by the UGC under different schemes. The UGC has sanctioned COSIST assistance in 1988 to the Department for development of post-graduate education and research in the areas of Microprocessor applications and Microwave Antennas. In 1994, the Department was selected by the UGC for Departmental Research Support (DRS)



in the field of Ocean Electronics. The Department has been selected for the special assistance programme (SAP) of UGC at DSA level in the year 2000. Recently, the UGC has recognized the Department as a participant in the Centre of Excellence in laser and optoelectronic sciences. The Department is currently undertaking research projects from various agencies and has successfully completed major research projects worth more than 1 Crore. The Department has already established international collaboration with Delft University (The Netherlands), Polarizone Incorporation (Malaysia), University of Paris, France, University of Kent (UK) for different research projects. The research facilities of the Department are used by different national research laboratories and research organizations like NAL Bangalore, SAC Ahmedabad, Indian Navy etc.

The Department conducts two symposia as biennial events – the National Symposium on Antennas & Propagation (APSYM) which commenced from 1988 and the Symposium on Ocean Electronics (SYMPOL) from 1991 onwards. Effective from 2007 onwards, SYMPOL is being organized as international conferences with the technical co-sponsorship of IEEE Oceanic Engineering Society and Acoustical society of America. The Department has over 250 research publications and 18 students have taken their Ph.D degree during the past five years. It also has a very good library facility with more than 6000 specialized books on Electronics and is subscribing to International and National Journals. The technical biasing of the University, spectacular growth of electronics industries in Kerala and the location of the University in the industrial zone of the State are all favourable aspects for the substantial development of this Department.

#### 7. DEPARTMENT OF COMPUTER APPLICATIONS, THRIKKAKARA CAMPUS, (Ph. 0484-2862391, 2576253, 2577602)

The Department of Computer Applications (DCA) was established in 1994 offering MCA programme with the financial support and a model curriculum from UGC and the Department of Electronics, Government of India to facilitate research and human resource development in the subject. The syllabus is being updated periodically according to the latest technology. Information Security, Simulation and Modelling, Cryptography & Coding Theory, Language Computing, Algorithm, Pattern Recognition, Web Mining, Graph Theory and its Applications, Image Processing, Data Mining, Networking and Software Engineering are the major research areas. 15 students have been awarded with PhD till date. Also another 3 scholars have submitted the thesis during the current year. It has 20 publications in last two years and more than 70 publications since its inception. The Department has an excellent library with more than 6000 books and a good number of National, International and Online Journals. The Department has a well-equipped laboratory with latest computers and software and 24 hour high speed (1GBPS) internet access through dedicated leased line. The Department has an active student's organization 'SAMCA' which also manages the Placement Cell assisted by the faculty members. The SAMCA hosts special interest groups in subject areas in Data Mining, Image Processing, Artificial Intelligence, Robotics, Cryptography etc. The Department also has a very good placement track record. The Department has a proud alumni, most of who are well placed with IT giants like IBM, HP, WIPRO, INFOSYS, TCS, CTS, BOSCH etc.



#### 8. DEPARTMENT OF COMPUTER SCIENCE, THRIKKAKARA CAMPUS, (Ph. 0484-2577126, 2862300, 2576368)

The Department of Computer Science (DCS) focuses on academic programs that prepare individuals for effective participation in computer and systems related professions. Qualified professionals in these fields continue to be in demand as organizations and economies rely upon the efficiency and effectiveness of computer based systems. Courses in the programs offered are designed to provide students with current skills for their first career position, with conceptual preparation to sustain their vocation throughout their career.

At present, three graduate programmes are offered:

M.Tech in Computer & Information Science

M.Tech in Software Engineering..

M.Tech in Computer Science with Specialization in Embedded Systems (Part-Time)

DCS offers two full time M.Tech programmes, having due approval of the AICTE. Research Programmes leading to PhD in Computer Science / Computer Engineering as well as in Information Science, are also offered. Started in the academic year 1984-85, DCS has been in the forefront in offering cutting edge courses, as well as in supporting CUSAT in its computer related activities. It was the seeding agent in establishing the Computer Centre in 1989, with support from the UGC and the DRDO, and has been managing the Centre. Five batches of students of the M.Sc in Computer Software had graduated from DCS, specifically to serve the DRDO laboratories. The CUSAT Intranet was conceived and commissioned by DCS; it also manages the net, along with the Webserver and the e-mail server. It has supported and enriched the MCA programme during the programme's brief stint at DCS.

Grants amounting to a total of around Rs.10.0 crores received from several funding agencies were managed by DCS based on projects it has initiated. The agencies include the MHRD, the DRDO, the UGC, the AICTE, the DST and the Nuffic of the Royal Government of the Netherlands. Two projects funded by the ISRO have been successfully implemented; more are in the offing.

While the major focus of research is on Information Systems, the departmental research interests span the Computer Science spectrum, as well. Recent publications cover topics in High Speed Computing, Human-Computer Interaction, Information Security, Networked Embedded System, Natural Language Processing, Software Engineering, VLSI, etc.

The research laboratories have been augmented / developed using the 2007 MHRD grant. They are:



- 1. Human-Computer Interaction Laboratory (HCI Lab)
- 2. Embedded Systems Laboratory (ESL)
- 3. Mobile Computing Laboratory (MCL)
- 4. Software Engineering Laboratory (SEL)

The DCS library has a rich collection of technical literature with more than 5000 volumes and all the ACM journals. In addition to the web access available in the library, it provides students with the opportunity to tap the latest information available, through a collection of technical journals, magazines, books, research papers, seminar proceedings and project reports.

The department has been selected for support by the Department of Science & Technology, Government of India, under its FIST programme. The funds received are being utilised to augment the post graduate programmes as well as to pursue research leading to Ph.D. Wireless Sensor Networks is one of the areas identified for further research.

#### 9. INTERNATIONAL SCHOOL OF PHOTONICS, THRIKKAKARA CAMPUS, (Ph. 0484-2862411, 2575848, 2577540)

Photonics is a high-tech subject which has evolved during the past two decades as a result of the fusion of optical technology with electronics. The subject has been hailed as the science and technology for the next millennium. Photonics has made its impact in various areas like communications, computing and control as well as in fields such as medicine, industry, defence and entertainment. Cochin University of Science and Technology is one of the first few Universities /Institutions in the country where due importance has been given to research, development and teaching activities in photonics and related areas. The International School of Photonics (ISP) came into existence in 1995. Research activities include the design and fabrication of various laser systems and laser components, detailed investigations of non-linear phenomena in different materials using photothermal, photoacoustic and related techniques, time and space resolved studies on laser induced plasmas from a variety of targets, design and characterization of fibre optic sensors, fabrication and characterization of polymer fibres, preparation and investigation of photonic materials and studies on photonics theory. Most of these activities are supported by funding agencies like DST, AICTE and UGC.

ISP at present offers a 4 semester M.Tech degree programme in Opto Electronics and Laser Technology and Ph.D Programme. Manpower development in this modern high technology field and establishment of collaborative research activities with various institutions in India and abroad are the major objectives of ISP.



Many of the alumni from ISP are now workings in advanced laboratories in various parts of the world. Four of the faculty members have won recognition through Fellowships/ Awards. Over 80 research papers were published during the past 5 years. The Department conducts a workshop/seminar in photonics annually during February. ISP has strong collaboration and interaction with a number of institutions such as Robert Gordon University U K, Nanyang Technological University in Singapore and Tampere University of Technology, Finland. Leading Organizations such as ISRO, SAMEER, NeST etc., select students from ISP through campus interviews. Major facilities include Master Optical Parametric Oscillator, High Power Nd: YAG Laser, 12 Watt Argon ion Laser, Optical Fibre drawing facility & Ring Dye Laser.

Thrust Areas of Research

Laser Technology

Fibre Optic Sensors

Nonlinear Dynamics

Lase Induced Plasma

Photothermal Phenomena

Laser control by Chaos

Nonlinear Optics

Polymer Optical

In recognition of the pioneering work carried out by the Laser Group in this University during the past two decades, the University Grants Commission identified Cochin University of Science and Technology as a "University with Potential for Excellence in the Field of Lasers and Optoelectronics Sciences" in March 2002 and released an initial instalment of grant of Rs.5 Crore. Following this, a "Centre of Excellence in Lasers and Optoelectronics Sciences - CELOS" was established in CUSAT in July 2002. The Primary objectives of this Centre are to initiate and organize teaching, research and extension activities in this highly specialized field of lasers and Optoelectronics.



CELOS started a five year integrated M.Sc. Degree course in Photonics in December 2002. Twenty students who have completed their +2 course are admitted every year to this course through the Common Admission Test (CAT) conducted by CUSAT. This is an integrated post graduate degree programme with duration of five years (10 semesters). The students are given intensive training in theory and practicals needed to provide a sound understanding of the modern subject of Photonics. Besides basic Mathematics and Physics, the subjects taught cover applied optics, Laser technology, Laser Applications, Optoelectronics and Fibre Optic Technology. Successful candidates who complete this M.Sc. Degree programme have plenty of opportunities in Photonics and Fibre Optics Industry and for advanced studies like M.Tech and PhD. Most of the students from the last batches are engaged in research in the area of Photonics in different parts of the world.

As part of launching research and development activities in the frontier areas, CELOS has established a major laser research facility with the most modern and advanced laser systems. This includes a femto/pico second laser system and related accessories. This is a major regional facility which will benefit the actual users from the different departments of CUSAT as well as from other research institutions and Universities in this part of the country. The activities initiated by CELOS are at present being implemented by ISP.

#### 10. DEPARTMENT OF POLYMER SCIENCE AND RUBBER TECHNOLOGY, THRIKKAKARA CAMPUS, (Ph. 0484-2862581, 2862580)

The Department of Polymer Science and Rubber Technology (P.S. & R.T.) established in 1971 is one of the pioneers in the area of education and research in Polymer Science and Engineering. In collaboration with the Rubber Research Institute of India the B.Tech. Programme was started in the year 1972. The starting of M.Tech. Programme in the year 1985 was a major milestone in the growth of the Department. The highly motivated faculty members with experience in Universities outside India have to their credit about 650 research publications in internationally reputed journals. More than 78 students have already taken their Ph.D. Degrees from the Department. The department has been organizing international Seminar series, Advance in Polymer Technology, APT, since 2002 to bring the Polymer scientists, technologists and engineers, working in academic institutions, industry and research organizations to a common platform. Almost 100% placement of the B.Tech and M.Tech students, mainly through campus selection, in major tyre companies, polymer manufacturing / processing industries and research institutions has been the tradition of the Department. Alumni of the Department are in senior positions in major polymer based industries, in India and in multinational corporations.

The eight-semester undergraduate B.Tech. Programme in Polymer Science and Engineering has been recently restructured in collaboration with the Eindhoven University of Technology, The Netherlands under the MHO programme. The revised curriculum has been designed to equip students in basic science and engineering skills, and to provide them up to date knowledge and skills in production, characterization, processing and testing of polymers and polymer



products. Practical trainings at the Rubber Research Institute of India, Kottayam, Central Institute of Plastic Engineering and Technology, Chennai other research institutions and in-plant trainings in Polymer Industries are the highlights of this course.

Teaching and research are intertwined in the four semesters of M.Tech .programme in Polymer Technology. The first two semesters in this programme comprise of lecturers, laboratory work and seminars. The students spend the third and fourth semesters in a research project either in a research institution / industry R&D or in the University. Two seats are reserved for candidates sponsored by University /Industry / Teaching or Research Organizations of Central /State Government or by Private Engineering Colleges approved by AICTE. The candidate (maximum age of 40 years as on 1st August of the year of admission) should have a minimum experience of three years in relevant field after completing the qualifying degree. The Department has a very active research group.

Major facilities in the Department include basic rubber/plastic processing equipment, Windsor Injection Moulding Machine, Shimadzu Autograph Universal Testing Machines (50 kN and 10kN), Alpha Technologies RPA2000 Rubber Process Analyser, TA Dynamic Mechanical Analyser Q800, TA DSC Q100, TA TGA Q50, Hitachi U-V Visible NIR Spectrophotometer, Bruker Tensor 27 FTIR, Zwick Impact Tester, Atago Abbe Regractometer, Keithley2182 Nano Voltmeter, Waters515 HPLC, Brookfield Viscometer, Carl Zeiss Stereo Microscope and ThermoHaake(Rheomix) Poly Lab System.

Thrust Areas of Research

Conducting polymers and composites

Nano composites

Recycling

Ionomers

Polymers from renewable recourses

Polymer Blends

Polymers for optical recording

Other highlights



The department has successfully completed major projects sponsored by Nuffic (MHO, The Netherlands), Volkswagen Foundation (Germany), MHRD, AICTE, DRDO, DST, and UGC. The Department has had a successful collaborative association with the Eindhoven University of Technology (TUE) and University of Twente, The Netherlands.

The Department received special assistance from the DST, Government of India under Fund for Improvement of Science and Technology Infrastructure (FIST) programme.

#### 11. DEPARTMENT OF MATHEMATICS, THRIKKAKARA CAMPUS, (Ph: 0484-2862461, 2577518)

The combined Department of Mathematics and Statistics came into existence in November 1976, with the major objective of developing it as a Centre of Excellence in this region in mathematical sciences and to provide facilities for training, study and research in these areas. This Department was bifurcated to form an independent Department of Mathematics on 1st January 1996. The Department offers MSc, M.phil and PhD programmes in Mathematics. The students of this Department after MSc generally take up teaching positions or opt for research. The Department has produced about 70 Ph.D.s and has published about 350 research papers in referred journals. Apart from giving instruction in post graduate courses, the Department has from the very beginning taken the leadership in promoting research in mathematics and its applications, especially in this part of the country. This is being realized in a two-fold way; one, by guiding young researchers to do their doctoral work and two, by conducting extension programmes which will improve the instruction at the P.G. level in colleges and encourage youngsters to take up research.

Thrust areas of research are Stochastic Control theory, Retrial Queues, Mathematical Finance, Graph Theory, Deterministic Field Theories, Fuzzy Mathematics, Wavelet Analysis, Operator Theory, Algebra, Category Theory, Topology, and Fluid Mechanics. The department has been receiving a library grant from NBHM since 1991 and financial support under FIST programme of DST since 2012. The department library has about 8650 books and subscribes to 12 Indian and 3 foreign journals, Mathematical Reviews and Mathscinet. Also the department has been co-ordinating the Mathematical Olympiads and related training programmes for school children with the assistance of NBHM since 1990.

#### 12. DEPARTMENT OF PHYSICS, THRIKKAKARA CAMPUS, (Ph: 0484-2862441, 2577404)

The present day Department of Physics of the Cochin University of Science & Technology first came into existence as the Department of Physics of the Ernakulam Centre of the University of Kerala in the year 1963. The Department of Physics was founded by Prof. K. Venkateswarlu with a moderate beginning and it gradually grew to a centre of excellence with emphasis on teaching and research. Today the Department of Physics is well known within India and



abroad for its contribution in teaching and research. During its existence for the last 50 years, it has made rapid strides in the realm of research, both in experimental and theoretical physics. The major thrust areas of the department are theoretical physics and material science. Research in the frontier areas of nanoscience and technology, optoelectronic devices, quantum computing, semiconductor devices, solar cells, holographic materials, high density storage batteries, astrobiology and quantum optics are also underway in the department.

The Department also has produced innumerable illustrious alumni and many of them are well placed in different spheres of life all throughout the globe. The department offers post graduate programmes namely M.Sc. (Physics), M.Phil (Physics) and Ph.D. The department of Physics is also a recipient of generous financial assistance in the form of sponsored projects from various agencies viz. UGC, AICTE, IUCAA, DST, DRDO, CSIR, IUAC, DAE, KSCSTE and others. At present, there are 14 ongoing research projects funded by various agencies. Last year UGC has recognized this Department as the Centre of Advanced Studies considering the various meritorious works during the last 50 years.

The faculty members of the department are engaged in active collaborative research with their counterparts at the national and international level. Some of the leading institutions with which they interact are NCL, Pune; NIIST, Trivandrum; Inter University Accelerator Centre, New Delhi; IGCAR, Kalpakkam; VSSC, Trivandrum, IUCAA, Pune and others. They also have ongoing collaborative programmes with faculty members from NTU, Singapore; NUS, Singapore; Rice University, USA; Toyo University, Japan; Tokyo Institute of Technology, Japan and IWATE University, Japan.

The department possesses the following sophisticated instruments for research:

Thickness Profilometer, Spectrophotometer, Fluorimeter, Liquid Nitrogen Plant, High Temperature Furnace, X-Ray Diffractometer, Nd: YAG Laser, Vacuum unit for laser plasma studies, HP 4192 LCR Meter, I-V Characterization unit (for pn junction), Hall measurement system, Optical microscope, Differential Scanning Calorimeter, HRXRD, XPS, FTIR, FESEM. These facilities are thrown open for users within and outside the state on nominal charges depending on the availability of the instrument time.

#### 13. DEPARTMENT OF STATISTICS, THRIKKAKARA CAMPUS, (Ph: 0484-2862471, 2575893)

The Department of Statistics was established in 1996 by bifurcating the erstwhile School of Mathematical Sciences. The Department offers M.Sc degree programme in Statistics, M.Tech in Engineering Statistics and research leading to Ph.D Degree. In addition to traditional teaching in Statistics, the Department is actively engaged in research in several areas of Statistics. Several research projects sponsored by UGC/DST have already been completed and one DST sponsored project is in progress.



The UGC has identified the department for special assistance at DRS II level. The Department is presently sponsored by DST, Government of India under its FIST programme. The Department has organized several seminars and workshops at the national and international level. The department library has about 3000 books in addition to subscribing to 20 journals. The Statistical Computing Laboratory of the department has several licensed software which include SAS, SPSS and Matlab. The department has a metrology laboratory with sophisticated instruments such as CNC Trainer, CMM Machine and other metrological instruments. There is a Center of Population Studies established in the Department aimed at conducting research in Demography and several other fields of social interest. The Department has close academic interaction with University of Waterloo, Dalhousie University, Canada, I.S.I. Calcutta, University of Dresden, Germany and University of Warwick, United Kingdom. Consultancy services are being offered to some industrial establishments and R & D institutions in the State in the field of Data Analysis, Planning of Surveys and Quality Improvement.

#### 14. DEPARTMENT OF APPLIED CHEMISTRY, THRIKKAKARA CAMPUS, (Ph: 0484-2862421, 2575804)

The Department of Applied Chemistry was established in 1976 to play an important role in the further development of the industrial belt in the Greater Cochin area by providing scientific support and trained personnel to the industries and by acting as a catalyst for the starting of new industries. The Department has grown and has now emerged as one of the best centres in Chemistry in the state of Kerala and had been fortunate to produce the only Bhatnagar Award Winner at that period in Chemical Sciences in the state (Dr. K.L. Sebastian, 1995). The department aims to transform itself into a Centre of Excellence for the Development of Chemical Industries in the state by providing trained personnel, scientific support and other consultancy and analytical services to solve the problems of the existing industries.

The Department has over 100 Ph.Ds and over 350 research publications and a few monographs to its credit. The Department has been selected for the FIST programme of Department of Science and Technology, Government of India and Special Assistance Programme (SAP) of University Grants Commission. Funds for these programmes are sanctioned to only a few Universities at the National level. The department is also undertaking a number of projects and schemes sponsored by funding agencies like UGC, CSIR, DST, STEC and DRDO. Major Analytical facilities in the department include UV–Vis Spectrophotometer, Gas Chromatographs with TCD, FID and mass detectors, Thermo Gravimetric Analyzer, Surface area analyzer, FTIR, HPLCs with UV, Diode array and mass spectrometer detectors, Electrochemical work station and Atomic Absorption Spectrophotometer.

As an extension activity, the instrumental facilities are offered to industries and academic institutions. The Department undertakes consultancy services for industrial/ R&D establishments etc. in an effort to find solutions to technical problems faced by them. The Department every year organizes either the National Seminar Series – 'Current Trends in Chemistry' (CTriC) or the International Seminar Series – 'Materials Conference' (MATCON), which attracts a number of



researchers nationally and internationally. These seminars help the department to re-focus its academic and research activities on a regular basis. The Department has International collaborations with National Technical University Singapore, KARD Scientific U.S.A., Limerick University Ireland, Polish Academy of Sciences Poland, Sultan Quaboos University Muscat, Bois State University U.S.A. and University Sains Malaysia. The Department also organizes outreach programmes for school children to inculcate an aptitude for Science and conduct such programmes in collaboration with KSCSTE, Kerala State Science and Technology Museum etc.

#### 15. DEPARTMENT OF BIOTECHNOLOGY, THRIKKAKARA CAMPUS, (Ph. 0484-2862571, 2576267)

The Department of Biotechnology was established in 1991, under the Faculty of Sciences for postgraduate teaching and research in the emerging area of Biotechnology. The M.Sc. programme in Biotechnology offers comprehensive education in all aspects of modern applied biology. The programme has been designed in such a way that the students are well trained in state-of-the-art techniques in the field of fermentation, molecular biology, genetic engineering, bio-informatics, molecular neurobiology and immunology. The theoretical and practical knowledge acquired by the student during the first three semesters is perfected through an intensive dissertation work during the fourth semester. Topically relevant problems are identified for the purpose so as to impart training in identification and execution of research problems and interpretation of data.

Most of the M.Sc. students opt for research programmes in national/international laboratories after they complete their programme. They also find employment in industries, educational institutions and other organizations involved in R and D and also in medical, pharmaceutical, agricultural and environmental biotechnology sectors. The Department has many achievements to its credit. More than 75 Ph.Ds have been awardedtill date and there are more than 200 publications to its credit. On an average about 60% of the M.Sc. students clear the UGC-CSIR-NET and 80% clear GATE, besides clearing the DBT (GOI)-fellowship examinations. The Department is also amongst the few at the National level to have been selected for the special assistance from DST (Govt. of India) under the FIST ( Fund for improvement of S & T infrastructure) both in 2003(2003-08) and in 2009(2009-2014). In addition there are also several externally funded research projects and schemes sponsored by UGC, CSIR, DBT, DOD, MoES, DST, ICMR, etc.

The departmental library has more than 1700 books on the subject and subscribes to several journals. The major analytical facilities in the Department include ultracentrifuge, Liquid scintillation counter, FPLC, UV-visible spectrophotometer, iso-electric focusing, 2D-gel electrophoresis, Confocal microscope, Real-time PCR, -these and other facilities provide opportunities for the students to carry out research activities in areas such as microbial technology, medical biotechnology, genetic engineering, molecular neurobiology, cell biology, plant biotechnology and immunology.



#### 16. SCHOOL OF MARINE SCIENCES, MARINE CAMPUS, (Ph. 2863216, 2863813)

The School of Marine Sciences (located at the Lakeside Campus of the University) has a glorious history of seventy three years of academic pursuit in marine sciences. Nucleated in 1938 as the Oceanography Laboratory of the erstwhile University of Travancore, the School has grown into the biggest academic facility in marine sciences in India. The School of Industrial Fisheries and the School of Environmental studies are off-springs of this evolutionary process. The School of Marine Sciences is the only institution in the country that has all the constituent disciplines harmoniously co-existing under one and the same roof. Currently, the school comprises five independent, but interdependent, departments with academic and administrative autonomy viz., Departments of Atmospheric Sciences, Chemical Oceanography, Marine Geology & Geophysics, Marine Biology, Microbiology & Biochemistry and Physical Oceanography. Facilities for teaching and research offer excellent opportunities for healthy interdisciplinary interaction. During the past seven decades, the school has produced over 2000 postgraduates, 550 PhDs, has to its credit and 1200 scientific papers published in journals of international repute and has taken the lead in organizing 30 International / National conferences. The School has won special recognition of the University Grants Commission under the DRS, COSIST, SAP and has completed Phase-II of the DSA Programme.

The Ministry of Earth Sciences, Government of India set up an Ocean and Atmospheric Science and Technology Cell (OASTC) in the School to encourage research in frontier areas of ocean/atmospheric sciences. The Centre for Integrated Management of Coastal Zones, established in the School (2002) offers consultancy and conducts research in the broad area of coastal zone management.

## 17.DEPARTMENT OF MARINE BIOLOGY, MICROBIOLOGY & BIOCHEMISTRY, MARINE CAMPUS, (Ph. 0484-2863215, 2368120)

The Department of Marine Biology, Microbiology and Biochemistry is an integral part of School of Marine Sciences. It is one of the first and foremost academic centres in Marine Biology in the country. The M.Sc programme in Marine Biology was started in 1958. The Department is engaged in research right from its inception in 1938 and more than 100 students have taken their Ph Ds in different areas of Marine Biology, Microbiology and Biochemistry. Nearly thousand research papers have been published so far by the researchers of the Department. Besides MSc and Ph D programmes, the Department also offers an M Phil programme in Life Sciences.

The Department has excellent infrastructure for teaching, research and training in the basic and applied frontiers of these disciplines. The facilities include a sophisticated central instrumentation lab with state of the art facilities such as HPLC, Transmission Electron Microscope, Freeze Drier, Fluorescence, uv – visible and atomic absorption Spectrophotometers, Gas Chromatograph, particle size analyser, Blood analyser, Gel documentation system, Water quality



analyser etc. Apart from the central instrumentation facility, the Department also has specific labs for Aquaculture, microbiology, biochemistry, algology, fish pathology, environmental toxicology, marine biology and marine ecology. The Department also has a large aquarium and well maintained museum facility.

Considering the research output of the Department over the years, the Ministry of Earth Sciences has set up an Earth Sciences and Technology Cell (ESTC) at the CUSAT School of Marine Sciences. Faculty members of the Department inspire their students to take up new challenges, share insights gained through professional experience and communicate the knowledge, they have spent a lifetime acquiring. With broad inter-disciplinary academic expertise, our faculty possesses a strong sense of integrity and commitment to sustainability, community development, and progressive education.

#### 18. DEPARTMENT OF CHEMICAL OCEANOGRAPHY, MARINE CAMPUS, (Ph. 0484-2863403, 2382131)

The Department of Chemical Oceanography has credentials of facilities and rich expertise in teaching / research on various chemical aspects of the aquatic system. It has pioneered investigations in many an area of vital significance and has contributed valuable inputs into the national database. Chemical Oceanography (Marine Chemistry) is the fulcrum for interaction between the various disciplines of Marine Sciences.

Two members of the faculty carried out post-doctoral research in the U.K. through the award of Commonwealth Academic Staff Fellowships. Sophisticated instrumental facilities available in the Department include UV-VIS Spectrophotometer, AAS, GC, HPLC, GC-MS, LC-MS, FTIR, Polarographic Analyzer, Laminar Flow Chambers, etc. The Department is actively engaged in consultancy and extension activities that include Analytical Testing/Training, Water Quality Analysis etc.

#### 19. DEPARTMENT OF PHYSICAL OCEANOGRAPHY, MARINE CAMPUS, (Ph: 0484-2863219, 2363950)

Oceans are vital to the world especially to a coastal nation like India due to its commercial (fishery, minerals, freshwater, salt, hydrocarbons, medicine, transport and energy), military and academic (weather and climate) values. It is also a known fact that oceans are one of the key components that influence climate and climate change due to its various interacting scales of processes. Physical oceanography is the study of physical processes that occur within the oceans and its interaction with the atmosphere, lithosphere and biosphere. To cater the needs of physical oceanographers for this country, a postgraduate programme in Oceanography commenced in 1965 at the erstwhile Department of marine Biology and Oceanography under University of Kerala which later came under the Physical Oceanography and Meteorology Division (POMD) of University of Cochin. In 1996, the Department of Physical Oceanography was established and the course was continued to offer under the Department. In 2001, a new course in M.Tech. Ocean Technology commenced in the Department aimed to explore the technological aspects of the oceans for the benefit of the nation.



In the academic sector, the department has been the forerunner in producing skilled Oceanographers for this country over decades; many of them are leading scientists in many research organizations. Students of this department were awarded with national UGC-CSIR Fellowships and able to secure research positions in major research institutions in India and abroad. With timely updating of the curricula (held recently in 2014) and training methods, the Department has been able to promote and develop a strong contingent of Oceanographers within the country and abroad. The department is also active in research by conducting major research projects funded by national bodies such as UGC, DST, MoES, SAC etc. and credited with valuable research publications. Members of the faculty have active collaboration with national research bodies and have also been awarded with International Fellowships.

#### 20. DEPARTMENT OF MARINE GEOLOGY & GEOPHYSICS, MARINE CAMPUS, (Ph. 0484-2863315, 2366478)

Earth Science education is enhancing its relevance and scope globally owing to recent advances in geoexploration and the role it has in environmental and developmental issues. CUSAT is one of the premier Universities in the country to begin a full-fledged post graduate programme in Marine Geology in the year 1976 taking into account the global advancement in general and national needs in particular in the field of Marine Science. A 3-year M.Sc (Tech.) programme in Marine Geophysics was introduced in1992 which has now been restructured into a 2-year M.Sc. programme. Both the programmes have been designed to aim at the development of manpower in the fields of Marine Geology and Geophysics with a special emphasis on off-shore areas with a view to cater to the needs of various research institutions and survey organizations as well as private companies engaged in mineral exploration, sea bed surveys, remote sensing and oil and ground water prospecting. Several major research projects funded by external agencies have been undertaken / are in operation in the Department. Infrastructural facilities available include X-ray Diffractometer, Sedimentation balance etc.

#### 21. DEPARTMENT OF ATMOSPHERIC SCIENCES, MARINE CAMPUS, (Ph. 0484-2863804, 2353662)

Department of Atmospheric Sciences is a centre of excellence in teaching as well as research in the field of Meteorology/Atmospheric Sciences and is located in the serene and beautiful Lakeside Campus of the Cochin University of Science and Technology. The Department started offering a 4-semester M.Sc Course in Meteorology since 1975 and a 4-Semester M.Tech Course in Atmospheric Science since 1989. The course content of all the above courses is of international standard updating every 3 years. As per the scheme of the Government of India entitled New Millennium Indian Technology Leadership Initiative (NMITLI) on Mesoscale Modelling for monsoon related predictions, the Council for Scientific and Industrial Research (CSIR) has identified the Department of Atmospheric Sciences as one of Centres of Excellence to carry out research work in the frontier area along with other premier centres such as Indian Institute of Technology, Delhi; Indian Institute of Tropical Meteorology, Pune; Indian Institute of Science, Bangalore; Tata Institute of Fundamental Research, Mumbai; C-MMACS, Bangalore and National Aeronautical Laboratory, Bangalore. Presently CUSAT is involved in the Phase II research activities of NMITLI Project.



The University Grants Commission has selected the Department of Atmospheric Sciences under its Special Assistance Programme (SAP) based on the quality of teaching, academic achievements, research in thrust area and viable potential for future development. The essence and primary aim of SAP of the UGC is the combination of teaching and research to encourage group research efforts. The project entitled, Monsoon Cloud Characteristics under UGC – SAP - Level DRS Phase III from 2013 to 2018 has been sanctioned with a total grant of Rs.62 lakh to carry out research in the frontier area of Atmospheric Sciences. The financial support for five years is expected to develop the Department into a Centre of Excellence.

Department received Rs.20 lakh as Special Assistance from UGC(SAP) for Augmentation of Infrastructure and Rs.30 lakh towards infrastructure development under the FIST programme of the Department of Sciences and Technology, Government of India during 2007 – 2011. UGC has also identified this Department as the Nodal Centre for introducing Computer Application Course at the Post Graduate level and extending lectures to other selected Departments of the University. Special funding is provided to the Department for conducting the course. DST has sanctioned a prestigious project on Studies on the Troposphere features and Stratosphere - Troposphere coupling processes over the Monsoon region using Stratosphere - Troposphere (ST) Radar at Cochin with K. Mohan Kumar as Project Coordinator. The Department has high speed computational facilities, and a full-fledged surface weather observatory consisting of an automatic weather station, Sonic Anemometer, Micro rain radar, high resolution GPS RadioSonde etc. It has also setup a data bank, which has NCEP/NCAR reanalysis global data, UARS data from NASA, Rocket data, MST Radar data, surface weather observations, TOMS data, etc.

The Department has produced 47 Ph.Ds and published about 250 research papers in reputed international and national scientific journals. In addition, more than 330 research papers were presented in various national/international scientific conferences in India and abroad. Eminent Scientists and Professors are often invited to the Department for giving lectures in advanced areas. The Department organized many national-level seminars and UGC Refresher Courses. Several national and International Conferences in Climate Variability and Predictability, Stratosphere - Troposphere Interactions, TROPMET2000, Scale Interactions and Variability of Monsoons, Atmosphere Ocean Interactions, preservation of ozone layer and climate change etc. were successfully organized by the Department.

#### 22. SCHOOL OF ENVIRONMENTAL STUDIES, THRIKKAKARA CAMPUS, (Ph: 0484-2862551, 2577311)

The School of Environmental Studies, a Centre for higher learning dedicated to environmental protection and sustainable development conceptualized in 1980, was established in 1983 to serve the cause of well-being of the society by emanating knowledge and by providing trained manpower and appropriate environmental technology. To achieve these objectives, the School offers M.Sc. in a carefully designed curriculum and reaches out to the community with socially relevant extension programmes. The School is DST-FIST sponsored and UGC-SAP assisted. The School has achieved a grant of Rs.75 lakhs under



the FIST programme and Rs.37 lakhs under UGC-SAP programme. The School conducted a study on Urban Governance Service for Climate resilience Strategies: Assessment of Cochin, India sponsored by Rockefeller Foundation and the Institute of Development Studies, University of Sussex, U.K.

The National Centre for Aquatic Animal Health (NCAAH), attached to the School of Environmental Studies conducts a two year M.Tech. programme sponsored by Department of Biotechnology, Government of India under its network programme in human resource development in biotechnology.

The M.Sc. Environmental Technology is offered with specialization in two disciplines:

Stream I: Environmental Engineering and

Stream 2: Environmental Biotechnology.

Candidates with Chemistry/Engineering background are admitted to the Engineering Stream and candidates with Life Science background are admitted to the Biotechnology stream. In addition to giving a holistic picture of the environment and its processes, the programme imparts training in branches like Environmental Engineering, Environmental Management, Environmental Monitoring, Waste Management and Environmental Modelling.

During the first two semesters, students of both streams take the same core programmes. In the third semester, they segregate to their respective disciplines and take advanced training. The fourth semester is allotted for a full time project work, at the end of which the candidate has to submit a dissertation. The students are encouraged to do project work in institutes of higher learning or industrial research laboratories. This will give them the much-needed exposure to the work-culture and state-of-the-art facilities available at such centres. Doctoral programme is offered in the areas of: Environmental Biology, Environmental Chemistry, Environmental Photocatalysis&SonoPhotocatalysis, Environmental Microbiology, Environmental Management, Environmental Toxicology,

Environmental Biotechnology, Environmental Engineering and Remote Sensing. The School is equipped with major equipments such as Gas Chromatograph, Total Organic Carbon (TOC) Analyser, Spectrophotometers, Pulse Field Gel Electrophoresis, Inverted Microscope, CO2 Incubator, Electrophoretic Systems, Plant growth chamber, Luminometer and GIS Work station and other minor equipments like Air Sampler, BOD Incubator, COD digester etc., required for Environmental Chemical analysis.

The School has produced several Ph.Ds. The School periodically conducts UGC sponsored Refresher Courses for University and College Teachers. It has also successfully completed externally funded research projects from agencies such as the UNESCO, IFS Sweden, OPCW The Netherlands, DST Govt. of India, DBT, UGC, ICAR, Coir Board, STED Kerala, etc., while some are still ongoing. With its expertise and infrastructure, the School extends consultancy services



in Pollution Monitoring, Water Quality Management, Water Treatment, Disease Diagnosis and Management of Aquaculture Systems, Environmental Impact Assessment etc. The School has participated in the EIA of Metro Rail Project of Kochi city. The School carries out environmental surveys for local authorities and government agencies on baseline status and waste management practices.

#### 23. SCHOOL OF INDUSTRIAL FISHERIES (SIF), MARINE CAMPUS, (Ph. 0484-2863711, 2354711)

The Department of Industrial Fisheries was established in 1976 with the prime objective of training students to meet the growing demand for qualified personnel in the fisheries sector. It offers expertise in various branches of fisheries science like Fishery Biology, Capture Fisheries, Aquaculture, Fishing Technology, Fish Processing Technology, Fisheries Economics and Fisheries Management. The Department was upgraded as a school in 1995 in due recognition of various academic and scientific achievements. Five divisions viz. (1) Aquaculture and Capture fisheries (2) Fishing Technology (3) Fish Processing Technology (4) Fisheries Economics (5) Fisheries Management were constituted for future expansion.

Since its inception, the School has been actively involved in crafting students to take up managerial challenges of fisheries in India and overseas. The Alumni are the brand ambassadors of the School and are serving in various capacities such as Heads of renowned institutions, Faculty, Scientists, Administrators, Technocrats and Professional Executives. The alumni interact strongly in all academic and extension activities of the School.

The School organized 13 International Conferences, 23 National Conferences and 17 Workshops since its inception. The School has developed research partnership with more than 32 countries in frontier areas of Fisheries Science such as Aquaculture, Capture Fisheries, Harvest and Post Harvest Technology and Marine Biodiversity. The activities also comprise staff secondment programmes, visit of Scientists on short and medium periods, organization of workshops, seminar, symposia, delivering of lectures etc. The School has carried out more than 10 international and 30 national research projects during the past decade funded by European Commission, Nuffic, Indo-Dutch Co-operation, Indo-Canadian funding assistance, Ministry of Earth Sciences, DOD, KSCSTE, ICAR-FRMS, ADAK, DOD-OSTC, NATICAR, World Bank and UNCTAD among others.

The faculty of the School also offers consultancy services and training programmes to the Government and Non-Governmental Organizations and Industry. Members of the faculty have participated in several international symposia, workshops etc. The faculty of this School serves as members in various expert committees constituted at regional, national and international levels.

#### 24. DEPARTMENT OF APPLIED ECONOMICS, THRIKKAKARA CAMPUS, (Ph. 0484-2862561, 2576030)



The Department promotes studies and research pertaining to the economic dimensions of science, technology & society and the economic problems of the region. It also provides training to college teachers in the state to enhance their capabilities in teaching and research. Another area of activity is developmental economics. The Department also offers a Master's Degree Programme in Applied Economics.

#### Core Areas of Research

Problems of regional development in Kerala, Industrial Economics, Fishery Economics, Environmental Economics, International Economics, Econometrics and Women's Issues.

This department is mainly concentrating on Research Activities

#### 25. SCHOOL OF LEGAL STUDIES, THRIKKAKARA CAMPUS, (Ph. 0484-2862481, 2575465)

Established as the P.G. Department of Law of the Kerala University in 1962 under the leadership of the late Prof. (Dr.) A.T. Markose, an internationally reputed jurist who was the founder Director of the Indian Law Institute, New Delhi and Deputy Judge of International Administrative Tribunal, the School of Legal Studies is a prestigious institution of the University.

The pioneering effort of the School in encouraging P.G. studies and research in the vital field of administrative law earned its name and fame. Its commitment to social development has made it to develop teaching and research in socially relevant and nationally important emerging areas of law, such as constitutional Law, Labour Law, Maritime Law, Corporate Governance and Securities Law and Intellectual Property Law. Its consistent dedication to social change has attracted the attention of UGC and Government of India and its programmes on Human Rights, Corporate Governance and Securities Law and Intellectual Property Rights Law are now substantially supported by these agencies.

Apart from pedagogic and lecture methods of teaching the School adopts new methods of discussion, seminars and tutorials which facilitate dissemination of advances in legal knowledge. Clinical legal training provides opportunities for extension activities and community reach out. The Library of the School has an excellent collection of precious periodicals and books. This priced holding and exceptional services have helped it to be recognized as a Nodal Centre for IPR studies. The Government of Kerala in recognition of the significant contributions made in the area of IPR has established an Inter University Centre on IPR studies in 2010. The School has established an IPR Depository consisting of rare books and journals with the aid of MHRD, Government of India. The World



Intellectual Property Organization (WIPO), a body of United Nations has donated its major publications to this Depository. The MHRD has sanctioned a Chair for IPR studies.

The School has been fortunate to attract scholars having experience and education from different parts of the world to be in its vibrant teaching faculty. The faculty of the School has earned repute in their respective areas of scholarship and is consulted by various agencies including the Government of India on Law Reforms. In 2011, the UGC has provided funds under its Special Assistant Programme to start courses in Corporate Governance and Securities Law. The Public Law Lecture Series established by the School has already produced commendable works in law and has received tremendous appreciation and applause. The LL.B. (3 year) programme started in 1994 as an evening programme is now a semesterised, full-time programme. In 2006, 5 year LL.B (Hons.) has been introduced. From 2009 onwards as directed by the Bar Council of India, the course has been remodelled and a B.B.A., LL.B. (Hons.) programme is offered. From 2013 B.Com LL.B(Hons.) course also has been introduced. A Human Rights chair in the name of late Justice V.R. Krishna Iyer has been established in the School. It enables interdisciplinary research and extension work in Human Rights values.

#### 26. SCHOOL OF MANAGEMENT STUDIES, THRIKKAKARA CAMPUS, (Ph: 0484-2862521, 2575310)

The School of Management Studies is one of the oldest academic units of the University. It was conceived with an aim to promote management education, way back in the year 1964. Being one among the first five management schools to be established in the country, it started functioning in the premises of the Fertilizers and Chemicals Travancore Ltd. (FACT) in October 1964 as a part of Kerala University with Professor Emeritus (Dr.) M.V.Pylee as the Director. When University of Cochin was formed in the year 1971 (which later became Cochin University of Science and Technology) the school became an integral part of the Cochin University. Since then, the school has striven tirelessly in pursuit of excellence in management education, and is celebrating its Golden Jubilee in 2014. The School has been ranked as one among the top Business Schools in the country. The School is relentlessly pursuing its aim of teaching, training, research and consultancy. SMS offers the following Programmes:

- 1. MBA (Full Time),
- 2. MBA (International Business),
- 3. MBA (Travel and Tourism),
- 4. MBA (Part-time),



#### 5. MPhil (Commerce) and

#### 6. PhD programme.

It also conducts Management Development Programmes and undertakes consultancy projects. Currently the school offers electives in the areas of Marketing, Finance, Systems and Operations and Human Resource Management. The pedagogy includes lectures, seminars, case studies, one month long organizational study, and a project in the final semester. The faculty of the School has published over 40 books and hundreds of research papers in journals of standing. Thus the school has evolved with changing times, effectively "moulding managers for mankind". SMS Library is well equipped and one among the best in South India with around 40000 books. The institute subscribes to over 104 journals, 79 Indian and 25 foreign issues. It also has a rich depository research volume of over 2400. CUSAT Library has IP enabled access to online Journals under the UGC-INFONET - E-Journals Consortia and INDEST Consortia set up in the Campus Network. The library also subscribes many other e-journals. Computer Lab is well equipped with latest software and other facilities. It has more than 40 computers with Internet connectivity and access to digital databases. Students stay connected round the clock with the added benefit of Wi-Fi available for their laptops.

#### 27. DEPARTMENT OF HINDI, THRIKKAKARA CAMPUS, (Ph. 0484-2862500, 2862502)

The Department of Hindi, established in 1963, is one of the oldest departments of the University. It was a part of the Kerala University and joined the folds of University of Cochin when it was established in the year 1971. From the period of inception it has blossomed into one of the prestigious institutions among Indian University Departments engaged in teaching and research of Hindi Language and Literature.

The Department is actively engaged in research in different areas like Ancient and Modern Poetry, Fiction, Drama and Theatre studies, Criticism, Grammar, Linguistics, Comparative Studies of Languages and Literature, Folk Literature, Translation, Computer Aided Language Teaching etc.

The Department is one of the leading centers of research in Hindi and the faculties have guided about 186 Ph.Ds. The creative capabilities of four of the teaching faculty received the recognition through the award of Fellowships/Prizes. About Sixty Seven research papers, Twenty Six books and learned articles have been published by the faculty during the past four years. The Department has completed four research projects including one on CALT - Computer Aided Language Teaching. The DRS Phase I, II & III have been completed by the Department and the UGC has sanctioned next stage of SAP programme ie., DSA for a period of five years. The Department of Hindi is the only Department in South India which got DRS and DSA programmes in Hindi.



The Department Library has about 40677 books and is currently subscribing 42 journals. The PG students and Research Scholars from various parts of Kerala use the Library as a reference centre. It has been assessed as one of the best libraries in the country. The Department has a well-equipped computer lab and conducts short term Computer Courses. The Department organizes national seminars every year and also conducts UGC sponsored programmes.

Programmes of Study/Research in the Department

M.A. Hindi Language and Literature

M.Phil

P.G. Diploma in Translational and Functional Hindi

Ph.D

Short Term Course in Computer based Training and Teaching in Hindi.

#### 28. DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES, THRIKKAKARA CAMPUS, (Ph. 0484-2862511, 2575180)

The Department of English and Foreign Languages was initially established as the Department of Foreign Languages in 1976. This Department is mainly involved in the teaching of English and Foreign languages like French, German, Italian, Japanese and Russian. However, in order to give supreme importance to English Language teaching and the cultural backdrop that encompasses each foreign language, the Department was rechristened as the Department of English and Foreign Languages in 2012.

All the courses in the foreign languages are at present restricted to Certificate and Diploma levels. A few years back in order to meet the contemporary needs M.A. Course in German and Russian Translation were also introduced. The Department also conducts short-term and need-based courses in the above foreign languages if there are aspirants. The Department undertakes translation and consultation work connected with the above foreign languages. Around 10 years back short-term course in Communicative English and 1 year Post Graduate Diploma Course in Communicative English were introduced. The short-term course in Communicative English is enjoying a high demand and this course is repeated every three months with an in-take of 25 students. The Department also conducts Short-term courses in French, German and Italian at regular intervals. For admission to the various courses of this Department, candidates may contact the Department directly.



## **AUXILIARY CENTRES**

1) Centre for Excellence in Lasers and Opto-Electronic Sciences
(CELOS)
2) Sophisticated Test and Instrumentation Centre (STIC)
3) Inter University Centre for Nano Materials & Devices (IUCND)
4) Centre for Advanced Materials
5) Inter University Centre for Studies on Kerala Legacy of
Astronomy and Mathematics
6) Centre for Particle Physics
7) Advanced Centre for Atmospheric Radar Research (ACARR)
8) Centre for Alternate Energy Sources
9) Centre for Techno Strategic Studies (CTESS)
10) Centre for Innovation, Technology Transfer and Industrial
Collaboration
11) Directorate of Sponsored Research and Industrial Consultancy
12) Centre for Information Resource Management (CIRM)
13) Centre for National Technical Manpower Information System
14) Centre for Science Communication
15) Centre for Science in Society (C-Sis)
16) Innovation and Entrepreneurship Development Centre (IEDC)

17) Centre for Enabling Technologies for the Aged	
18) Centre for Employee Empowerment and Skill Acquisition	
19) Directorate for Management of Resources and Budget	
20) K.M. Mani Centre for Budget Studies (KMMCBS)	
21) Centre for Study of Social Exclusion and Inclusive Policy	
(CSSEIP)	
22) International Centre for Economic Policy and Analysis (ICEPA)	
23) Centre for Population Studies,	
24) Women's Studies Centre	
25) Centre for Adult Continuing Education and Extension	
26) Inter University Centre for Development of Marine Bio-	
Technology	
27) Centre for Integrated Management of Coastal Zones	
28) Ocean Science Technology on Marine Benthos	
29) National Centre for Aquatic Animal Health (NCAAH)	
30) Rajiv Gandhi Chair for Contemporary Studies (Ecosystems &	
Sustainable Development)	
31) Centre for Monsoon Studies	
32) Inter University Centre for Intellectual Property Rights Studies	
33) Centre for Neurosciences	



#### HIGHLIGHTS OF AUXILARY CENTRES

#### 1. CENTRE OF EXCELLENCE IN LASERS AND OPTO ELECTRONICS SCIENCES (CELOS)

In recognition of the pioneering work carried out by the Laser Group in this University during the past two decades, the University Grants Commission identified Cochin University of Science and Technology as a "University with potential for Excellence in the field of Lasers and Optoelectronics Sciences" in March 2002 and released an initial instalment of grant of Rs.5 crore. Following this, a "Centre of Excellence in Lasers and Optoelectronics Sciences" was established in CUSAT in July 2002. The primary objectives of this Centre are to initiate and organize teaching, research and extension activities in this highly specialized field of Lasers and Optoelectronics.

CELOS is presently merged with the International School of Photonics. CELOS started a Five year Integrated M.Sc. Degree Course in Photonics in December 2002. Twenty students who have completed their +2 course are admitted every year to this Integrated M.Sc. Degree programme through the Common Admission Test conducted by CUSAT. This is an integrated post graduate degree programme with duration of five years (10 Semesters). The students are given intensive training in theory and practicals needed to provide a sound understanding of the modern subject of photonics. Besides basic Mathematics and Physics, the subjects taught cover applied optics, laser technology, laser applications, optoelectronics and fibre optic technology. Successful candidates who complete this M.Sc. Degree programme have plenty of opportunities in Photonics and Fibre Optics industry and for advanced studies like M.Tech and Ph.D. Most of the students from the last batches are engaged in research in the area of Photonics in different parts of the world.

As a part of launching research and development activities in the frontier areas, CELOS has established a major laser research facility with the most modern and advanced laser systems. This includes a femto/pico second laser system and related accessories. This is a major regional facility which will benefit the actual users from the different departments of CUSAT as well as from other Research Institutions and Universities in this part of the country. The Centre has now been merged with International School of Photonics.

#### 2. CENTRE FOR SCIENCE IN SOCIETY (C-Sis) - AN OUTSTANDING SOCIAL OUTREACH PROGRAMME OF THE UNIVERSITY



The Centre for Science in Society was established in 1991 under the UGC VIII plan Development Assistance with partial financial assistance from Cochin Refineries Limited. It is instituted as endowment (BPCL Chair/Professor) in the University. The Centre conducts various programmes about science with the view to popularize Science and Technology among children. Government of Kerala has approved C-SiS as a Training Centre for High School science teachers under the prestigious "Sastraposini" Programme. In 2013-14, Kerala State Council for Science, Technology and Environment (KSCSTE), Govt. of Kerala has sanctioned a project entitled 'Enlightening of scientific spirit and awareness among school students and Teachers through a 'Two-in-One' project for the benefit of school children and their teachers to develop scientific awareness and passion for knowledge through various learning process using innovative science gadgets and books". This project is ongoing.

#### Facilities available

- 1. Science Park- The outdoor facility where the children can play and learn many science principle using play models.
- 2. Science Pavilions (Physics &Biology), Exhibition halls-Here the participants can interact with various gadgets and models arranged in the laboratory. The working principles will be explained to them. In the biology section, a number of specimens are exhibited
- 3. "See & Believe" Labs- Laboratory experiment sessions; (Physics, Chemistry and Biology) in which children can do themselves basic experiment in science and experience the thrill of science.
- 4. Maths Lab-Models & Gadgets to learn Mathematics through simple methods.
- 5. Computer lab –with modern facilities like e-mail, internet and multimedia.
- 6. Children's Science library A rare collection of about 10500 popular science books and science journals, 250 CDs, Scientific American's Amateur Scientist Projects of the last 78 years, National Geographic Magazine, Rare Books like HortusMalabaricus, Lakhupanineeyam, Ganithayukthibasha, etc.
- 7. Hall of Scientists (Statues)-Statues of famous scientists with brief description of their contributions and achievements are exhibited to excite children with the growth of Science.
- 8. Work experience lab.
- 9. Satellite Centre with uplink and downlink facilities.
- 10. The Herbal Park & Butterfly garden A Herbal Park where medicinal plants are exhibited with labels. A Butterfly garden where Special plants attracting butterflies are grown. A good number of beautiful butterflies may be seen on normal bright days.

A fully operational Rain Water harvesting unit is also set up in the Science Park.



The Indian Space Research Organization (ISRO) is putting up a 'Space Pavilion' in the Science and Technology Park of C-SiS. Models of their space rockets, Chandrayaan and video shows of rocket launching from Sriharikotta will be shown to the visitors. The formal inauguration of the Space Pavilion is expected to be held shortly. The U.S based IEEE (Institute of Electrical and Electronics Engineers) has come forward to establish an 'E –Scientia' (Electronics Scientific Exhibit) in the Science and Technology Park of CSiS. The trajectory monitoring and error correction in the process of Satellite Launching are shown to the group of students who visit C-sis.

C-SiS will have a spacious building to house its various laboratories and other facilities. The Construction of the first floor of the U.G..C sponsored building for C-SiS by CPWD is completed. The construction of the second floor will also be taken up shortly.

#### Ongoing Programmes for Children's Science education in C-SiS.

a. One Day Attachment Programme (ODAP):

This is a programme which aims at acquainting children with various science principles and experimental set up, through interactive study materials. A well planned one day programme for batches of students from one or two schools (with prior reservation). Details are as follows:-

Module/Batch Time

1. M1-ODAP 9 am – 3 pm

2. M2-ODAP 10.30 am - 4.30 pm

3. M-IODAP 9 am - 5 pm

The children will have opportunity to participate in most of the following programmes on the day:-

Lecture-cum-Demonstration

See & Believe-Laboratory

Science Pavilion



Science Park

The Children's Science Library

The Multimedia Computer facility for learning.

The Herbal Garden

Maths Laboratory

b. Science Talent Development Programme (STDP): (Mid-summer Programme)
Science Talent Development Programme is an intensive programme meant for children with special aptitude for science. This is an intensive programme meant for children studying in 4th to 10th Standards with special aptitude for science.

The Mid-Summer Programme (STDP- M1) starts in first week of April and will continue till the end of the Month. A Mid Summer Programme (STDP-M2) suitable for Schools with vacation in May / June starts in the 1st week of May and ends in the last week of the month.

#### 3. SOPHISTICATED TEST AND INSTRUMENTATION CENTRE (STIC)

STIC is a joint venture of the Kerala State Council for Science, Technology and Environment (KSCSTE) and Cochin University of Science and Technology (CUSAT). This institution has been established with the following objectives.

- 1. Provide advanced instrument facilities for analysis testing, measurement and calibration to users from industries, academic institutions and R&D establishments.
- 2. Undertake research and development in the field of instrumentation and related areas relevant to industries in the State.
- 3. Undertake training and other services for personnel from industries, R&D establishments and academic institutions.



STIC has established highly sophisticated test, measurement, calibration, analysis and research laboratories in the areas of instrumentation, quality evaluation / calibration, chemical analysis and testing. A good number of industries, academic institutions and research establishments make use of the services of STIC. In addition to regular calibration, testing and analysis activities, the scientific personnel in STIC are involved in research and development in instrumentation and allied areas.

- a. STIC has set up the following facilities to carry out its activities.
- b. NABL accredited calibration laboratories (Electro-Technical, Thermal, and Mechanical)
- c. Testing laboratories (Electrical, Plastics, Mechanical)
- d. Sophisticated Analytical Instrument Facility (SAIF), supported by Department of Science and Technology, Government of India.
- e. Instrumentation R & D Laboratory.

More details are available at www.sticindia.com

#### 4. NATIONAL CENTRE FOR AQUATIC ANIMAL HEALTH (NCAAH)

NCAAH (formerly Centre for Fish Disease Diagnosis and Management) was establishment in 18<sup>th</sup> January, 2000 to cater to the requirement of aqua farmers in protecting health of rearing stock through the introduction of the recent advancements in marine biotechnology, and situates in the Lakeside Campus of the University. Motto of the Centre is 'Relentless effort for the protection of health of aquatic animals and their environment". To achieve the goal, it continually endeavours to transfer the output of research directly to the end users, the aqua farmers. These endeavours resulted in the development and commercialization of nitrifying bioreactors for establishing recirculating aquaculture systems, bioaugmentors for zero water exchange grow out systems, probiotics for the management of gut microbial flora in favour of the animal, vaccines and immunostimulants to protect them from both viral and bacterial pathogens. The centre could implement 31 externally funded projects over the years through which, state of the art infrastructure of furthering research and development in aquatic animal health and marine biotechnology could be developed. An active extension wing has been functioning in preventing diseases in culture systems by educating farmers and providing the required inputs for application. A unique feature of the Centre is its in-house production facility, the Aquaculture Health Products Division to meet the needs of the aquaculture industry. Aquaculture extension cell is the link of the farmers to technology. Besides, the Centre maintains a diagnostic service to the diseases which often occurs during the culture. NCAAH is the seventh Regional Resource Centre (RRC) in aquatic animal health of the Network of Aquaculture Centres in Asia Pacific (NACA) which has its headquarters at Bangkok, Thailand. As an RRC, the Centre is mandated to



provide scientific and technical training of personnel from the South Asian Region, diagnostic Testing Facilities to countries who are members of the Regional Aquatic Animal Health initiative, organize scientific meetings, training courses and workshops for NACA, dissemination of Information and other such initiatives in aquatic animal health.

Utilizing the above strength, an M.Tech programme in Marine Biotechnology could be initiated during the year 2008, sponsored by Dept. of Biotechnology, under its network programme in Human Resource Development in biotechnology. It has student strength of 8, provided with fellowship of Rs.8000/- per month by DBT. It has the faculty strength of five. The centre is equipped with research Labs such as Bacteriology, Virology, Animal Tissue Culture, Immunology, Genomics, Proteomics and Fermentation. An extensive bioassay system with RAS is another feature. Till date, as Scientific literature 90 publications in peer reviewed Journals and as manpower, 25 PhDs and 21 MTech graduates could be generated. For more details visit: <a href="https://www.ncaah.org">www.ncaah.org</a>

#### 5. CENTRE FOR THE STUDY OF SOCIAL EXCLUSION & INCLUSIVE POLICY (CSSEIP)

The UGC centre has, since the starting of its formal work in February 2009, engaged in building the required intellectual infrastructure for furthering research in the broad agenda of social exclusion. Following the general approach to social exclusion research, the Centre examines social exclusion as both 'a Process and a Status'. Developing on this scheme of examining social exclusion, the Centre advocates in its research for inclusive policy the 'Process-Status-Process' approach i.e. identify and examine the process that led to social exclusion, evaluate the present status/magnitude of social exclusion and chart out processes to achieve the desired level of social inclusion. The centre has identified as its core research themes a) Digital Exclusion b) Housing and Basic Amenities Exclusion c) Socio cultural and Structural Determinants of Exclusion d) Spatial Exclusion and e) Demographic dimensions of exclusion. The primary contexts of the Centre's research are a) Tribal Communities in Kerala b) Resource Based Industries in Kerala c) Rural population in Kerala d) Workers in unorganised sectors in Kerala.

The Centre has also undertaken research projects on behalf of various government agencies and NGOs to develop inclusive development strategies for the marginalized communities. The Centre has produced several outputs in the form of reports, projects, working papers and research articles in referred national and international journals.

Research output of the Centre

20 Research Projects

4 Books



International Journal with ISSN Number

13 Working Papers

More than 35 Articles in National /International Journals

3 Seminars / Conferences / Workshops

One International seminar Presentation at Wisconsin, U.S.; 12 National Seminar presentations.

## 6. INTER UNIVERSITY CENTRE FOR IPR (Intellectual Property Rights) STUDIES

Inter University Centre for IPR Studies (IUCIPRS) is an autonomous institution established by the Government of Kerala in Cochin University of Science and Technology. This is one of the Inter University Centres conceived and implemented by the Department of Higher Education, Government of Kerala. The Centre for IPR Studies established in the School of Legal Studies of the Cochin University of Science & Technology in 2003 is converted into IUCIPRS to encourage multidisciplinary teaching and research in the area of intellectual property rights. From its very inception till date, the Centre has secured a prominent place among the national and international IP fraternity.

The main objective of IUCIPRS is to evolve into a research hub and resource centre of international repute to act as a think tank in the area of IPR and related subjects. It is also intended to facilitate interaction between researchers from different universities and research institutions in India and abroad.

IUCIPRS is governed by a Governing Council consisting of twelve distinguished members with the Hon'ble Minister for Education and Culture, Government of Kerala as Chairman and Vice-Chancellor of CUSAT as Vice-Chairman.

# Programmes offered

- A) Ph.D Programme: The centre is offering multi-disciplinary regular Ph.D programme with scholarships in IPR related areas to encourage researchers from different disciplines to undertake policy research.
- B) Integrated Dual Degree programme in MIP, Ph.D and LLM (IPR), Ph.D: The centre is offering these courses on cost sharing mode. Candidates for admission to the Five year Integrated Dual Degree Programme in MIP, PhD and LLM (IPR) Ph.D shall be required to have passed the Bachelor's Degree Examination in Law, Economics, Political Science, History, Management and Science and Technology with 55% from any of the Universities in



Kerala or an examination of any other University accepted by the Syndicate as equivalent thereto and to have obtained rank in CAT conducted by the University. Candidates with other Bachelor's Degree in law alone are eligible for admission to LLM (IPR) Ph.D Degree. Candidate with other Bachelor's Degree are eligible for admission to MIP/Ph.D Degree. However a candidate with LLB Degree may opt for MIP, Ph.D Degree at the time of admission. Scheduled Caste/ Scheduled Tribe candidates are eligible for concession admissible under the orders of the government.

- C) P.G. Diploma in Intellectual Property Laws (Part Time): The centre is offering this course on cost sharing mode. The candidates for admission to the course should have Bachelor's Degree in Law, Economics, Political Science, History, Management and Science & Technology/Engineering.
- D) Visiting Fellowship: The centre allows opportunity for teachers and researchers from India and abroad to associate with the Centre for engaging in teaching and research in IPR related areas for a period not exceeding six months.
- E) Short Term Fellowship for M.Phil. /Ph.D scholars: The Inter University Centre for IPR Studies offers short term fellowship for a maximum period of three months to M.Phil. /Ph.D scholars in IPR related areas who have already registered in any recognized Universities in India.

For more details visit <a href="http://ciprs.cusat.ac.in">http://ciprs.cusat.ac.in</a>

#### 7. INTERNATIONAL CENTRE FOR ECONOMIC POLICY AND ANALYSIS (ICEPA):

The International Centre for Economic Policy and Analysis (ICEPA) was an off-shoot of the international collaboration the Department of Applied Economics had in the 1990s and 2000s. The original request for the development of this Centre came from the international collaborators so as to sustain the system with continuous linkage. ICEPA was established in the year 2004 April in the Department of Applied Economics, CUSAT for analysing the economic issues and giving guidelines to authorities for taking policy decisions. Currently, the Centre is carrying out research projects from national and international agencies and is also engaging in development dialogues with national and international NGO's as well as with industries and Governments. Important works undertaken by the Centre since its inception include studies relating to the World Bank, the European Union, The Royal Netherlands Embassy, Development Research Institute, The Netherlands, The Royal Netherlands Embassy Press and Culture Affairs, New Delhi, the Tilburg University, Ministry of Agriculture, Government of India, Ministry of Plantation, Government of India, Kerala Shipping and Inland Navigation Corporation Ltd, etc. . The core research themes are;

- Globalization and emerging economies
- Ecotourism
- Fisheries Economics



- Industrial Clusters
- Economic Development
- WTO and Global Supply Chain

#### **Activities:**

- ➤ Conducted/organized seven International Seminars/Workshops in collaboration with international agencies.
- > Published five books.
- > Ten Seminar presentations and research articles.
- The Centre also proposes to develop Working Paper Series in the above mentioned thematic areas.

#### 8. K M MANI CENTRE FOR BUDGET STUDIES

In the year 2012, a proposal to undertake a study on 'Critical Evaluation of State Budgets: Kerala (1957 to 2012) prepared by Dr.Sabu Thomas was submitted to the Government by the University. The Government approved the proposal and provided a token provision in the Budget 2012-13 to establish a Centre for Budget Studies (CBS) at the Cochin University of Science and Technology. The University instituted the centre and named it as the 'K M Mani Centre for Budget Studies (KMMCBS)' and the formal inauguration of the Centre was done by the Hon'ble Vice-President of India, Shri. Mohammad Hamid Ansari on 17th February 2013 at the Old Assembly Hall, Thiruvananthapuram. The Centre is headed by Dr. M A Oommen, Honorary Director. Dr.Sabu Thomas is functioning as the Co-ordinator.

## **Objectives of the Centre**

- 1. The major objective of the Centre is to contribute to the theory and practice of Public Budget and Budget making as well as to the classification, analysis, accountability and management of budget in democratic countries with special focus on India's fiscal federation.
- 2. To start post graduate course in Budget and Budget Management.
- 3. Research related to Public Finance and Fiscal Management is also under consideration.
- 4. To promote inter-departmental teaching and research with focus on Public Finance through collaborative ventures with School of Management Studies and Dept. of Applied Economics.
- 5. To provide training for the concerned officials of Secretariat, PSUs, Universities, Local Fund Departments and Local Bodies.

#### Thrust areas of the Centre

- a) Local Government budgeting with focus on Kerala
- b) State, sub-state level fiscal relations



- c) Archival of Travancore, Cochin, Travancore-Cochin and Kerala Budgets\
- d) Continuous Research, publications of books & papers etc. on the political economy of budgets and budget making in Kerala from the days of the princely states till date.
- e) Create a cadre of experts on budget and public budget making
- f) Study on the public debt of Kerala
- g) Establishment of State Budget Observatory and h) Dissemination of knowledge in the field

# RECOGNIZED RESEARCH INSTITUTIONS

- 1. Model Engineering College, Kochi- 682021
- 2. National Institute of Oceanography, Regional Centre Kochi -682018
- 3. Rubber Research Institute of India, Kottayam -686009
- 4. Cochin Base of Fishery Survey of India, Kochi- 682005
- 5. Central Institute of Fisheries Technology, Kochi -682029
- 6. Kerala Forest Research Institute, Peechi, Thrissur -680653
- 7. Kerala Institute of Local Administration, Thrissur -680581
- 8. Central Marine Fisheries Research Institute, Kochi -682018
- 9. Naval Physical and Oceanographic Laboratory, Kochi -682021
- 10. Vikram Sarabhai Space Centre, Thiruvananthapuram -695022
- 11. Marine Products Export Development Authority, Kochi -682016
- 12. Centre for Earth Science Studies, Thiruvananthapuram -685031
- 13. Central Coir Research Institute, Coir Board, Alappuzha -688522
- 14. Centre for Marine Living Resources and Ecology, CSEZ.P.O. Kochi
- 15. Space Physics Laboratory, Trivandrum 695022
- 16. National Institute of Fisheries Post Harvest Technology and Training, Kochi -682016
- 17. Centre for Water Resources Development and Management (CWRDM), Calicut- 673571
- 18. Central Institute of Fisheries Nautical and Engineering Training Division, Kochi -682016
- 19. National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram -695019
- 20. Centre for Biopolymer Science and Technology, A Unit of CIPEI, Eloor, Kochi- 683501



21. Indian Institute of Information Technology & Management, 'Nila', TVM-695581

## OTHER RECOGNIZED INSTITUTIONS

- 1. ER & DCI Institute of Technology, P.B.No 6520, Vellayambalam, Thiruvananthapuram 695 033
- 2. M.G. College of Engineering, Thrikkanamangalam, Thiruvallam, Thiruvananthapuram 695 027
- 3. Recognized Institutions under Southern Naval Command Head Quarters, Kochi (SNCHQ)
- 4. Conspi Academy of Management Studies, Plangalamukku, Thiruvananthapuram 695109
- 5. Sarabhai Institute of Science and Technology, Vellanada, Thiruvananthapuram 695543
- 6. College of Engineering, Vadakara, Mandarathur PO, Vadakara, Kozhikode 673 105
- 7. T.K.M. Institute of Technology, Karuvelil, Musaliar Hills, Ezhukone, Kollam 691505
- 8. College of Engineering, Pathanapuram, Kuriottumala, Piravanthoor, Pathanapuram, Kollam 689 696
- 9. College of Engineering, GovT. ITI Campus, Attingal, Thiruvananthapuram 695101
- 10. K.V.M. College of Engineering and Information Technology, Kokkothamangalam P.O, Alleppey 688 583
- 11. Toc-H Institute of Science and Technology, Arakunnam.P.O., Kochi 682 313
- 12. College of Engineering, Thrikkaripur, Cheemeni.P.O., Kasargod 671 313
- 13. College of Engineering, Poonjar, Thekkekkara.P.O., Kottayam 686 583
- 14. College of Engineering, Pallipuram, Cherthala, Allapuzha 688 541
- 15. College of Engineering, Kallooppara, Pathanamthitta 689 603
- 16. College of Engineering, Chengannoor, Alappuzha 689 121
- 17. College of Engineering, Karunagapally, Kollam 690 518
- 18. College of Engineering, Adoor, Pathanamthitta 691 523
- 19. College of Engineering, Kidangoor, Kottayam 686 583
- 20. College of Engineering, Kottarakkara, Kollam 691 531
- 21. College of Engineering, Eranholi, Thalassery, Kannur 670 107
- 22. College of Engineering, Munnar, Idukki 685 612
- 23. Bhavan's Royal Institute of Management, off Hill Palace, Tripunithura, Ernakulam 682 305



- 24. TKM School of Architecture, Ezhukone, Kollam
- 25. College of Engineering, Aranmula, Aranmula P O, Pathanamthitta 689 533
- 26. Marian College of Architecture and Planning, Kazhakuttom, Thiruvananthapuram, Pin 695 582
- 27. Nizar Rahim & Mark School of Architecture, Nizar Estate, Madannada, Kollam
- 28. Recognized Institutions under Southern Naval Command Head Quarters, Kochi (SNCHQ)

## **CHAPTER 3**

## GLIMPSES OF ACADEMIC & STUDENTS SERVICES

- 1. UNIVERSITY LIBRARY (Ph: +91-0484-2862130, 2862125)
- 2. DEPARTMENT OF YOUTH WELFARE (Ph: +91-0484-2862862156, 2862157)
- 3. DEPARTMENT OF PHYSICAL EDUCATION (Ph: +91-484-2862514)
- 4. CENTRE FOR INFORMATION RESOURCE MANAGEMENT (CIRM) (Ph: +91-484-2577124)
- 5. EMPLOYMENT INFORMATION & GUIDANCE BUREAU (Ph: +91-484-2576756)
- 6. DIRECTORATE OF PUBLIC RELATIONS AND PUBLICATIONS: (+91-484-2577550)
- 7. PLACEMENT CELL
- 8. CENTRE FOR SCIENCE COMMUNICATION
- 9. INTERNATIONAL RELATIONS AND ACADEMIC ADMISSIONS (+91-484-2577159, 2577100)



# Glimpses of Various Academic/Student Facilities Available

#### 1. UNIVERSITY LIBRARY

The Cochin University Library was established in 1977 as a central agency for meeting the information requirements of the academic community of the University and for collection, organization and dissemination of information. The University Library is fully automated and is one of the best scientific and technical libraries in the country. Being the information centre of the Technological University in the state, the library has built up a balanced and rich collection on all branches of sciences and technology. At the same time books of general interest in various subject fields are not neglected either.

CUSAT library has restructured its services to face the threat and boon that result from the rapid proliferation of electronic information resources. Library LAN has been a part of Campus Wide Network, which has made it possible for the academic community to access information from their location itself. As a part of the free/open source software movement in CUSAT, the University Library is migrated from ADLIB library software into KOHA open source integrated library system. The bibliographic records of books, journals and thesis in the Library can now be accessed globally through WebOPAC (http://opac.cusat.ac.in)and Union Catalogue of all libraries in CUSAT.

The Library offers Loan service, Inter-Library Loan, Literature Search, Reference Search, Compilation of Bibliographies, Reprographic Service, Reprint Service, Conference Alert Service, New Addition Alert Service, Patent Information and Consultancy Service. CUSAT Library has campus wide IP enabled access to online journals under the UGC-INFONET DIGITAL Library Consortia and INDEST Consortia. The UGC initiated UGC-INFONET project provides access to electronic journals and database over the internet executed by INFLIBNET. Under this project electronic full text access is provided to scholarly literature of all major areas of learning like Science Direct, ACS, IOP, Taylor & Francis, RSC, Wiley publications, Nature, Project Muse, Project Euclid, Web of Science...etc. Members can avail the service of UGC-INFONET, JCCC portal (an e-journals gateway to Indian Universities & Colleges) which also provides ILL between various Universities in India. Under the INDEST consortia setup by the MHRD, online access is available to IEEE Digital library which provides full-text access to IEEE publications published since 1988. In addition to this, CUSAT Library is also subscribing online databases like ACM, Crisil, SciFinder, Manupatra, Emerald extra (Management & Library Science), Proquest databases, Proquest Dissertations and Theses database, CMIE Prowess-



database, JSTORE, ASCE journals ...etc. The services and facilities provided by the library are published in the library website <a href="http://library.cusat.ac.in/">http://library.cusat.ac.in/</a>. The links to the online journals and databases subscribed are provided in the library e-journals portal.

University library is a member of DELNET (Developing Library Network) providing access to DELNET databases of books, periodicals, theses etc. available among the various member libraries. Members can avail inter library loan service and document delivery service from DELNET for books and journal articles not available in the University Library. The library also houses an Institutional Repository "Dyuthi", supported by the Department of Scientific and Industrial Research, where the research publications and Ph.D theses of the University is available online to the public. It also provides open access to institutional research output by self-archiving it.

#### 2. DEPARTMENT OF YOUTH WELFARE

Department of Youth Welfare is a formal platform in the University to design and implement Youth Policy which includes the issues related to motivation, participation, promotion and socio-economic and cultural settings within which young people grow up. The Department will act as a driving force for the student and youth community to epitomize their academic excellence through doing and learning.

#### Core values

Creativity, Competence, Confidence and Compassion

#### Vision

- 1. To create sense of values and social life among students of the University
- 2. To inculcate positive thinking for physical and mental health
- 3. To provide encouraging atmosphere to strengthen teaching-learning process, student-teacher relationship, peer group relationship, etc.
- 4. To coordinate cultural programmes, youth activities and other programmes in the campus and recognized institutes.
- 5. To help authorities in framing policies and procedures relating to the students.
- 6. To take measures to promote welfare activities in the campus.
- 7. To conduct research in youth related issues.



#### Mission

- 1. Organizing training /orientation programmes/motivation sessions/camps
- 2. Conducting bridge and remedial courses
- 3. Conducting academic and applied research with relation to young people.
- 4. Conducting extension/outreach services
- 5. Provide advocacy services for students
- 6. Coordinate students' activities
- 7. Facilitate both tangible and intangible welfare programmes and procedures

## 3. DEPARTMENT OF PHYSICAL EDUCATION (Ph: 0484-2575493, 2862514)

The Department of Physical Education, Cochin University of Science and Technology is promoting physical education and sports on par with regular academics. The University has well recognized the value of sports and physical activities as a means of developing personality, promoting social harmony and inculcating discipline. The department provides ample opportunities to the students to utilize their leisure time with physical activities to reduce their stress and inculcate a life-time physical activity behaviour. Physical fitness is not only the most important key to a healthy body but also the basis of dynamic and creative intellectual abilities. We encourage mass participation towards physical activities, which in turn enhance the overall cognitive abilities of the students. The Department of Physical Education is monitoring the sports activities of University. The University provides facilities and support to students so as to enable them to participate in the South Zone as well as All India Inter University Tournaments.

# **Aims and Objectives**

The aim of Department of Physical Education, Cochin University of Science and Technology is to promote activities in the field of sports and games with excellent infrastructure facilities and also to provide a systematic and scientific training for the students. More than 3000 students get competitive experience from the Inter collegiate level sports and games competitions organized by the Cochin University of Science and Technology every year.

All the recognized colleges take part in the Inter Collegiate sports and games competitions in 16 disciplines organized by the Department of Physical Education, Cochin University of Science and Technology.

## **Nature of Programme**



Total Number of games and sports activities conducted for CUSAT Inter Collegiate Games: 16

Nearly 2500 students get competitive experience every year.

CUSAT-Vodafone ever rolling inter collegiate meet is conducted every year in the month of January.

Selection and preparation of CUSAT University Teams, (Eleven Disciplines) to participate in the Inter University Competition organized by Association of Indian Universities every year.

Organize Adventure Sports camps.

Conducting coaching camps for various teams.

Organizing various championships as joint venture of University and other associations.

Play field Facilities

Multipurpose track and field (outdoor) for Foot Ball, Cricket, Volleyball, Basketball etc.

Multipurpose Indoor Stadium for Badminton and Table tennis.

CUSAT ARENA (Multipurpose sports courts for Lawn Tennis, Volleyball, Basket Ball etc. inside a wire meshed and flood lit area).

Ladies Health club.

#### **Future Plans:**

Yoga, meditation and self-defence training programmes for female students

Development of Health Club Facilities for boys.

Individualized health related physical fitness assessment and remedial programmes

Development of indoor facilities and swimming pool

## **Adventure Sports**



Conducted four Adventure Sports Camps for boys and girls separately at National Adventure Academy, Munnar under Kerala State Youth Welfare Board. Activities include River Crossing, 100 mts height rock climbing, trekking etc.

#### **Achievements**

CUSAT Shuttle Badminton Team attained 1st position in the South Zone and All India Inter University Badminton Championships during the year 2012-13.

#### 4. CENTRE FOR INFORMATION RESOURCE MANAGEMENT (CIRM) (0484-2577124, 2862114)

The Centre for Information Resource Management (CIRM) was established in 1998 under the MHO-INFOCUS project of the Netherlands Government. In 2006, CIRM became an Independent Centre with a full-fledged Office.

The main objective of CIRM is to act as the nodal centre for all the information technology resources of the University. It involves design, installation and maintenance of the IT infrastructure including the network, software resources and IT enabled services and facilities. CIRM also provides staff training, user support and consulting services to user departments and external clients on demand.

CUSAT is one of the few institutions of higher learning in India that possess a state of the art, reliable and scalable campus-wide network which support the information needs of the user community. All the departments in the main campus are interlinked with a fibre optic backbone. Also the Lakeside Campus 15 Km away and the Pulincunnu campus 75 km away from the main campus are connected to the main network using 20 Mbps leased line.

The campus network is seamlessly integrated to the internet through broad band connectivity available to the user community on 24x7 basis. The internet connectivity in the Main Campus has been upgraded to 100 Mbps during the year 2012-13. With this new connectivity the users in the main campus and lake side campus can experience a much higher band width.

Apart from this the campus is connected to the National Knowledge Network (NKN) using a 1 Gbps backbone connecting major institutions in India.

The domain name cusat.ac.in is registered with the National Centre for Software Technology (NCST) India. The portal www.cusat.ac.in serves as the single window access point to all the information resources and IT enabled services of CUSAT which is managed by CIRM.

Services offered

Internet: The internet facility is extended to all CUSAT community on 24x7 basis.



Web Service: The University web server and the various web services of the campus is developed and maintained by CIRM

Email: The mail server is hosted in house and email facility is extended to all teachers, staff, research fellows and post graduate students of the campus.

Financial Information System: The financial information system was developed by CIRM during 2010 under the Open Source ERP Software.

Voice Communication system: The voice communication system is installed with 1000 lines both in the main and lakeside campuses.

Online Counselling System: Online Counselling Software for admissions to different courses of the University is developed by the department under the open source platform.

#### 5. EMPLOYMENT INFORMATION AND GUIDANCE BUREAU (Ph: +91-484-2576756)

The University Employment Information & Guidance Bureau attached with Cochin University of Science and Technology came into existence on 10.01.1973. This is the joint venture of the University and the National Employment Service Department. The Chief of the Bureau is nominated by the Vice Chancellor of the University and the Deputy Chief of the Bureau is an Employment Officer of the Department of National Employment Service.

## **Major Activities**

The objective of the Bureau is to provide career guidance (both individual &in groups) and dissemination of occupational and vocational information to the student community so as to enable them to achieve their career goals. Conducting coaching classes of various competitive examinations like UGC-CSIR JRF/NET, LDC, Bank P O, Junior Telecom Officers, etc. is another important activity of the Bureau. Personality Development Courses, career talks, career seminars etc. are provided by the department free of cost.

#### Achievements

Bureau conducts coaching classes for UGC-CSIR JRF/NET, Bank Probationary Officer /Management Trainee /Clerical Examination on a regular basis. The Bureau conducts seminars without charging any fee in various schools and colleges in and around Ernakulam District. Eminent faculties handle the sessions. The Bureau brings out Vocational Guidance Information Bulletin regularly.

## **Future plans**

We plan to conduct Civil Service Examination coaching. We also plan to arrange coaching class to SC/ST, Minority students with the aid of UGC.

#### 6. DIRECTORATE OF PUBLIC RELATIONS AND PUBLICATIONS



The activities of the Directorate of Public Relations and Publications take on a wide perspective while catering to the interests of a large audience in connection with the area of higher education in the state, especially in Science and Technology. The Directorate has been successful in maintaining and enhancing a spotless image for the University as a public organization committed to the cause of higher learning before the internal as well as external public including the media. The efficient and effective use of PR tools like publicity, advertising. Media relations and special events such as special convocation have paved the way to sustain a healthy relationship with the public. With keen PR acumen, the Directorate organizes functions regularly to facilitate the percolation of knowledge accrued through research in the various University Departments to the masses. This objective also drives the Directorate to publish "Science Communicator" the Interdisciplinary Journal with ISSN and RNI registration and other publications to popularize science among the society. The conduct of national workshops and popular science orations, especially in the local language is of immense benefit to science communicators and journalists.

The Directorate issues around 1000 press releases per annum in both English and Malayalam. Another innovation by the Directorate is the PR alerts to media through SMS that keeps the media persons up- to date on University affairs .Such timely and effective briefing of the media by the Directorate of Public Relations provide a sustainable source of authentic information for all who are in pursuit of excellence in learning.

Around 100 scientific books have been published with ISBN numbers till date. The joint publication of Science and Technology books in Malayalam by the Directorate in collaboration with the SahithyaPravarthaka Co-operative Society (SPCS), Kottayam is considered a milestone and the University has published 6 popular Science Books as part of this. The Directorate spares no effort to bring out the University Diary in time with up to date information besides the collection, compilation and publication of Annual Report of the University. The University newsletter "Tejus", unique by nature is a matter of pride for the Directorate as well as the University fraternity. The Directorate takes all efforts to provide up-to-date information to other academic institutions, research scholars, students and to the general public regarding education and related opportunities. It also assists various departments in organizing seminars, workshops and symposia by ensuring an excellent media coverage. As part of its PR activities the Directorate take all efforts in clearing the doubts of the general public regarding various academic programmes of CUSAT directly or over phone. Many of the dignitaries from India and abroad, who visit the University are extended a warm welcome by the Directorate of Public Relations and Publications.

**7. PLACEMENT CELL:** Placement Cell caters for enhancing not only the employability skills of the passing out Cusatians but also the overall development of their personality. PC organizes on campus and off campus recruitments and preplacement training programmes in Aptitude test, Group Discussions, Interviews and presentation skills in collaboration with TEQUIP and core departments. Mock interviews and GDs are conducted on a regular basis so as to equip final and pre-final students to face the challenges of the recruitment scenario. Close on the heels of placement drives, the Placement Assistance Cell



makes an evaluation of the performance of our students. This objective appraisal enables us to identify strengths and weakness of the candidates and select the strategies for improvement. Besides, there are intensive supportive measures for the rejected candidates.

#### 8. CENTRE FOR SCIENCE COMMUNICATION

The Centre regularly conducts Science Orations and National Science Day programme, besides round-table conference and competition aimed at popularization of science among students, media persons as well as the general public. It also publishes popular science books and is actively engaged in empowering science writers /journalists through various National Workshops/programmes in association with reputed Government agencies like VigyanPrasar, Govt of India, IGCAR and Kerala State Council for Science, Technology and Environment (KSCSTE).

## 9. INTERNATIONAL RELATIONS AND ACADEMIC ADMISSIONS (IRAA) (Ph. 0484-2862258, 2862257)

DIRECTOR	Dr.SAJU K K	Tel:91-484-2577688 :91-484-2862289	Fax:91-484-2577688
ASSISTANT REGISTRAR	SRI. VENKITESWARAN M	Tel:91-484-2862290 :91-484-2577159	
ENQUIRY: 91-484-2577159	0 / 2577100		

The Unit for International Relations and Academic Admissions (IRAA) manages the international ventures and academic admission activities of the University. The unit was carved out in 1996 with the specific purpose of promoting the cause of academic linkage with overseas institutions and ensuring total quality management in admission procedures. It plays a pivotal role in fostering international tie-ups and collaborative ventures by promoting faculty/student exchanges and joint research ventures with a view to placing CUSAT on a high pedestal in the international arena of academic excellence. The Unit has also made its presence felt in different realms of academic administration by conducting training programmes, competitive examinations etc. for external clients as well.



## CHAPTER 4

# ACADEMIC PROGRAMMES OF THE UNIVERSITY

# (Fostering Excellence)

Academic programmes of CUSAT are open to all Indian / foreign nationals irrespective of caste, creed, race or sex, subject to satisfying the prescribed eligibility criteria / admission test requirements.

**A. UNDER GRADUATE PROGRAMMES (First Degree Programmes)** (Eligibility criteria for the programmes are detailed in chapter 5 – Admission through Common Admission Test (CAT) 2015)

These programmes are meant for students who have completed their 12th class/+2 level or equivalent and aspire to join for their first degree programmes. B.Tech Lateral Entry Programmes are meant only for eligible Diploma holders. The following are the courses offered:-

## (FOR DETAILED ELIGIBILITY CRITERIA OF EACH COURSE – SEE CHAPTER 5)

#### 1) B. Tech PROGRAMMES

SL. No.	Name of programmes	Dept./School	Phone no:
B.Tech in	:		
1	Civil Engineering		
2	Computer Science		
3	Electrical & Electronics Engineering	Cochin University College of Engineering	0477-2707500
4	Electronics & Communication Engineering	Kuttanad,Pulinkunnoo, Alappuzha	
5	Information Technology		
6	Mechanical Engineering		



B.Tech in	ı:		
1	Civil Engineering		
2	Computer Science & Engineering		
3	Electrical & Electronics Engineering		0484-2556187
4	Electronics & Communication Engineering	School of Engineering, Thrikkakara Campus	
5	Information Technology		
6	Mechanical Engineering		
7	Safety & Fire Engineering		
8	Marine Engineering (Residential Programme)	KunjaliMarakkar School of Marine Engineering,	0484-2576606
		Thrikkakara Campus	
9	Instrumentation Technology	Dept. of Instrumentation, Thrikkakara Campus	0484-2575008
10	Polymer Science & Engineering	Dept. of Polymer Science & Rubber Technology,	0484-2575723
10	1 orymer science & Engineering	Thrikkakara Campus	0707-2373723
11	Naval Architecture & Ship Building	Dept. of Ship Technology, Thrikkakara Campus	0484-2575714

Admission to seats for the various Under Graduate Programmes offered at the School of Engineering, KunjaliMarakkar School of Marine Engineering, Cochin University College of Engineering Kuttanad, Department of Instrumentation, Department of Ship Technology, Department of Polymer Science and Rubber Technology, International School of Photonics and School of Legal Studies will be based on the "Common Admission Test" (CAT) of CUSAT, open to all Indian nationals with test centres in all districts in Kerala, and in selected centres outside Kerala. Candidates applying for the NRI seats in SOE, CUCEK and KunjaliMarakkar School of Marine Engineering should also apply online and secure a valid CAT rank.



#### 2) LATERAL ENTRY TO B. Tech. PROGRAMMES (Candidates must register online for CAT 2015.)

The University offers admission to the third semester of the following B.Tech programmes. Candidates with any three year Diploma in Engineering / Technology awarded by the Board of Technical Education recognised by the Department of Technical Education, Government of Kerala, with not less than 60% marks, will be considered for admission to the B.Tech. programme through Lateral Entry Scheme.

# The maximum age prescribed is 25 years as on 1st July of the current academic year.

Admissions will be based on the rank in the admission test, conducted for the purpose. See notification of CAT 2015 for the test schedule. Test Centre for Lateral Entry to B.Tech Programmes (LET) will be located only at Ernakulam / Kochi. Admitted candidates will have to undergo remedial courses as decided by the University.

PROGRAMMES OFFERED (Lateral entry)	CAMPUS
B.Tech. Programmes in Civil Engg., Computer Science	School of Engineering, Thrikkakara Campus
&Engg., Electrical & Electronics Engg., Electronics &	&
Communication Engg., Information Technology, Mechanical Engg.	Cochin University College of Engineering, Kuttanad, Pulincunnu Campus
B.Tech. Programme in Safety & Fire Engg.	School of Engineering, Thrikkakara Campus
B.Tech. Programme in Polymer Science & Engineering	Department of Polymer Science & Rubber Technology Thrikkakara Campus
B.Tech. Programme in Instrumentation Technology	Department of Instrumentation, Thrikkakara Campus



# 3) UG PROGRAMMES OTHER THAN B. Tech PROGRAMMES— (Admission through CAT 2015. Candidates must apply online)

1	5 Year Integrated M.Sc in Photonics	International School of Photonics, Thrikkakara Campus	0484-2577540
2	5 year B.B.A., LL.B.(Hons.)		
3	5 year B.Com.,LL.B.(Hons.)	School of Legal Studies, Thrikkakara Campus	0484-2575465
4	3 year LL.B course (Evening)		

# **B. POSTGRADUATE PROGRAMMES**

1.	1. INTEGRATED DUAL DEGREE PROGRAMMES – Candidates must apply Online for CAT 2015				
1	Master of Intellectual Property	Inter University Centre for Intellectual			
1	(MIP),Ph.D.	Property Rights Studies,	0484-2862491		
2	LL.M (IPR) Ph.D Degree	Thrikkakara Campus			
2.	2. PG PROGRAMMES OTHER THAN M.Tech (All Candidates except those for MA (Translation in German/Russian) must apply online for CAT				
	2015)				
	LL.M	School of Legal Studies,	0484-2575465		
1	EL.IVI	Thrikkakara Campus	0404-2313403		
2	M.A Hindi Language and Literature	Dept. of Hindi, Thrikkakara Campus	0484-2575954		
3	M.A Translation in German/ Russian	Dept. of English and Foreign Languages,	0484-2575180		



		Thrikkakara Campus	
4	M.A. Applied Economics	Dept. of Applied Economics, Thrikkakara Campus	0484-2576030
5 6 7	M.B.A(Full-time & Part-time)  M.B.A.(International Business)  M.B.A. (Travel & Tourism)	School of Management Studies, Thrikkakara Campus	0484-2575310
8	M.Sc (Chemistry)	Dept. of Applied Chemistry, Thrikkakara Campus	0484-2575804
9	M.Sc (Biotechnology)	Dept. of Biotechnology, Thrikkakara Campus	0484-2576267
10	M.Sc (Hydrochemistry)	Dept. of Chemical Oceanography, Marine Campus	0484-2382131
11	M.Sc (Industrial Fisheries) M.F.Sc (Seafood Safety and Trade)	School of Industrial Fisheries, Marine Campus	0484-2354711
13	M.Sc (Instrumentation)	Dept. of Instrumentation, Thrikkakara Campus	0484-2575008
14	M.Sc (Marine Biology)	Dept. of Marine Biology, Microbiology & Biochemistry, Marine Campus	0484-2368120
15	M.Sc Marine Geology	Dept. of Marine Geology & Geophysics, Marine Campus	0484-2366478



16	M.Sc Marine Geophysics	Dept. of Marine Geology & Geophysics, Marine Campus	
17	M.Sc Mathematics	Dept. of Mathematics, Thrikkakara Campus	0484-2577518
18	M.Sc Meteorology	Dept. of Atmospheric Sciences, Marine Campus	0484-2353662
19	M.Sc Oceanography	Dept. of Physical Oceanography, Marine Campus	0484-2363950
20	M.Sc Physics	Dept. of Physics, Thrikkakara Campus	0484-2577404
21	M.Sc Statistics	Dept. of Statistics, Thrikkakara Campus	0484-2575893
22	M.Sc Environmental Tech.  Stream 1.Environmental Engineering  Stream 2.Environmental Biotechnology	School of Environmental Studies, Thrikkakara Campus	0484-2577311
23	M. Sc. Electronic Science (with specialization in Artificial Intelligence, Robotics, Microwave Electronics and Computer Technology)	Dept. of Electronics, Thrikkakara Campus	0484-2576418
24	M.Sc Biopolymer Science	Centre for Bio-Polymer Science & Technology, A Unit of CIPET, Eloor, Kochi 683 501	0484-2555750
25	M.C.A	Cochin University College of	0477-2707500



		Engineering Kuttanad, Pulincunnu	
26	M.C.A	Dept. of Computer Applications, Thrikkakara Campus	0484-2576253
3.	M.TECH PROGRAMMES		
1	M.Tech.Marine Biotechnology	School of Environmental Studies, conducted at NCAAH, Marine Campus	0484-2577311
2	M.Tech Atmospheric Sciences	Dept. of Atmospheric Sciences, Marine Campus	0484-2353662
3	M.Tech Ocean Technology	Dept. of Physical Oceanography, Marine Campus	0484-2363950
4	M.Tech. Industrial Catalysis	Dept. of Applied Chemistry, Thrikkakara Campus	0484-2575804
5	M.Tech Engineering Statistics (Conducted in alternate years) (No admission in 2015)	Dept. of Statistics, Thrikkakara Campus	0484-2575893
6	M.Tech.Electronics with specialisation in Digital Electronics, Microwave & Radar Electronics	Dept. of Electronics, Thrikkakara Campus	0484-2576418
7	M.Tech Polymer Technology	Dept. of Polymer Science & Rubber Technology, Thrikkakara Campus	0484-2575723
8	M.Tech Computer Aided Structural Analysis & Design	Dept. of Ship Technology, Thrikkakara Campus	0484-2575714



9	M.Tech.Opto-Electronics and Laser Technology	International School of Photonics, Thrikkakara Campus	0484-2575848
10 11 12	M.Tech .Computer and Information Science  M.Tech Software Engineering  M.Tech Computer Science with	Dept. of Computer Science, Thrikkakara Campus	0484-2577126
13	specialization in Embedded systems (part time)  M Tech Electronics & Communication Engg. with specialization in Wireless Technology (Full Time) (Self Financing)		
14	M Tech Information Technology with specialization in Software Systems (Full Time) (Self Financing)		
15	M.Tech in Mechanical Engg. (Thermal Engg.) (Full Time) (Self Financing)	School of Engineering, Thrikkakara Campus (Sl. No. 13 to 22)	
16	M.Tech in Civil Engg. (Geotechnical Engg.) (Self Financing) (Full Time)		
17	M.Tech Mechanical Engineering (Production Engg.) (Part Time) (Cost Sharing)		
18	M.Tech Electrical & Electronics Engg. with specialization in Power Electronics (Part Time) (Cost Sharing)		0484-2556187



19	M.Tech (Health, Safety and Environment Management) (Full Time) (Self Financing) (GATE scholarship is not available at present)		
20	M.Tech Civil Engineering (Construction & Management) (Part Time) (Cost Sharing)		
21	M.Tech (Computer Science and Engg with specialisation in Network Computing) (Full Time) (Self Financing) (GATE scholarship is not available at present)		
22	M.Tech Chemical Engineering (Process Engineering) (Part Time) (Cost sharing)		
23	M Tech Marine Engineering (Full Time) (Self Financing)	Kunjalimarakkar School of Marine Engg., Thrikkakara Campus	0484-2576606

# C. RESEARCH PROGRAMMES (Admission through DAT)

# 1. MPhil Programmes in

1	Chemistry	Dept. of Applied Chemistry, Thrikkakara Campus	0484-2575804
2	Marine Chemistry	Dept. of Chemical Oceanography Marine Campus	0484-2382131
3	Fisheries Science	School of Industrial Fisheries, Marine Campus	0484-2354711



4	Mathematics	Dept. of Mathematics, Thrikkakara Campus	0484-2577518
5	Commerce	School of Management Studies, Thrikkakara Campus	0484-2575310
6	Physics	Dept. of Physics, Thrikkakara Campus	0484-2577404
7	Applied Economics	Dept. of Applied Economics, Thrikkakara Campus	0484-2576030
8	Life Sciences	Dept. of Marine Biology, Micro Biology & Biochemistry, Marine Campus	0484-2368120
9	Hindi	Dept. of Hindi, Thrikkakara Campus	0484-2575954

#### 2. PhD PROGRAMMES (Admission through DAT)

Students are advised to read the write ups/visit web sites of teaching Departments/Schools/Centres for having an understanding of their fields of research. They may contact guides of the Department/School/Centre of the concerned field of study and check the availability of research guides. After getting the consent of a guide the candidates have to obtain the hard copy of the application form (within the prescribed time as per CAT 2015 Notification) from the concerned Department/School/Centre by making the payment of required fee through Demand Draft taken from State Bank of Travancore or State Bank of India in favour of The Registrar, CUSAT, payable at Ernakulam. See Notification for CAT 2015 for fee details. The duly filled in applications should be submitted within the time prescribed in the CAT 2015 Notification. Once the applications are submitted, the concerned Department/School/Centre will intimate the candidate the schedule for DAT, Interview etc. in due course. CANDIDATES FOR PHD WITH SPECIFIED FELLOWSHIPS ARE EXEMPTED FROM DAT. For more details see admission procedure for PhD described in chapter 6.

#### 3. POST DOCTORAL PROGRAMMES



CUSAT offers Post Doctoral Fellowships in the Faculties of Science, Social Science, Law, Environmental Studies, Marine Sciences, Technology and Humanities. To apply for PDF, the candidate shall identify a Mentor who shall be a permanent Faculty of the University, holding a Doctoral Degree and shall be recognized Research Guide of the University and prepare a Research Project Proposal in consultation with the Mentor in the specific format provided by the University and submit the same to the Head/Director of the Department/School after authentication by the Mentor. For more details see Post Doctoral Fellowship Programmes described in chapter 6.

# D. DIPLOMA PROGRAMMES/CERTIFICATE PROGRAMMES (Admissions conducted directly by the Departments/Centres. No need to apply online through CAT 2015. Contact the concerned Department/Centre for more details)

1	P.G.Diploma in Communicative English			
2	Diploma Programmes in French/German/Japanese/ Russian			
3	Certificate Programmes in French/German/Japanese/ Russian/Italian	Dept. of English and Foreign Languages, Thrikkakara Campus	0484-2575180	
4	Short Term Course in Communicative (English/French/German/Italian) (Certificate from the Department only are issued)			
5	Integrated Diploma in Italian			
6	P.G Diploma in Translation and Functional Hindi	Dept. of Hindi, Thrikkakara Campus	0484-2575954	
7	P.G. Diploma in Intellectual Property Laws. (Part Time)	Inter University Centre for Intellectual Property Rights Studies, Thrikkakara Campus	0484-2862491	



# CHAPTER 5

# **ELIGIBILITY CRITERIA – A READY RECKONER**

(The terms Self Financing, Cost Sharing etc. are explained at the end of this Chapter)

NB: - The minimum required qualifications are only detailed below in this chapter. For detailed admission procedure see Chapter 6.

Programme Name  Cochin University	Eligibility Criteria for Admission versity College of Engineering, Kuttanad, Pulincunnu, (CU	CEK)	Nature of Programme	Professional or Non- Professional	Intake
B. Tech. Computer Science& Engineering			cing)		60
B. Tech. Electrical and Electronics Engineering	Pass in the Plus Two Examination of the State of Kerala or any other examination accepted as equivalent thereto with Mathematics, Physics and Chemistry as optional	m.	(Self-financing)	ional	60
B. Tech. Electronics &Communication Engineering	subjects securing a minimum of 50% marks in Mathematics and 50% marks in Mathematics, Physics	8 Sem.		Professional	60
B.Tech. Information Technology	and Chemistry put together.		Full-Time		60
B.Tech. Mechanical Engineering			Ful		60



B.Tech. Civil Engineering			60
MCA is also offered in CUCEK. Scroll	down for eligibility criteria.		



	School of Engineering (SOE), Thrikkakara				
B. Tech. Civil Engineering					90
B. Tech. Computer Science & Engineering			icing)		90
B. Tech. Electrical & Electronics Engineering	Pass in the Plus Two Examination of the State of Kerala or any other examination accepted as equivalent thereto	Sem.	(Self-financing)	ional	60
B. Tech. Electronics & Communication Engineering	with Mathematics, Physics and Chemistry as optional subjects securing a minimum of 50% marks in Mathematics and 50% marks in Mathematics, Physics	8 Se	_	Professional	90
B. Tech. Information Technology	and Chemistry put together.		l-Time		90
B. Tech. Mechanical Engineering			Full		90
B. Tech. Safety & Fire Engineering					60



#### Note:

For all Under Graduate Programmes (except Marine Engineering) the minimum eligibility for SEBC candidates to be considered under reservation quota (belonging to Kerala State) for admission to B. Tech is 45% for Mathematics and 45% for Mathematics, Physics and Chemistry put together in the qualifying examination. Of the total seats for B.Tech. (Self-financing) 50% are State merit, 40% All India Merit and 10% are NRI payment seats. The State merit seats are reserved only for Keralite students. For B.Tech in Naval Architecture and Ship Building, Instrumentation, Polymer Science Engineering, 10% of the seats are earmarked for students on All India basis (All India quota) and the remaining seats for the Keralites. Candidates under SEBC category, whose family income is more than Rs. 6,00,000/- (Rupees Six Lakhs only)) are not eligible for State Merit/All India Merit under the respective community quota. Seats reserved under sports quota will come under All India Merit of B.Tech programmes.50% concession in tuition fees will be granted to Physically Challenged candidates admitted against the seats reserved for Physically Challenged and have been approved by the medical board constituted for the purpose by the University and whose annual family income does not exceed Rs. 1.50 lakh.

# SC/ST candidates are eligible for admission, if they have pass marks in the qualifying examination except for B.Tech Marine Engineering.

<u>For all regular PG programmes</u> including subsidized PG programmes like, M.C.A, M.B.A (International Business) and 5 year Integrated M.Sc. in Photonics 10% of seats are set apart for students on All India basis and the remaining for Keralites.

<u>For P.G. programmes under self financing</u> sector 50% of the seats are given for Keralites, 10% for NRIs and the remaining 40% open to all.

## A candidate will be considered as a 'Keralite' for the limited purpose of eligibility for admission, if

- a. He/She or his/her father/mother was born in Kerala **OR**
- b. He/She has been a resident of Kerala for a period of 5 years within a period of 12 years **OR**
- $c. \ He/She \ has \ undergone \ his/her \ school \ studies \ from \ standards \ VIII \ to \ XII \ in \ educational \ institutions(s) \ in \ Kerala. \ OR$
- d. Children of All India Service (AIS) officers (Non Keralites) allotted to Kerala circle are deemed to be "Keralites' (GO



(Rt.) No. 822/08/H.Edn dated 29/05/2008). But they will not be eligible for Communal/Special Reservations.

Candidates claiming the Keralite status should invariably produce at the time of interview / admission, any one of the following certificates in original.

• The certificate of Birth / Residence of the candidate or his/her father or mother from the Village Officer / Tahsildar or from a competent authority of local body,

or

• The 'Certificate showing school studies in Kerala from Standards VIII to XII' from the Head of School where the candidate completed his / her study in Standard XII,

or

• Relevant page of the SSLC of the candidate's father / mother showing the place of birth in Kerala with corroborative evidence showing the relationship between the candidate and the parent,

or

• Relevant page of the passport of the candidate or either of the parents issued by the Government of India showing place of birth in Kerala with corroborative evidence showing the relationship between the parent and candidate,

or

- Birth certificate of candidate or his / her, father / mother showing the place of birth in Kerala with corroborative evidence showing the relationship between the candidate and father / mother of whose birth certificate is being produced
- •For claiming Keralite-AIS (All India Service), certificate from competent authority should be attached.



# MTech Programmes in School of Engineering, Thrikkakara

Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional or Non-Professional	Intake
M. Tech Civil Engineering (Construction Engg & Management)	a) Shall have passed B.Tech/B.Sc. Engg./BE Degree Examination in the respective branch with a minimum of 50% marks from any University in Kerala or an examination of any other University/Institution accepted by this University as equivalent thereto.	6 sem			15
M. Tech Chemical Engineering (Process Engg)	b) Candidates who have passed BTech/BSc(Engg)/BE Degree examination in allied branches of Engineering /Technology with a minimum of 50% marks may also be considered in the absence of sufficient number of candidates for the course. The suitability of such candidates may be assessed by an admission committee constituted by the Head of the Department/School.	6 sem	e Cost Sharing	Professional	15
M.Tech Electrical & Electronics Engineering with specialization in Power Electronics	c) Candidates who have passed sections A and B of the Associate Membership/Graduate Membership Examinations in respective/allied branches conducted by Institution of Engineer's (India), Institution of Electronics and Telecommunication Engineers and Indian Institute of Chemical Engineers with 50% marks are also eligible for admission if they have an Engineering Diploma or a basic degree in Science.  d) Should have a minimum of 2 years' experience in the concerned field after	6 sem	Part Time Cost	Pro	15



M. Tech Mechanical Engineering (Production Engg)	acquiring qualifying degree. This may be relaxed if sufficient number of candidates with the minimum prescribed experience is not available	6 sem			15
M. Tech. Civil Engineering with specialization in Geotechnical Engineering	<ul> <li>A. Shall have passed B.Tech/B.E/B.Sc. Engineering Degree Examination in Civil Engineering branch from any University in Kerala or an examination of any other University /Institution accepted by this University as equivalent thereto with a minimum of 60% marks.</li> <li>B. Candidates who have passed Sections A&amp;B examinations conducted by the Institution of Engineers (India) – AMIE in Civil branch shall be eligible</li> <li>C. A valid GATE Score.</li> <li>D. In the absence of GATE qualified candidates non GATE candidates will be considered for admission on the basis of Departmental Admission Test (DAT)</li> </ul>	4 sem	Full Time – self financing	Professional	18
M. Tech Mechanical Engineering with specialization in Thermal Engineering	<ul> <li>a. Shall have passed B.Tech/B.E/ B.Sc. Engineering Degree Examination in Mechanical branch from any University in Kerala or an examination of any other University /institution accepted by this University as equivalent thereto with a minimum of 60% marks.</li> <li>b. Candidates who have passed sections A and B examinations conducted by the Institution of Engineers (India) – AMIE in Mechanical branch shall be eligible</li> <li>c. A valid GATE score in Mechanical Engineering.</li> <li>d. In the absence of GATE qualified candidates, non-GATE candidates will be considered on the basis of Departmental Admission Test (DAT)</li> </ul>	4 sem	Full Time – self financing	Professional	18



M Tech Electronics & Communication Engineering with specialization in Wireless Technology	accepted by this University as equivalent thereto with a minimum of 60% marks  b. A valid GATE Score  c. In the absence of GATE qualified candidates non GATE candidates will be considered for admission on the basis of Departmental Admission Test (DAT)	4 Sem	Full-time	(Self financing)	Professional	18
M.Tech Information Technology with specialization in Software Systems	a) Shall have passed B.Tech/BE/BSc Engineering Degrees in Information Technology/Computer Science &Engg./Computer Engineering/Biomedical Engg/Electronics & Communication/Electronics/Electrical & Electronics branch from any University of Kerala or an Examination of any other University/ Institution accepted by this University as equivalent thereto with a minimum of 60% marks or CGPA 6.5 in 10 –point scale  b) A valid GATE Score  (In the absence of GATE qualified candidates non GATE candidates will be considered for admission on the basis of Departmental Admission Test (DAT))	4 Sem	Full-time	(Self financing)	Professional	18



*MTech Health, Safety and Environment Management	a) b) c) d)	Institution of Engineers (India) – AMIE in Chemical /Civil/Mechanical branches or Indian Institute of Chemical Engineers – AMIChE shall also be eligible.		Full Time (Self Financing)	Professional	18
*MTech Computer Science and Engineering with specialization in Network Computing	a) b) c)	Engineering/Information Technology/Electronics and Communication Engineering with a minimum of 60% marks or CGPA 6.5 in 10 point scale from any recognized University in Kerala or any other University/Institution accepted	4 Sem	Full Time (Self Financing)	Professional	18

PhD research programmes are also offered in SOE

<sup>\*</sup>GATE scholarship is not available at present.



	KunjaliMarakkar School of Marine Engineering				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional or non professional	Intake
B.Tech. Marine Engineering (Residential Programme)	Pass in the Plus Two Examination of the State of Kerala or any other examinations accepted as equivalent thereto with Mathematics, Physics, Chemistry and English as separate subjects with a PCM average of not less than 60% marks and minimum 50% for Mathematics alone. Should have passed English at 10th or 12th Standards with 50% marks. (applicable to SC/ST candidates also)  Vocational/Diploma students are not eligible to apply.  Maximum age limit prescribed is 25 years as on 1st September of the year of admission. Eligibility for admission is based on the directions from the DG shipping.	8 semesters	Full Time – Self Financing- Fully Residential	Professional	80



M.Tech Marine Engineering	a) Shall have passed B.Tech /B.E/B.S degree in Marine Engineering OR B.Tech/B.Sc. (Engg) degree in Mechanical Engineering OR B.Tech degree in Naval Architecture & Ship Building with a minimum of 60% marks or an examination of any other University /Institution accepted by this University as equivalent thereto with 60% marks  Preference will be given to those who have passed M.E.O class IV examination or a minimum of 2 years professional experience in ship building /ship repair yard /ship design office/Indian navy. See "Exceptions" in chapter 6 "admission procedure".	4 semesters	Full Time – Self Financing	Professional	18	
---------------------------------	---	-------------	-------------------------------	--------------	----	--

B.Tech programme in Marine Engineering is conducted with the approval of Directorate General of Shipping, Government of India, as well as AICTE. This consists of 8 semesters with one semester specifically for Afloat training which is carried out in Ship in Campus'. Graduates from this course are given with the document of CDC and INDoS number by the D.G.Shipping, after which they can sail on board Merchant Ships as Junior Engineer officer. Placement service is rendered by the department for getting employment in Indian and foreign shipping Companies.

Physical & eye fitness certificate from a medical officer approved by the DG Shipping should be produced at the time of admission. (The list of medical officers and agency are available in website www.dgshipping.com.). In this B.Tech programme the students are governed by separate rules regarding uniforms, hostel facilities, curricular and extra-curricular activities, training, discipline, attendance requirement besides a special fee structure. However, candidates are advised to ensure themselves that they are medically fit in all aspects before submitting their options.



School of Environmental Studies								
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional or non professional	Intake			
M. Sc. Environmenta	al Technology							
Stream 1. Environmental Engineering.	Graduate in Chemistry with Physics and Mathematics as subsidiaries or graduate in Engg. (Civil/Public Health/ Environmental or Chemical) with 55% marks. (50% in the case of SC/ST candidates) in optional subjects in the qualifying exam and a valid rank in the CAT, conducted by the University.	4 Sem.	Regular	Professional	6			
Stream 2. Environmental Bio technology	Graduate in Life Sciences/ Environmental Science/ Zoology/ Botany/ Microbiology with 55% marks (50% in the case of SC/ST candidates) in optional subjects in the qualifying exam and a valid rank in the CAT, conducted by the University.	4 Sem.	Regular	Professional	6			



School of Environmental Studies								
M.Tech Marine Bio technology (offered at National Centre for Aquatic Animal Health, Marine Campus) (sponsored by Department of Bio-Technology, Government of India) (No need to register for CAT)	B.Tech/BE in Chemical Engg., Bio-Chemical Engg., Industrial Biotechnology, Leather Biotechnology, Chemistry/Bio technology, Biomedical Engg., B.Pharm, Chemical Technology.  Or  MSc. in Biotechnology, Marine Biotechnology, Life Sciences, Botany/Zoology/Bio chemistry, Microbiology/Genetics, Biophysics, Microbial Genetics and Bioinformatics, Marine Biology/Aquatic Biology and Fisheries/Environmental Biotechnology/Mariculture with 60% marks  Or  equivalent CGPA from any recognized Indian or foreign University  (The selected candidates will get a monthly stipend of Rs.8000/-)	4 Sem	Regular	Professional	8			

For admission to M.Tech in Marine Bio-Technology, GATE score is not considered. Selection of candidates is done by Jawaharlal Nehru University (JNU) on behalf of Department of Bio-Technology, Government of India through a National Test along with all such examinations conducted by the JNU. For details visit JNU website: <a href="https://www.jnu.ac.in">www.jnu.ac.in</a>. For details on (NCAAH) please visit www.ncaah.org

Ph. D research programme is also offered in School of Environmental Studies



Depar	Department of English and Foreign Languages (Admission directly by the Department -NO online registration)										
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/ Non- Professional	Intake						
Certificate programmes in French / German /Japanese/ Russian	Pass in Pre-degree/Plus Two or equivalent thereto of any University recognized by CUSAT. Previous knowledge of the language is not essential.	1 year	Part-Time	Non-Professional	25						
P.G. Diploma in Communicative English	Bachelor's degree holders of any University acceptable by the University.	1 year	Part-Time	Non-Professional	25						
Diploma Programmes in French / German /Japanese/ Russian	Pass in Pre-degree/Plus Two or equivalent thereto of any University recognized by CUSAT. Previous knowledge of the language is not essential.	1 year	Part-Time	Non-Professional	10						
Integrated Diploma in French/ German / Japanese/ Russian	Pass in Plus Two or equivalent. Previous knowledge in the language concerned is not essential.	1 year	Part-Time	Non-Professional	20						
Integrated Diploma in Italian	Pass in Plus Two or equivalent. Previous knowledge of the language concerned is not essential	1 Year	Part-Time	Non-Professional	25						
M. A. Translation in German/Russian	Bachelor's degree of any University recognized by CUSAT and diploma level knowledge in the language concerned.	4 sem.	Regular Full-time	Non-Professional	5						



#### **Department of Hindi Professional** Nature of or Non-**Programme Name Eligibility Criteria for Admission Duration** Intake **Programme Professional** M. A. Hindi B.A. /B.Sc. degree with Hindi as a subject of study with at least 45% Non-Language and 4 Sem. Regular 28 marks in Hindi. Professional Literature Non-M. Phil. Hindi Master's Degree in Hindi with at least 55% marks. Regular 10 2 Sem. Professional P. G. Diploma in Non-Translational and Bachelor's degree with Hindi as one of the subjects. Part-time 28 1 year Professional Functional Hindi

PhD Programmes are also offered in this Department

	School of Legal Studies								
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./Non- Prof	Intake				
5 Year B.B.A. LL. B. (Hons.)*	<ul> <li>i) Pass in Plus 2 examination with 60% marks in Science / Commerce group or 55% marks in Arts / Humanities.</li> <li>ii) Should not have completed 20 years of age on July 1st of the year of admission; 22 years in the case of SC / ST and OBC candidates.</li> </ul>	10 Sem.	Regular (Cost-sharing)	Professional	30				
5Year B.Com. LL.B. (Hons.)*	<ul> <li>(i) Pass in Plus 2 examination with 60% marks in Science group or 55% marks in Commerce / Arts / Humanities.</li> <li>(ii) Should not have completed 20 years of age in July 1st of the year of admission; 22 years in the case of SC / ST and OBC candidates.</li> </ul>	10 Sem.	Regular (Cost-Sharing)	Professional	30				
3 Year LL.B (regular) (evening)	Bachelors Degree with 40% aggregate marks in any discipline of a University recognized by CUSAT. 35% for SC/ST. Candidates who have appeared for the qualifying examination may also apply in anticipation of results. However, the mark lists obtained in the qualifying examination shall be produced at the time of admission. Those who fail to produce mark list shall not be considered for admission.	6 Sem.	Regular (Cost-Sharing) (Evening)	Professional	40				
LL. M.	Bachelor's degree in Law with at least 45% marks.	4 Sem.	Regular	Professional	36				

<sup>\*(</sup>Students who have taken their 10+2 or degree through distance or correspondence method are permitted to join the five year course, whereas those who received the course completion certificate through Open University Scheme without any basic qualifications, are not eligible for admission to this course)

Ph.D research programme is also offered in this Department.

	Inter University Centre for Intellectual Property Rights Studies								
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./Non- Prof	Intake				
Master of Intellectual Property (MIP), Ph.D.	Bachelor's Degree in Law, Economics, Political Science, History, Management and Science & Technology with 55% from any of the Universities in Kerala or an examination of any other University accepted by the University as equivalent thereto and should have obtained rank in CAT conducted by the University.  SC/ST candidates are eligible for concession admissible under the orders of the Government.	5 years	Cost Sharing	Non- Professional	05				
LL.M (IPR) Ph.D Degree	Bachelor's Degree in Law with 55% from any of the Universities in Kerala or an examination of any other University accepted by the University as equivalent thereto and should have obtained rank in CAT conducted by the University.  SC/ST candidates are eligible for concession admissible under the orders of the Government.	5 years	Cost Sharing	Non- Professional	05				
P.G. Diploma in Intellectual Property Rights.	Bachelor's Degree in Law, Economics, Political Science, History, Management and Science & Technology / Engineering.	1 year	Cost Sharing	Non- Professional	15				



	School of Industrial Fisheries				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./ Non Prof.	Intake
M. Sc. Industrial Fisheries	Bachelor's degree in Fisheries/Zoology/Botany with at least 55% marks in the optional subjects. Bachelor's Degree in Fisheries includes Industrial Fisheries/Aquaculture/Fishery Science/ Industrial Fish & Fisheries/ B.F.Sc (Nautical Science).  * Reserved for children of such persons whose occupation is fishing and are sponsored by Dept. of Fisheries, Kerala. (3 seats)  # Reserved for Sponsored staff of Kerala Fisheries Department (2 seats)  (admission based on CAT score and Interview Marks)	4 Sem.	Regular	Professional	14+ 3*+ 2 <sup>#</sup>
M .Phil. Fisheries Science	M.Sc. Degree in Industrial Fisheries/ Marine Biology/ Zoology/Aquatic Biology and Fisheries/Fishery Biology and Aquaculture/ Capture and Culture Fisheries/ Aquaculture/ M.F.Sc/M.Sc Applied Fisheries and Aquaculture/M.Sc. Aquaculture and Fish Processing or any other Post Graduate Degree in Fisheries and allied subjects / Life Sciences / Biotechnology with a minimum of 55% aggregate marks (or equivalent grade)	2 Sem.	Regular	Non Professional	10



M .F.Sc Seafood Safety and Trade  Bachelor's degree in Fisheries/Food Technology/ Food Science/Microbiology/ Biochemistry/ Zoology with at least 55% marks in optional subjects. Bachelor's degree in Fisheries includes Industrial Fisheries / Aquaculture / Fishery Science / Industrial Fish & Fisheries / B.F.Sc (Nautical Science). Bachelor's degree in Food Technology / Food Science includes B.Tech / B.E. / B.Sc. in Food Science and Technology / Food Science and Management /Food Science / Food Technology / Food processing Technology / Food Science and Quality Control.	4 Sem.	Regular	Professional	20
---	--------	---------	--------------	----

# **Department of Atmospheric Sciences**

Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./ Non- Prof.	Intake
M. Sc. Meteorology	B.Sc. degree with Physics/Mathematics as the main subject with 55% marks. Those with Mathematics as the main subject should have studied Physics as one of the subsidiaries and vice-versa.	4 Sem.	Regular	Professional	12
M. Tech (Atmospheric Science)	<ul> <li>i) M.Sc degree or its equivalent in Meteorology/ Oceanography/ Mathematics/ Physics/Space Physics with a first class (60% marks) from any recognized University or Institution.</li> <li>ii) A valid GATE score or a pass in the Joint UGC - CSIR Test (NET) for JRF</li> </ul>	4 Sem.	Regular	Professional	10+ 2(sponsored)

Ph.D. research programme is also offered in this Department



Programme Name  Eligibility Criteria for Admission			D C : 1/	-
	Duration	Nature of Programme	Professional/ Non- Professional	Intake
M.Sc. Hydro chemistry  B.Sc. Degree in Chemistry with Mathematics and Physics as subsidiaries or B.Sc. Degree of any University in Kerala with Polymer Chemistry/ Industrial Chemistry/ Petro chemicals/ Environment and Water Management as the main subject and Mathematics and Physics/ Computer Science as subsidiaries, with a minimum of 55 marks in the respective main subject.	4 Sem.	Regular	Professional	12
M.Phil.  Marine Chemistry  Master's Degree in Hydrochemistry, Chemistry or any other branch of Chemistry was a minimum of 55% marks in aggregate or equivalent grade.	ith 2 Sem.	Regular	Non-Professional	10



	Department of Marine Biology, Microbiology & Biochemistry							
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake			
M. Sc. Marine Biology	B.Sc. degree in any branch of Life Sciences such as Aqua culture, Biochemistry, Biotechnology, Botany, Microbiology, Zoology etc. as a main subject or B.Sc. degree in Fishery Science with at least 55% marks in the optional subjects.	4 Sem.	Regular	Professional	19+1*			
M. Phil. Life Sciences	Pass in Master's degree examination in any branch of Life Sciences (Aquatic Biology and Fisheries, Biochemistry, Biotechnology, Botany, Fishery Science, Marine Biology, Micro Biology and Zoology)	2 Sem.	Regular	Non-Professional	6			

Ph.D. research programme is also offered in this Department.

# **Department of Marine Geology and Geophysics**

Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake
M. Sc. Marine Geology	B.Sc. degree in Geology/Physics/Chemistry with 60% aggregate marks.	4 Sem.	Regular	Professional	10
M. Sc. Marine Geophysics	B.Sc. degree in Geology/Physics with Mathematics as one of the subjects and at least 60% aggregate marks.	4 Sem.	Regular	Professional	10

Ph D. research programme is also offered in this Department.

<sup>\*</sup>reserved for physically challenged (super numerary)



	Department of Physical Oce	eanography	7		
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake
M. Sc. Oceanography	B.Sc. degree with Physics/ Mathematics as the main subject with 55% marks. Those with Mathematics as the main subject should have studied Physics as one of the subsidiaries and vice-versa.	4 Sem.	Regular	Professional	15
M. Tech. Ocean Technology	<ul> <li>(i) M.Sc. degree in Oceanography/ Physics / Marine Geology / Meteorology / Marine Geophysics / Environmental Sciences or M.Sc.</li> <li>(Tech) Degree in Marine Geophysics or</li> <li>B.Tech or equivalent degree/AMIE in Civil Engineering/ Environmental Sciences with 60% marks from any recognized University or Institution.</li> <li>(ii) A valid GATE score with any of the subjects mentioned above as the second paper</li> </ul>	4 Sem.	Regular	Professional	12

Ph.D. research programme is also offered in this Department.



	Department of Applied Chemistry									
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake					
M.Sc. Chemistry	B.Sc. degree with Chemistry/Polymer Chemistry/ Environmental Chemistry/Industrial Chemistry/ Petrochemicals (main) with Mathematics as one of the subsidiary subjects with at least 55% marks in the main subject.	4 Sem.	Regular	Non-Professional	20+1 (BGN)					
M.Phil. Chemistry	Pass in Master's degree examination in the concerned subject of any of the Universities approved by the University Grants Commission (UGC) or examinations accepted by the Academic Council as equivalent thereto and have obtained a minimum of 55% aggregate marks (or equivalent grade) in the examination.	2 Sem.	Regular	Non-Professional	9					
M.Tech. Industrial Catalysis	M.Sc. degree in (Chemistry / Applied Chemistry) or any other degree recognized as equivalent with at least a first class (60% marks) from any recognized University or institution with a valid GATE score.	4 Sem.	Regular	Professional	10+ 5 (spons ored)					

Ph. D. research programme is also offered in this Department.



	Department of Biotechnology				
M. Sc. Bio-technology	Bachelor's degree in any branch of Life Sciences including Agricultural and Medical Sciences/Chemical Sciences/ Chemical Engg. with minimum of 55% marks in aggregate.	4 Sem.	Regular	Professional	12
Ph.D. research programm	ne is also offered in this Department.				
	Department of Mathematics				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./ Non- Prof.	Intake
M. Sc. Mathematics	B.Sc. degree with Mathematics main with at least 55% marks for optional subjects taken together.	4 Sem.	Regular	Non-Professional	30
M.Phil Mathematics	M.Sc degree in Mathematics with at least 55% Marks, or equivalent grade.	2 Sem.	Regular	Non-Professional	10
Ph.D. research programm	e is also offered in this Department.	1	1		· ·



Programme Name Eligibility Criteria for Admission Duration Prof. Intake M. Sc. Physics B.Sc. degree with Physics main and Mathematics subsidiary with at least 55% marks in Physics.  M. Sc. Physics M.Sc. degree in Physics with at least 55% marks.  Duration Prof. Prof./Non-Prof. Intake Prof.  A Sem. Regular Non-Professional 25 M. Phil. Physics M.Sc. degree in Physics with at least 55% marks.		Department of Physics				
M. Sc. Physics  55% marks in Physics.  4 Sem. Regular Non-Professional 25	Programme Name	Eligibility Criteria for Admission	Duration			Intake
M. Phil. Physics M.Sc. degree in Physics with at least 55% marks. 2 Sem. Regular Non-Professional 8	M. Sc. Physics	·	4 Sem.	Regular	Non-Professional	25
	M. Phil. Physics	M.Sc. degree in Physics with at least 55% marks.	2 Sem.	Regular	Non-Professional	8

Ph.D research Programme is also offered in this Department.



	Department of Statistics									
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./ Non- Prof.	Intake					
M. Sc. Statistics	B.Sc. degree in Mathematics or Statistics main with at least 55% marks for optional subjects taken together.	4 Sem.	Regular	Non-Professional	20					
M.Tech. Engineering Statistics (No admission in 2015)	B.Tech or equivalent degree or AMIE in any discipline or AMII with a first class (60%) from any recognised University or institution with valid GATE score.	4 Sem.	Regular	Professional	8					

Ph. D. research programme is also offered in this Department.



	Department of Applied Economics				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./Non- Prof.	Intake
M. Phil. Applied Economics	Pass in Master's degree examination in the subject concerned of any of the Universities approved by the University Grants Commission (UGC) or an examination accepted by the Academic Council as equivalent thereto and have obtained a minimum of 55% aggregate marks (or equivalent grade) in the examination.	2 Sem.	Regular	Non-Professional	12
M.A. (Applied Economics)	Bachelor's degree in Economics with 55% marks in part III (Economics & Subsidiaries) or 60% marks with B.Com, BBA, BBM with Economics as one of the subjects or B.Sc. Mathematics or Statistics with 65% marks. Pass for SC / ST candidates.	4 Sem	Regular	Non-Professional	15



	School of Management Studies									
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake					
M. B. A. (Fulltime)	Bachelor's degree in any subject with 50% marks in aggregate.	4 Sem.	Regular	Professional	60					
M. B. A. (Parttime)	<ul> <li>(i) Bachelors degree in any subject with 50% marks in aggregate.</li> <li>(ii) 50% of the seats are reserved for candidates having 3 years of supervisory/executive experience after taking the degree.</li> <li>(iii) In the absence of such candidates as mentioned in (ii) vacancies will be offered to any other candidates satisfying eligibility as per (i).</li> </ul>	6 Sem.	Part-time (Evening)	Professional	30					
M.B.A (Inter national Business)	Bachelor's degree in any discipline recognized by the University with 50% marks in aggregate	4 Sem.	Regular	Professional	60					
M.B.A (Travel & Tourism)	Bachelor's degree in any subject with 50% marks in aggregate.	4 Sem.	Regular- Self- Financing	Professional	60					
M. Phil. (Commerce)	Master's degree in Commerce with at least 55% marks.	2 Sem.	Regular	Non- Professional	6					

Ph. D. research programme is also offered in this Department.

NB: - The admission to MBA courses are based on C-MAT (AICTE)/MAT (AIMA)/CAT (IIM) score and performance in GD interview etc. See Chapter 6 for full details.



	Cochin University College of Engineering Kuttanad									
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake					
M.C.A	Any graduate with Mathematics as one of the main or subsidiary subjects or graduate in Electronics / Computer Science / Computer Applications/ Engineering/Technology with aggregate 55% marks in all subjects other than	6 Sem.	Full-time (Cost- sharing)	Professional	30					
	languages and humanities.		Full-time (Regular)	Professional	30					

	Department of Electronics									
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake					
M. Sc. Electronic Science (with specialization in Artificial Intelligence, Robotics, Microwave Electronics and Computer Tech.)	First Class B.Sc. degree (with not less than 60% aggregate marks) in Electronics or Physics.	4 Sem.	Regular	Professional	25+ 05(sponsored)					



M. Tech. Electronics (with specialization in Digital Electronics, Microwave & Radar Electronics)	i) B. Tech or equivalent degree /AMIE/ AMIETE in Electronics and Communication Engineering/Electrical Engineering / Electronics and Instrumentation or M.Sc. degree in Electronics /Physics (with Electronics as specialization) with a First Class (60%) from any recognized University or Institution.  ii) A valid GATE score in Electronics/Electronics and Communication Engg.  iii) If sufficient numbers of candidates are not available in category (ii) above, candidates with GATE score in Electrical & Electronics Engg., Instrumentation, Electrical Engg. or Physics will be considered.  In the absence of GATE qualified candidates Non GATE candidates can be admitted on the basis of a Departmental Admission Test (DAT)	4 Sem.	Regular	Professional	20+5 sponsored
--	---	--------	---------	--------------	----------------

Ph. D. programme is also offered in this Department



Programme name  Eligibility Criteria for Admission  The candidates shall have passed the plus two (12th) examination of any state/national board with Mathematics, Physics and Chemistry or any other examination accepted as equivalent by the Cochin University of Science and Technology.  The candidate shall have secured a minimum of 60% marks in	Duration	Nature of Programme	Prof./Non- Prof.	Intake
state/national board with Mathematics, Physics and Chemistry or any other examination accepted as equivalent by the Cochin University of Science and Technology.  The candidate shall have secured a minimum of 60% marks in				
Instrumentation Technology  Mathematics, Physics and Chemistry put together with at least 55% in Mathematics separately. The minimum eligibility for SEBC (belonging to Kerala State) is 55% for Mathematics, Physics and Chemistry put together with at least 50% for Mathematics.	8 Sem.	Regular	Professional	28
M.Sc B.Sc. Degree in Instrumentation / Physics / Electronics with 60% marks from any recognized University	4 Sem.	Regular	Professional	15

Ph. D. programme is also offered in this Department



	Department of Polymer Science & Rubber T	<b>l'echnology</b>			
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional/Non- Professional	Intake
B. Tech. in Polymer Science &Engg.	Pass in Plus Two examination of the State of Kerala with Mathematics, Physics and Chemistry as optional subjects or any other examination accepted as equivalent thereto securing a minimum of 50% marks in Mathematics and 50% marks in Mathematics, Physics and Chemistry put together.	8 Sem.	Regular	Professional	20
M.Tech. Polymer Technology	<ul> <li>i) B. Tech or equivalent degree / AMIE in Polymer Science and Rubber Technology/ Chemical Engg. /Technology or M.Sc. Polymer Chemistry/ M.Sc. Chemistry with Polymer Chemistry specialization with a First Class (60% marks) from any recognized University or Institution.</li> <li>ii) A valid GATE score</li> </ul>	4 Sem.	Regular	Professional	10
M.Sc in Biopolymer Science*	Pass in the B.Sc. Degree examination with Chemistry as one of the subjects (Main or one of the subsidiary subjects) of any University / Institution approved by UGC. The candidate should have passed the qualifying examination with a minimum of 50% marks in the main and subsidiary subjects taken together.	4 Sem.	Regular	Professional	20

<sup>\*</sup> offered at Centre for Bio-Polymer Science & Technology, A Unit of CIPET, Eloor, Kochi 683 501

Ph. D. programme is also offered in this Department



	Department of Ship Technology				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional or Non-Professional	Intake
B. Tech. Naval Architecture & Ship Building	Should have passed Plus Two (10+2) examination conducted in Kerala or the examination of any other University/ Board accepted by the Syndicate of the University as equivalent thereto in First Class (60% marks) with Mathematics, Physics and Chemistry as subjects of study. The candidate shall have secured a minimum of 50% marks in Mathematics as well as for Mathematics, Physics and Chemistry put together.	8 Sem.	Regular	Professional	43 seats out of which 15 seats are reserved for Naval candidates
M. Tech. Computer Aided Structural Analysis & Design	<ul> <li>i) B.Tech. or equivalent degree in Naval Architecture and Ship Building/ Civil Engineering/ Mechanical Engineering with a first class (60%) marks from any recognized University or Institution.</li> <li>ii) A valid GATE score.</li> </ul>	4 Sem.	Cost -sharing	Professional	18



	International School of Photonics				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Professional / Non- Professional	Intake
M. Tech. Opto- Electronics and Laser Technology	<ul> <li>i) Master's degree in Physics / Electronics/Photonics or B.Tech /B.E Degree in Electronics and Communication Engineering / Electronics Engineering / Electrical Engineering / Electrical &amp; Electronics with a first class (60%) from any recognized University or institution</li> <li>ii) A valid GATE score (in the concerned branch of study)</li> <li>iii) If sufficient numbers of candidate with GATE score in the concerned branch of study are not available, candidates with GATE score in Instrumentation will be considered. If sufficient numbers of GATE score holders are not available a pass in DAT is sufficient.</li> </ul>	2 years.	Regular	Professional	10
5 Year Integrated M.Sc in Photonics	Pass in Plus Two examination of the State of Kerala with Mathematics, Physics and Chemistry as optional subject or any other examination accepted as equivalent thereto securing a minimum of 50% marks in mathematics and 50% marks in Mathematics, Physics and Chemistry put together.	10 sem.	Full-time	Professional	20
Ph.D. programme is also offered in this Department					



	Department of Computer Applications				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./ Non- Professional	Intak
M. C. A.	Any graduate with Mathematics as one of the main or subsidiary subjects or graduate in Electronics/ Computer Science / Computer Applications / Engineering/ Technology with	6 Sem.	Regular	Professional	30
	aggregate 55% marks in all subjects other than languages and humanities.	6 Sem.	Cost-sharing	Professional	30
Ph.D. programme is also off	ered in this Department			1	
	Department of Computer Science				
Programme Name	Eligibility Criteria for Admission	Duration	Nature of Programme	Prof./Non- Professional	Intak
M.Tech. Computer and Information Science	i) B.Tech or equivalent degree or AMIE/AMIETE in the branch of Computer Science or Information Technology or Electronics & Communication, or MCA, with a first class (60%)	4 Sem.	Regular	Professional	14
M. Tech. Software Engg.	marks) applicable to all the above, from any recognized University of Institution.  ii) A valid GATE score in the subject 'Computer Science & Information Technology'.	4 Sem.	Regular	Professional	13
M.Tech Computer Science with Specialization in Embedded Systems (Part-Time)	<ul> <li>i) First Class B.Tech degree in Computer Science &amp; Engineering / Electronics Engg. / Information Technology / Electrical Engg. or equivalent branches or M.C.A with 60% marks or equivalent CGPA</li> <li>ii) Minimum of 1 year experience in Industry of repute or a University / Institution recognized by appropriate statutory bodies.</li> </ul>	5 Sem.	Part-time (evening)	Professional	15



#### 'SELF-FINANCING', 'COST-SHARING' AND 'REGULAR' PROGRAMMES

Academic Programmes of the University are classified as 'Self-financing', 'Cost-sharing' and 'Regular' programmes. The nature of the programme is clearly indicated against each programme in the table of Eligibility Criteria given above.

'Self-financing' Programme

Specified academic programmes of the University are "Self-financing" programmes, which have a different fee-structure. All B.Tech courses offered at KunjaliMarakkar School of Marine Engineering, SOE, (both at THRIKKAKARA Campus) & CUCEK (Pulincunnoo campus) comes under the category of self financing programmes. 50% of the seats of these programmes are treated as 'State merit' carrying lower rate of fees. The remaining 40% of seats are 'All India Merit' carrying higher rate of fees and 10% reserved as NRI payment seats (see schedule of fees). Communal reservation rules are applicable to these programmes; (The candidates applying for such reservation may make sure that they meet the criteria regarding caste, income etc.); however, eligibility under communal reservation quota is restricted to applicants who satisfy the requirements regarding annual family income (see section on 'Annual Family Income limit').

#### 'Cost - sharing' Programmes

Specified academic programmes of the University are "Cost – sharing" Programmes, which envisage a sharing of the cost of infrastructure-building between the students and the institution.

### 'Regular' Programmes

All UG or PG Programmes not specifically indicated as 'Self-financing' or 'Cost-sharing' are 'Regular' Programmes.



#### CHAPTER 6

# ADMISSION PROCEDURE – GENERAL INSTRUCTIONS

All academic admissions are based on the merit of the applicants as determined through an admission test conducted for the purpose, subject to satisfying other prescribed eligibility criteria. (See section on "Eligibility Criteria"). Foreign nationals are exempted from the above requirement of writing the admission test (See section on "International Students"). The admission tests are of two types viz, Common Admission Test (CAT) or Department Admission Test (DAT). Depending upon the combination of programmes an applicant chooses, he / she may have to appear for the CAT/DAT (and / or Group Discussion/ Interview). As part of CAT, special test called Lateral Entry Test (LET) is conducted for admission to Lateral Entry Programmes. Candidates are advised to read carefully the rules in this regard and choose & appear for such examinations that would make them eligible for the programmes they prefer to get admitted to. Candidates who await their final semester results can also apply for DAT at their own risk. They shall prove their eligibility by producing the final mark list and provisional degree certificate within the prescribed time limit as set by the Department that conducts the DAT, failing which their candidature will be forfeited and they shall not be included in the rank list. No representations for redressal of grievances caused by acts of omission or non - observance of rules by the candidates in this regard will be entertained by the University.

All UGC specified Degrees, Diplomas etc. awarded by the UGC approved statutory Universities shall be accepted as qualifying examination for admission to PG courses. Distance education Degrees/Diplomas recognized by the UGC in conformity with UGC notification of specification of degrees, for education/employment purpose in the University shall also be accepted. Courses equivalent to 12th standard/plus two or equivalent with the required combinations and marks shall be the required qualification for undergraduate courses. Students who have appeared or are appearing for the final year/semester examination may also apply for the Tests provided that 1. they have appeared/ are appearing for the final year/semester exam in full and for the first time 2. they have passed all examinations prior to the final year/semester. In other words students who are appearing for compartmental/improvement/supplementary examinations are not eligible for this privilege. Such candidates who avail of this privilege have to produce the original mark lists of all semesters/years excluding the final semester/year, relevant and previous, (including the penultimate) examinations, the Transfer Certificate and a Certificate from the Head of the Institution last attended stating that they have completed the programme of study and have appeared or are appearing for all the examinations in the courses of the final year/semester of the qualifying degree / diploma / certificate and that their results are awaited, at the time of Counselling/admission, whichever is held earlier, failing which they will not be



permitted to attend the same as the case may be. In the case of PG admissions such candidates awaiting their final year/semester results, if selected, may be permitted to join at their own risk subject to the condition they shall produce the provisional degree certificate and mark lists of the required qualification before the date of registration for the regular first semester examination, failing which they shall not be permitted to continue the programme and shall be summarily removed from the rolls of the University. These concessions shall not be applicable to students who have failed in their qualifying examination or who have failed to acquire the required percentage of marks and subsequently have appeared for supplementary / improvement examination(s). However, for admissions to all B.Tech., 5 year Integrated M.Sc. in Photonics, and 5 year B.B.A. LL.B (Hons.)/B.Com.LL.B. (Hons.) programmes, the mark list proving the eligibility obtained in the qualifying examination has to be produced invariably at the time of admission. Those who fail to produce mark list shall not be considered for admission. For those, who pass the Plus Two or equivalent qualifying examination in a subsequent chance in the current/same year, admission to the B.Tech programmes of the University shall be governed by the current rules prescribed in the matter by the Government of Kerala.

#### A. THE DEPARTMENTAL ADMISSION TEST (DAT) (For PhD and MPhil)

Admission to MPhil and PhD programmes are based on the DAT conducted by the respective Department, marks of the qualifying examination and marks obtained for interview are also considered for preparing the final rank list. Detailed procedure is given below under the heading PhD Programme. PLEASE NOTE THE CANDIDATES WHO WISH TO APPLY FOR PhD PROGRAMME SHOULD CONTACT THE FACULTY MEMBERS OF THE CONCERNED DEPARTMENT/RESEARCH CENTRE AND OBTAIN THE CONSENT OF A GUIDE FOR DOING THE RESEARCH UNDER HIM/HER. FOR PhD AND MPhil HARD COPYOF THE APPLICATION FORM SHOULD BE PROCURED FROM THE CONCERNED DEPARTMENT AND SHOULD BE SUBMITTED TO THE SAME DEPARTMENT ITSELF WITHIN THE PRESCRIBED TIME. The prescribed fee for cost of application should be remitted in the form of DD from State Bank of Travancore or State bank of India drawn in favour of Registrar, CUSAT and payable at Ernakulam.



# **B.THE COMMON ADMISSION TEST (CAT)**

Admission to all undergraduate courses and PG courses other than MPhil & MTech are based on the CAT Rank. Students who have passed the qualifying examination (the qualification prescribed under 'Eligibility Criteria') shall be eligible to apply for the CAT. The Tests offered in CAT and the Test Codes are listed below:-

# **CHOOSE YOUR TEST SUBJECT CORRECTLY** (see chapter 9 for assistance)

Subject of Tests	Test Code
Test for B.Tech and M.Sc Photonics	101
LET (Lateral Entry to B.Tech. Programmes)	102
Aptitude Test for 5 Year B.B.A LL.B. (Hons.)/B.Com LL.B. (Hons.)	201
Test for M.A. Hindi	301
C-MAT/MAT/CAT(IIM) for management programmes of CUSAT	401
Aptitude Test for MCA	501
Biotechnology	601
Botany	602
Chemical Engineering	603
Chemistry	604
Electronic Science	606
Engineering Science	607
Fisheries / Fisheries Science	608

Geology	609
Law (for LL.M)	610
Life Sciences	611
Mathematics	612
Physics	613
Statistics	614
Zoology	615
Applied Economics	616
Instrumentation	617
Food Science	618
Aptitude Test for 3 year LL.B (Regular) (Evening)	619
Aptitude Test for MIP, PhD and LLM, PhD	620



#### STRUCTURE OF CAT

# Test for First Degree programmes in Engg. & Technology (Test 101)

The test comprises of 250 objective type multiple choice questions based on Plus Two syllabus. Of this, 125 questions will be from Mathematics and 125 questions will be from Physics and Chemistry with physics to chemistry ratio maintained at 3:2. The duration of the test will be three hours. The admission to following courses is based on the score in this test.

5-year Integrated M.Sc. in Photonics

- B. Tech. course in Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Electronics Engineering, Information Technology, Marine Engineering, Mechanical Engineering, Safety & Fire Engineering.
- B. Tech. course in Instrumentation Technology
- B. Tech. Naval Architecture & Ship Building
- B. Tech. Polymer Science & Engineering

Candidates, appearing for Test 101, i.e. the **Test for First Degree programmes in Engineering and Technology, should have scored a minimum of ten marks for each subject (PCM) of the paper (101) to be eligible to figure in the respective rank list.** This requirement of minimum marks, however, will not be applicable for candidates coming under SC/ST communities.

# Test for Lateral Entry to III Semester B.Tech Programme (LET) (Test 102)

The Lateral Entry Test for admission to III Semester of the B. Tech course comprises 200 objective type questions designed to test the proficiency in English (20 questions), Mathematics (50 questions), Engineering Mechanics (40 questions), Engineering Graphics (40 questions) and General Engineering (50 questions). The test shall be of 3 hours duration and the maximum marks will be 600.



#### Aptitude Test for B.B.A., LL.B. (Hons.) / B. Com., LL.B. (Hons.) (Test 201)

The Test for B.B.A., LL.B.(Hons.) / B.Com.,LL.B (Hons.) comprises 150 objective type questions designed to test the proficiency in General English (50 questions) Ability in Reasoning and Logical Thinking (50 questions) proficiency in General Knowledge and Current affairs (25 questions) and in Law Related Matters (25 questions). The maximum marks will be 450. The candidate will have option to select either of the five year courses on the basis of their ranks.

Applicants for B.B.A. LL.B. (Hons.) / B.Com., LL.B (Hons.) irrespective of whether or not they are applicants for any other programme, have to necessarily take the Test 201.

# Test for LL.M. (Test 610)

The Test for LL.M. comprises of two parts:

Part I – Proficiency in English, Analytical & other abilities and General Knowledge

Part II –Proficiency in the related subjects.

# Test for M.A. Hindi (Test 301):

The Test for M.A. Hindi comprises 150 objective type questions at a level answerable by candidates with Hindi as a second language at degree level.

Applicants for M.A. Hindi, irrespective of whether or not they are applicants for any other programme, have to necessarily take the Test 301.

# Test for Management Programme MBA (Full Time) / (Part Time), MBA (International Business) & M.B.A. (Travel & Tourism)

For MBA courses of the University, the admission to the 2015 batch will be based on C-MAT (AICTE)/ MAT (AIMA)/CAT (IIM) score and performance at Group Discussion and Interview conducted by the University. However, they must also submit their applications online to the University within the stipulated time as per the CAT 2015 Notification.

# **Aptitude Test for MCA (Test 501)**



The aptitude Test for MCA comprises 150 objective type questions designed to test the aptitude and capability of an applicant for pursuing the M.C.A programme. About 50% of the questions will be from Mathematics covering areas of Engineering Mathematics / B.Sc. subsidiary level Mathematics while the remaining questions will be to test the ability of the candidate in logical reasoning based on pictures, geometrical figures, patterns of words, Number Sequence, Set Theory, Logic decoding etc. Applicants for MCA, irrespective of whether or not they are applicants for any other programme, have to necessarily take the Test 501.

#### Tests for PG Programmes (Tests 601-604, 606-615, 617-618)

The Test for PG Programmes (Tests 601–604, 606-615, 617-618) comprises 150 objective type questions designed to assess the proficiency of the applicant at the Graduate level in the test subject chosen by the candidate. Applicants for PG programmes (other than M.A. Hindi) may choose and specify any one of the 16 subjects (listed with Code Numbers 601–604, 606-615, 617-618) relevant to the programme for which the admission is sought for. A table is given at the last page of the prospectus for quick reference of the selection of Test Subjects. This subject could be either the main subject of the qualifying degree examination of the applicant or the subject nearest to the main subject, provided it meets the eligibility criteria prescribed for the programmes chosen. See chapter on "How to Choose test subjects for PG Programmes-Quick reference table"

### **Test for M.A. Applied Economics (Test 616)**

The Test for M.A. Applied Economics (Test 616) comprises of 150 objective type questions designed to test the proficiency of the applicant at the Graduate level in Economics. (50 % of the questions will be from Economics, 15% from Simple Mathematics, 15% from Statistics and 20% General awareness.)

# **Test in Engineering Science (Test 607)**

The Test in Engineering Science is for testing the aptitude of an applicant for admission to the interdisciplinary programme M.Sc. Environmental Technology (Stream 1).

# **Test in Life Science (Test 611)**

Tests the subject knowledge as well as aptitude of an applicant for admission to the interdisciplinary programmes of M.Sc. Biotechnology M.Sc. Environmental Technology (Stream II) M.Sc. Marine Biology and M.Sc. Biopolymer Sciences. Questions will therefore be from areas in Life Science / Medical Science / Agricultural Science, which a graduate in any of the above branches of study, should be able to answer.



# **Aptitude Test for 3 year LL.B course (Test 619)**

The Test for 3 year LL.B. Course (Test 619) comprises 150 objective type questions designed to test the proficiency in English (25) Comprehension ability (25) General Knowledge/Current affairs (25) Legal aptitude (50) and Logical Reasoning (25). The maximum marks will be 450. Applicants for the above irrespective of whether or not they are applicants for any other programmes, have to necessarily take the Test 619.

# Aptitude Test for Five year Integrated Dual Degree Programmes of MIP Ph.D Degree & LL.M (IPR) Ph.D Degree (Test 620)

The Aptitude Test for MIP Ph.D& LL.M., Ph.D. comprises 150 objective type questions designed to test the proficiency in English (40 marks), General Knowledge (15 marks), General aptitude in Intellectual Property Law (20 marks), Analytical and Reasoning Ability (40 marks) and Aptitude to do Research (35 marks). Applicants for MIP Ph.D Degree & LL.M (IPR) Ph.D Degree, irrespective of whether or not they are applicants for any other programme, have to necessarily take the Test 620.

Marks and Scoring: The CAT score will be calculated as per the formula, S = 3R - 1W, where S is the CAT score, R is the number of right answers and W is the number of wrong answers. For each right answer 3 marks will be awarded and for each wrong answer one mark will be deducted. In case of a tie, the existing University norms will be followed.

# **Group Discussion and Interview**

Applicants for M.B.A (Full-time) / M.B.A (Part-time), M.B.A (International Business), M.B.A. (Travel & Tourism) will be short-listed on the basis of their C-MAT score (AICTE) / MAT Score (AIMA) / CAT (IIM) and will be required to attend Group Discussion and Interview.

Applicants for M.Sc Industrial Fisheries will be short-listed on the basis of their CAT score and will be required to attend interview.



# **CAT Rank Lists**

M.B.A (F.T) / (P.T), M.B.A (I.B) & M.B.A. (T.T.): Rank lists for M.B.A (Full-time) / (Part-time), M.B.A (I.B.) M.B.A. (T.T.) are prepared on the combined basis of the C-MAT score (AICTE) / MAT Score (AIMA) /CAT(IIM) and performance at Group Discussion and Interview as indicated below. The normalization of the C-MAT / MAT Score/CAT (IIM) will be decided by the University.

C-MAT /MAT /CAT(IIM)	70%
Group Discussion	15%
Interview	15%
Total	100

M.Sc. Industrial Fisheries: Rank list for M.Sc Industrial Fisheries is prepared on the combined basis of the CAT score and performance in the Interview as indicated below:

CAT Score	85%
Interview	15%
Total	100

For all other programmes the marks secured at the Common Admission Test in the subject that qualifies the candidate for admission to the programme alone will be considered for preparing the Rank list. However, in the case of programmes where multi-disciplinary Tests are conducted, rank lists are drawn up on

the basis of the Percentile Index determined by the formula,  $\frac{\frac{n-p}{n}}{n} \times 100$  where n is the number of candidates appearing for the Test in a particular subject and p is the position according to the CAT score. The Percentile Indices are then integrated to obtain the relative position of the candidate in the rank list for that particular programme.



#### Procedures specific to M. Tech., M.Phil and Ph. D programmes

#### M. Tech. Programmes

Applicants for M Tech with required scores should apply online for CAT though they need not appear for CAT.

Rank lists for M. Tech. programmes are prepared on the basis of the valid GATE Score. When the GATE Scores of two or more candidates are equal, the marks scored at the qualifying examination are reckoned as the tie-breaker. Seats set apart for candidates from different disciplines in interdisciplinary M. Tech. programmes will be allotted on the basis of their GATE Scores in the respective disciplines.

Candidates without GATE Score will be considered only if sufficient numbers of applicants with valid GATE Score are not available. Candidates without valid GATE score and sponsored candidates will have to appear for a Department Admission Test (DAT) conducted in the Department/ School concerned.

## **Exceptions:**

**M.Tech Marine Engineering:** The admission will be based on the Rank list prepared by giving due weightage to qualifying degree marks (50%), Admission Test conducted by the Department (40%), and number of years of experience after obtaining the degree (weightage is at the rate of 1% per year of experience subject to a maximum of 10%). In the case of Marine Engineers possessing M.E.O Class II Certificate of competency 5% weightage and for those possessing M.E.O. Class I Certificate 10% weightage.

**M.Tech in Marine Bio-Technology:** GATE score is not considered. Selection of candidates is done by Jawaharlal Nehru University (JNU) on behalf of Department of Bio-Technology, Government of India through a National Test along with all such examinations conducted by the JNU. For details visit JNU website: www.jnu.ac.in. For details on (NCAAH) please visit www.ncaah.org

### THE DEPARTMENT ADMISSION TEST (DAT) (For PhD and MPhil)

Admission to MPhil and PhD programmes are based on the DAT conducted by the respective Department, marks of the qualifying examination and marks obtained for interview are also considered for preparing the final rank list. Detailed procedure is given below under the heading PhD Programme. PLEASE NOTE THE CANDIDATES WHO WISH TO APPLY FOR PhD PROGRAMME SHOULD CONTACT THE FACULTY MEMBERS OF THE



CONCERNED DEPARTMENT/RESEARCH CENTRE AND OBTAIN THE CONSENT OF A GUIDE FOR DOING THE RESEARCH UNDER HIM/HER. FOR PhD AND MPhil HARD COPYOF THE APPLICATION FORM SHOULD BE PROCURED FROM THE CONCERNED DEPARTMENT AND SHOULD BE SUBMITTED TO THE SAME DEPARTMENT ITSELF WITHIN THE PRESCRIBED TIME. The prescribed fee for cost of application should be remitted in the form of DD from State Bank of Travancore or State bank of India drawn in favour of Registrar, CUSAT and payable at Ernakulam.

Applicants for all Certificate, Diploma, PG Diploma programmes &MA Translation (German/Russian) need not register for CAT. They may contact the respective Department/School for guidance.

# M.Phil. Programmes

M.Phil Programmes are offered by the following Schools/Departments of CUSAT. Candidates intending to apply for M.Phil courses are requested to contact the respective Departments/ Schools directly.

Sl. No	Departments/Schools	Phone	M.Phil Programmes
1	Applied Chemistry	0484-2575804	Chemistry
2	Chemical Oceanography	0484-2382131	Marine Chemistry
3	Industrial Fisheries	0484-2354711	Fisheries Science
4	Mathematics	0484-2577518	Mathematics
5	Management Studies	0484-2575310	Commerce
6	Physics	0484-2577404	Physics
7	Applied Economics	0484-2576030	Applied Economics
8	Marine Biology, Micro Biology & Biochemistry	0484-2368120	Life Science
9	Hindi	0484-2575954	Hindi



Candidates seeking admission to the Master of Philosophy degree course should have passed a Master's degree examination in the concerned subject of any of the Universities approved by the University Grants Commission (UGC) or an examination accepted by the Academic Council as equivalent thereto and have obtained a minimum of 55% aggregate marks (or equivalent grade) in the examination. For M.Phil in Life Sciences the minimum eligibility is 60% in the qualifying examination. Distance education Degrees recognized by the UGC in conformity with UGC notification of specification of degrees, for education/employment purpose in the University shall also be accepted

A relaxation of 5% of marks shall be given to the SC/ST candidates. Teachers of a University Department or Colleges recognized by or affiliated to a statutory or "Deemed" University having not less than three years of teaching experience will also be eligible for admission to the course. 50% of the seats of the course shall be reserved for University or College teachers. Priority shall be given to those coming under the Faculty Improvement Programme (FIP) of the UGC or Quality Improvement Programme (QIP) of AICTE.

#### Ph. D Programmes

## (NB: - IT IS THE RESPONSIBILITY OF THE CANDIDATE TO OBTAIN PRIOR CONSENT FROM AN APPROVED GUIDE FOR SUPERVISING THE RESEARCH WORK. APPLICATIONS WITHOUT THE WRITTEN CONSENT OF A GUIDE WILL NOT BE ACCEPTED)

Candidates for Ph. D. programmes are advised to ascertain the areas of research and the availability of vacancies under their proposed Supervising Guides in the University Departments / Schools or Recognized Institutions before obtaining the application Forms.

A candidate who wishes to pursue a programme of study and research leading to the Degree of Doctor of Philosophy of the University will be required to seek registration to the programme as a full-time / part-time research student in a University Department / Recognized Institution under an appropriate Faculty. In the case of a Recognized Institution, part-time registration would be granted only for permanent employees of that institution. Candidates, who are working in research projects relevant to the research topic that has been taken up by a Department or by a Recognized Institution and funded by internal or external agencies, will be deemed to be full-time students if they are admitted to the Ph.D. programme. Candidates who are applying for registration, as part-time students shall be considered for registration only where the Research Committee is convinced that effective supervision can be ensured.

## Eligibility for Admission to the Ph.D Programme



- 1. Candidates seeking registration to the Ph.D programme shall hold a Master's Degree from a recognized University with 55% marks in the qualifying examination, or a CGPA of 6.0 in the 10 point scale or an equivalent grade in similar scales. A candidate belonging to SC/ST community is eligible for concession up to 10% marks for admission provided that he/she has a pass in the qualifying examination.
- 2. Candidates seeking registration shall have to appear for the Department Admission Test and get ranked as per the norms laid down in the regulation.
- 3. Candidates who possess national/state research fellowship with valid scores, with committed financial assistance at the time of seeking admission, in any of the national/state level eligibility tests conducted by the agencies or by industries so recognized by the University for the purpose, are exempted from provision (2) above.
- 4. Teachers of Universities/Aided Colleges in Kerala/Teachers who are working in Quasi Government/Government Institutions recognized by CUSAT and scientists in National Level Research Laboratories, who have put in five years of continuous service, and foreign nationals who have been sponsored under a scholarship scheme by the Government of India for undergoing Ph.D. programme in India, are exempted from provision (2) above.

#### Admission Procedure for PhD

Candidates seeking admission to the Ph.D programme

1. Should attend & qualify The Departmental Admission Test (DAT) which shall have two parts, a. Written Test b. Interview. A minimum score of 50% marks (45% in the case of SC/ST) in the written test is compulsory. Only those candidates who score the minimum required marks in written test will be called for interview with the Research Committee or with a Sub Committee appointed by it. The Committee shall also scrutinize the academic records of the candidate, the research proposal made by him/her in the application, the long term plan of the academic work to be undertaken by the candidate and recommend remedial courses to be taken by the candidate to complete the requirements of the course work. For the latest Ph.D regulations please visit website (cusat.ac.in). The final rank list for PhD programme will be prepared on the basis of the total score calculated as detailed below:-

Marks obtained in the Master's Degree	30%
Marks obtained in the written test	50%



Marks obtained in the interview	20%
Total	100

#### POST DOCTORAL FELLOWSHIP PROGRAMMES

CUSAT offers 7 Post-Doctoral Fellowships, one each in the Faculties of Science, Social Science, Law, Environmental Studies, Marine Sciences, Technology and Humanities with the following terms and condition:.

#### TERMS AND CONDITIONS FOR THE AWARD OF THE UNIVERSITY POST-DOCTROAL RESEARCH FELLOWSHIP

- 1. Post Doctoral Fellowship (P.D.F.) shall be of the value of Rs 12,500/- per month with a Contingency Grant of Rs.20,000/- per annum and shall be tenable at any Department/School of study and Research of the University.
- 2. Each Department /School of the University shall be allocated a fixed number of such fellowships.
- 3. The minimum, qualification for the award of the P.D.F. shall be a recognised Doctorate Degree with at least two research publications in refereed journals.
- 4. The P.D.F. shall be awarded for a maximum period of three years with yearly performance appraisal. Continuation of the fellowship to the second and third year shall be based on the satisfactory progress in the research as assessed by a Committee constituted by the University
- 5. Every Post Doctoral Fellow shall have a Mentor in the Department/School. He shall be a permanent Faculty of the University, holding a Doctoral Degree and shall be a recognised Research Guide of the University.
- 6. To apply for a Post Doctoral Fellowship the candidate shall identify the Mentor and prepare and Research Project Proposal in consultation with the Mentor in the specific format provided by the University and submit the same to the Head / Director of the Department / School after authentication by the Mentor.
- 7. Head / Director of the Department / School shall place the applications received from the candidates before the Departmental Research Council and the applications, complete in all respects shall be forwarded to the Registrar with ranking and recommendation.
- 8. The intake of Post Doctoral Fellows shall be notified along with the Common Admission Test of the University.



- 9. Prescribed application forms shall be made available with the School / Department.
- 10. The Scholarship Committee of the University shall scrutinize the application and award the fellowship within a month.
- 11. On receipt of notification of the award of the Fellowship, the candidate shall report for duty within one month at the respective School / Department.
- 12. Apart from research the Post Doctoral Fellow shall get himself/herself involved in teaching in the area of his/her specialisation and in other academic activities with the knowledge of the mentor.
- 13. The Post Doctoral Fellow shall submit an Annual Progress Report in the prescribed format authenticated by the Mentor to the Director / Head and will be placed in the Department Research Council (DRC). Minutes of the DRC along with the progress report and recommendations of the DRC shall be submitted to the University.
- 14. Leave rules are as applicable to Research Fellows of the University.
- 15. The Syndicate has every right to terminate the fellowship based on the recommendation of the Assessment Committee and DRC.
- 16. Four copies of consolidated report of the research work done by the candidate during the tenure of the fellowship shall be submitted at least one month ahead of the end of tenure of the fellowship together with reprints of papers published, if any.
- 17. Each fellow shall be a full time research scholar and shall not accept any other remunerative work without the written permission of the University.
- 18. The application for the award of the fellowship shall be forwarded through the Head of the Department where the candidate proposes to carry out his research work. A list of publications and reprints of publications should be submitted along with the application.
- 19. The selected candidate shall execute a bond to the effect that he/she will complete his/her research project.
- 20. A P.D.F. may discontinue his/her P.D.F. after obtaining sanction thereof from the University.

The application form for PDF and the other details can be downloaded from the website. The application fee can be paid by Demand Draft for Rs.100/- (Rs.50/- for SC/ST candidates) drawn in favour of "The Registrar, Cochin University of Science & Technology", payable at Ernakulam,drawn from SBI/SBT. The completed application form with all necessary enclosures including the application fee (Demand Draft) and the lists of publications and reprints of publications should reach the respective departments on or before 01.02.2015



#### CHAPTER 7

## INTERNATIONAL STUDENTS (FOREIGN NATIONALS/PIO'S)

International students are exempted from the requirement of admission tests for the academic programmes of the University. They can apply either on self-financing basis or through the Indian Council for Cultural relations (ICCR) attached to the Ministry of External Affairs, Government of India.

The ICCR offers a number of scholarships to enable International students to pursue higher studies in Universities and other recognized institutions of higher learning in India. Details regarding the various ICCR Scholarships can be had from:

The Director (Scholarship)

Indian Council for Cultural Relations

Azad Bhavan, Indraprastha Estate,

New Delhi – 110002

Tel: 91-011-23379309/23379310

Fax:91-011-23378639/23378647/

23370732/2337873

E-mail:<u>dir.aj@iccrindia.net/</u> dir.ajoffice@iccrindia.net

Website: http://www.iccrindia.net

The Regional Director

Indian Council for Cultural Relations

Rohini, TC 16/131,

Easwaravilasom Road,

Thiruvananthapuram – 695014.

Tel: 0471-2326712/2320825

Fax: 0471-2332479

E-mail: <u>iccrtvm08@gmail.com</u>

Website: http://www.iccrindia.net



The International students are required to submit their application online, for the academic programmes of the University, on payment of US\$100 by way of Demand Draft/Pay order/ any other instrument (which does not involve any collection charges on the part of the University) in favour of Registrar, CUSAT.

Applicants who have successfully registered online with CUSAT may forward an advance copy of the confirmation page along with the payment and the following documents to the Director, IRAA, Cochin University of Science and Technology, Kochi – 682022, Kerala, India.

The original confirmation page along with copies of certificates mentioned below shall be routed either through the Embassy of India in their respective country or through their respective Embassy in India.

- Curriculum Vitae
- Copies of Mark lists/transcripts of all examinations undergone.
- Two copies of recent passport size photographs
- Character Certificate from the Head of Institution last studied.
- Reference letters from two persons who have intimate knowledge of their academic capabilities.
- Copy of Passport

Students from Nepal do not require a student visa for studying in India. Hence, they should forward a copy of the Nepal Citizenship card to the Embassy of India in Kathmandu for verification and for onward transmission to CUSAT.

## The following points may strictly be noted:

- An Equivalence Certificate issued from the Association of Indian Universities (AIU), New Delhi is to be produced at the time of taking admission in CUSAT. More information about applying for the same could be had from http://www.aiuweb.org/"Evaluation" "Equivalence of Degrees" and also to Download Evaluation (request) form.
- ➤ International Students are exempted from the Common Admission Test (CAT)
- For Eligibility Criteria etc., please read Chapter 5.
- ➤ The academic year of CUSAT commences in July.
- ➤ Please read the Instructions carefully before proceeding with the Online Registration.
- > For further queries, please contact the Unit for International Relations & Academic Admissions (IRAA).

Tel: 91-484-2577159/2862255/2862290

E mail: iraa.cusat@gmail.com



## SEATS RESERVED FOR INTERNATIONAL STUDENTS (FOREIGN NATIONAL'S/PIO'S)

Department/Programme	Number of Seats									
DEPARTMENT OF APPLIED CHEMISTRY										
MSc (Chemistry)	1 seat									
M.Tech (Industrial Catalysis)	1seat									
M.Phil	1seat									
DEPARTMENT APPLIED	D ECONOMICS									
MA Applied Economics	5 seats									
DEPARTMENT OF ATMOSP	HERIC SCIENCES									
MSc Meteorology	1 seat									
DEPARTMENT OF COMPUTER APPLICATIONS										
MCA	2 seats									



DEPARTMENT OF COMPUTER SCIENCE								
M.Tech Computer and Information Science	2 seats							
M.Tech Software Engineering	2 seats							
SCHOOL OF ENGINEERIN	G							
B.Tech Civil Engineering	2 seats							
B.Tech in Computer Science	2 seats							
B.Tech in Electronics & Communication	2 seats							
B.Tech in Information Technology	2 seats							
B.Tech in Mechanical Engineering	2 seats							
B.Tech in Fire & Safety Engineering	5 seats							
DEPARTMENT OF HIND	I							
MA Hindi	3 seats							
M.Phil	1 seat							
PG Diploma in Translation and Functional Hindi	3 seats							
SCHOOL OF INDUSTRIAL FISH	IERIES							
MSc. Industrial Fisheries	3 seats							
SCHOOL OF MANAGEMENT ST	SCHOOL OF MANAGEMENT STUDIES							
MBA (Full Time)	5 seats							
DEPARTMENT OF MATHEMATICS								
MSc Mathematics	5 seats							
M.Phil (Mathematics)	2 seats							



DEPARTMENT OF PHYSICAL OCEANOGRAPHY								
	2 seats for the first 4							
MSc Physical Oceanography	years and 1 seat in the							
	5 <sup>th</sup> year							
	1 seat for the first 4							
M.Tech Ocean Technology	years and 2 seats in the							
	5 <sup>th</sup> year							
DEPARTMENT OF POLYMER SCIENCE AND RUBB	ER TECHNOLOGY							
B.Tech (Polymer Science and Engg.)	2 seats							
M.Tech (Polymer Technology)	1 seat							
DEPARTMENT OF SHIP TECHNOLO	GY							
B.Tech Naval Arch. and Ship Building	2 seats							
DEPARTMENT OF STATISTICS								
MSc Statistics	2 seat							
M.Tech (Engineering Statistics) - No admission in 2015	1 seat							

A few Post-Doctoral Fellowships are earmarked for students from Russia and neighbouring countries. Interested students may please contact the concerned Departments for further details.



## Fee for International Students (Course fee including normal Examination fee)

COURSES	SELF-FINANCING STUDENTS	ICCR SCHOLARS
Undergraduate (UG)	US\$3000 per annum	US\$1500 per annum
Postgraduate (PG) (MSc, MA, MBA, MCA)	US\$2500 per annum	US\$1250 per annum
M.Phil/M.Tech/LLM	US\$3000 per annum	US\$1500 per annum
PhD	US\$5000 per annum	US\$2500 per annum
5 year Integrated Programmes	US\$2500 per annum	US\$1250 per annum
PG Diploma (Languages)	US\$750 per course	US\$350 per course
PG Diploma (Others)	US\$1000 per course	US\$500 per course
Certificate Courses (Languages)	US\$500 per course	US\$250 per course
Certificate courses (others)	US\$750 per course	US\$350 per course



## CHAPTER 8

## CHILDREN OF INDIAN WORKERS IN GULF COUNTRIES

Applications are invited from the Children of Indian Workers in the Gulf Countries for admission to the seats reserved for them in the following M.Tech programmes of the University:

#### SEATS RESERVED FOR CHILDREN OF INDIAN WORKERS IN GULF COUNTRIES

Sl.No.	Programme	Number of
1.	M.Tech Marine Biotechnology	0
2.	M.Tech Ocean Technology	1
3.	M.Tech Industrial Catalysis	1
4.	M.Tech Electronics	1
5.	M.Tech Polymer Technology	1
6.	M.Tech Computer Aided Structural Analysis & Design (CASAD)	1
7.	M.Tech Opto-Electronics and Laser Technology	1
8.	M.Tech Computer and Information Science	1
9.	M.Tech Software Engineering	1
10.	M.Tech Civil Engineering (part-time)	1
11.	M.Tech Chemical Engineering (part-time)	1
12.	M.Tech Mechanical Engineering (part-time)	1



Interested candidates should submit online application by making a payment of US\$100 by way of Demand Draft/Pay Order (which does not involve any collection charges on the part of the University) in favour of Registrar, CUSAT. For Online Registration, please go to the link cusat.nic.in, and proceed with the registration process.

Applicants who have successfully registered online with CUSAT may forward an advance copy of the confirmation page along with the payment and the following documents to the Director, IRAA, Cochin University of Science and Technology, Kochi – 682022, Kerala, India.

- Curriculum Vitae.
- Copies of Mark lists/transcripts of all examinations undergone.
- Two copies of recent passport size photographs.
- Character Certificate from the Head of Institution last studied.
- Reference letters from two persons who have intimate knowledge of their academic capabilities.
- Copy of Passport.

#### The following points may strictly be noted:

- ➤ The academic year of CUSAT commences in July.
- > Those candidates who have undergone their course of study outside India shall produce an Equivalence Certificate issued from the Association of Indian Universities (AIU), New Delhi.
- The Equivalence Certificate is to be produced at the time of taking admission in CUSAT. More information about applying for the same could be had from <a href="http://www.aiuweb.org/">http://www.aiuweb.org/</a> "Evaluation" "Equivalence of Degrees" and also to Download Evaluation (request) form.
- The tuition fee shall be US\$3000 per year, payable at the beginning of the academic year.
- ➤ Please read Chapter 5 of the prospectus for ascertaining your Eligibility.
- > Selection procedure will be similar to that of the International students.
- For online registration, please go to the link "International Students" and proceed with the registration process
- ➤ Please read the Instructions carefully before proceeding for the registration.



## CHAPTER 9 CHOOSE YOUR TEST SUBJECTS – AQUICK REFERENCE TABLE (SEE CHAPTER 6 ALSO)

Test Code	BBA,LLB/BCom, LLB(Hons)	ПГМ	3Yr LLB (Evening)	MA Applied Economics	MA Hindi	MCA	MSc Chemistry	MSc Biotechnology	MSc Electronics	MSc Environmental	Tech. Stream I MSc	Environmental	Tech. Stream II MSc	Hydrochemistry	Fisheries	MSc	MSc Marine	Biology	MSc Marine	MSc	Meteorology	MSc Oceanography	MSc Statistics	MSc Physics	MSc Marine	Geophysics	MSc	MFSc in	Seafood Safety & Trade	MSc Biopolymer Science	MIP, PhD /LLM PhD
201	<b>V</b>																											+			
301					<b>V</b>																										
501						<b>V</b>																									
601								<b>V</b>									•													<b>V</b>	
602			100					<b>V</b>				<b>V</b>		1	<b>/</b>		•							(4						<b>V</b>	
603								<b>V</b>		V																					
604							<b>V</b>	<b>V</b>		<b>₩</b>			<b>✓</b>	-					$\checkmark$				o a							<b>V</b>	
606									<b>V</b>																		<b>V</b>				
607										<b>4</b>	1																				
608														1 3	<b>/</b>		4											4			
609																			4						•						
610		<b>V</b>									_			_																	
611								<b>V</b>			_	<b>V</b>					9		_					2	_					<b>V</b>	
612					0						_			_		4	_		<b>V</b>	•		<b>V</b>	<b>V</b>		•						
613									<b>V</b>		_								4	4		<b>V</b>		<b>V</b>	•		<b>\</b>			<b>\</b>	
614										1	_						$\perp$						<b>V</b>					1			
615								<b>V</b>				<b>V</b>		1	<b>V</b>		4								_			4		<b>V</b>	
616	ļ. ļ			<b>V</b>										$\perp$						1			1		1		_	4			
617																											<b>V</b>	Щ,			
618																												4			
619			<b>V</b>																									4			
620																															



#### CHAPTER 10

## RESERVATIONS

#### 1. COMMUNAL RESERVATION

Rules for communal reservation framed by the Government of Kerala and implemented by the University from time to time will be applicable to the various academic programmes. Only candidates from 'Socially and Educationally Backward Communities' (SEBC) eligible for Kerala State communal reservation will be considered for seats earmarked for such communities, provided, the eligibility for such reservation shall be subject to satisfactory verification of relevant Community as well as Annual Family Income certificates issued by competent revenue authorities as prescribed by the rules of the University in force.

## **Percentage-wise Reservation Details**

**Non-Professional Programmes** 

SC/ST	20%						
~	Ezhava / Thiyya / Billava (ETB)	8%					
Socially and Educationally	Muslim (MSM)	7%					
Backward	LCC / SIUC	1%					
Classes (SEBC)	Other Backward Christian (OBX)	1%					
	Other Backward Hindu (OBH)	3%					
Total for SC/S	Total for SC/ST and SEBC						
Economically Caste (BGN)	7.5%						



#### **Professional Programmes**

Scheduled Cast	8%	
Scheduled Trib	2%	
	Ezhava / Thiyya / Billava (ETB)	9%
	Muslim (MSM)	8%
	Other Backward Hindu (OBH)	3%
Socially and Educationally Backward	Latin Catholic including Anglo- Indian	3%
Classes	Other Backward Christian (OBX)	1%
(SEBC)	Dheevara	2%
	Viswakarma	2%
	Pot-making castes	1%
	Kudumbi	1%
Total for SC/ST	40%	

"KSC/KST candidates are eligible for admission, if they have minimum pass marks in the qualifying examination except for Marine Engineering". They can opt for All India Merit category also and are not required to make any payments (except their common fee payable) once they get admission under this category. They will have to produce original Community Certificate in the prescribed format issued by the competent revenue authorities at the time of Group Discussion and / or Interview / Counselling / Admission, whichever is held earlier as the case may be.



Community Certificate and Annual family Income Certificate are to be issued by the Village Officer concerned for 'SEBC' candidates belonging to the state of Kerala and by the Tahsildar concerned for KSC/KST candidates belonging to State of Kerala for claiming admission under respective "Reservation" category. IN THE CASE OF EVENING COURSES SC/ST STUDENTS ARE ALSO REQUIRED TO REMIT THE FULL FEES.

Candidates who are natives of states other than Kerala are not eligible for communal reservation.

#### 2. SPECIAL RESERVATIONS

Besides communal reservation, specified numbers of seats are set apart under "Special Reservation" as detailed below. All applicants under this quota have to appear for the Common Admission Test/ Department Admission Test, as the case may be, unless otherwise specified.

- 1. Physically Challenged: Physically challenged persons with minimum of 40% disability as certified by the Medical Board stipulated under relevant rules of Government of Kerala in the matter, are eligible for reservation. The certificate produced should be either in Malayalam or in English. 3% seats are reserved for physically challenged candidates for all B.Tech courses, except B.Tech Marine Engineering, Mechanical Engineering, Naval Architecture & Ship Building, Instrumentation, Polymer Science & Engineering and Safety & Fire Engineering. One seat each for all other academic programmes except M.Sc. (Industrial Fisheries) is reserved for physically challenged candidates. The seats allotted to physically challenged candidates are supernumerary in nature. A certificate of disability in original from the District Medical Board certifying the percentage of disability issued not earlier than 12 months prior to the date of counseling / GD / interview / admission, whichever is earlier, has to be produced by the candidate. The percentage of disability shall not be an index for gaining eligibility / admission. Admission shall be based on merit of the candidates. A medical board constituted by the University will examine individual cases prior to admission. The decision of the board will be final.
- 2. **Blind:** Reservation for Blind candidates is applicable only for MA (Hindi) and LLM programmes. The certification requirement is same as applicable to the Physically Challenged (detailed above)

## 3. Experienced Candidates:

- a. M.B.A. (Part-time): 50% seats of the M.B.A. (Part-time) programme are reserved for candidates having 3 years of supervisory / executive experience after taking the degree. In the absence of sufficient number of eligible candidates from the aforesaid category, the vacant seats will be treated as open to all candidates.
- b. M.Philprogrammes: 50% seats of the M.Phil. programmes are reserved for University / College teachers having not less than three years of teaching experience. Such candidates coming under FIP of the UGC or QIP of AICTE will be given preference.



- 4. **Sponsorship from Lakshadweep Administration:** One supernumerary seat under All India Merit quota is reserved in each BTech Programmes of SOE and CUCEK for candidates from Lakshadweep who are sponsored by Lakshadweep Administration. The candidates will be ranked among them on the basis of their rank in JEE conducted by the CBSE in the current year.
- 5. **Sponsored Candidates:** Specified number of seats as detailed below are reserved for "Sponsored Candidates" with a maximum age limit of 45 years as on 1st September of the year of admission (except for M.Sc. Electronic Science for which the maximum age limit is 30 years and for all M.Tech programmes, the maximum age limit is 40 years as on 1st August of the year of admission).
  - a. M.C.A.: Two seats of the M.C.A. programme are reserved for candidates with a minimum of three years' experience in the relevant field sponsored by industry / teaching / research organizations of the Central / State Governments. Candidates for sponsored quota must have a minimum experience of three years in the relevant field and must be sponsored by University or Industry / Teaching / Research organizations of Centre / State Government /or by Private Engineering Colleges approved by AICTE. Maximum age of sponsored candidates is fixed as 40 years as on 1st August of the year of admission. Also, a special fee equivalent to the contingent grant received for GATE qualified candidates will be levied on the sponsored candidates.
  - b. **M.Sc.** (**Electronic Science**): Five seats of the M.Sc. (Electronic Science) programme are reserved for candidates from industry / teaching / research organizations of Central / State Governments. Sponsored candidates must have a minimum experience of three years in the field of Electronics or related subjects and should not have completed 30 years of age as on 1st August of the year of the admission. A sponsorship certificate must be produced by the candidate. One out of the five seats is reserved exclusively for candidates sponsored by Defense Research and Development Organization (DRDO) and they are exempted from Common Admission Test (CAT), if they are otherwise qualified for admission to the programme.
  - c. **M.Sc.** (Environmental Technology): Two seats of the M.Sc. (Environmental Technology) programme are reserved for candidates with five years experience and sponsored by industrial and research organizations. If sponsored candidate is not available in the rank list, only three sure candidates need be called for counselling.
  - d. M.Sc. (Industrial Fisheries): Three seats are reserved for candidates who are sponsored by Kerala Fisheries Department. Candidates whose parent's occupation is fishing are eligible for this sponsorship and such candidates should mention this in the Special Reservation field of the online application as "Registered Fishermen Community". After submitting online applications the candidates should apply to the Director, Department of Fisheries, Vikas Bhavan, Thiruvananthapuram along with a certificate from the local office of Fisheries Department stating that the parent's occupation is fishing. The Director of Fisheries shall send a sponsorship certificate to the Director, School of Industrial Fisheries, CUSAT, Kochi-16. Two seats are reserved for the staff of the Fisheries Department. Those who want to be considered against these two reserved seats shall apply online mentioning their eligibility for reservation and afterwards forward an official letter from the Director, Department of Fisheries, VikasBhavan, Thiruvananthapuram to the Director, School of Industrial Fisheries, CUSAT, Kochi-16. Only on receipt of sponsorship letter or official letter the



- candidate shall be considered against the respective reservation seats. Hence the candidates should personally make sure that the sponsorship letter or official letter reaches the Director, School of Industrial Fisheries, CUSAT, Kochi-16 before the preparation of Rank List.
- e. M.Sc. (Oceanography): Two seats of the M.Sc. Oceanography programme are reserved for Candidates from open Sponsored category.
- f. **M.Tech.** (**Polymer Technology**): Two seats of the M.Tech. (Polymer Technology) programme are reserved for candidates sponsored by University/ Industry/Teaching or Research Organizations of Central/State Government or by Private Engineering Colleges approved by AICTE. The candidate should have a minimum experience of three years in the relevant field.
- g. **M.Tech.** (**Atmospheric Science**): Two seats of the M.Tech. (Atmospheric Science) programme are reserved for candidates sponsored by user departments such as Indian Meteorological Department, Indian Institute of Tropical Meteorology, National Institute of Oceanography, Department of Ocean Development, National Physical Laboratories and Departments of Universities.
- h. **M.Tech.** (Computer Aided Structural Analysis & Design): Four seats of the M.Tech. (Computer Aided Structural Analysis and Design) programme are reserved for Naval Architects and three seats for candidates sponsored by shipbuilding / offshore industries / organizations. Admission to unfilled seats, if any, will be decided in the following order of preference: (i) Sponsored; (ii) Naval Architects; and (iii) Civil / Mechanical B.Tech. degree holders.
- i. M.Tech. (Computer & Information Science / Software Engineering): Five seats each of the M.Tech. (Computer & Information Science) and M.Tech. (Software Engineering) programmes are reserved respectively for candidates sponsored by the Director of Technical Education and Research organizations of the Central / State Governments or Computer Industry. The sponsored candidates must have been in employment with their sponsor for at least three years, working in an area related to computers at the time of submitting the application. Applicants under the sponsored category are not required to have a GATE Score. But they have to appear for the Department Admission Test (DAT). One of the five seats in M.Tech. Software Engineering is reserved exclusively for a candidate sponsored by the DRDO and this candidate is exempted from DAT, provided he/she is otherwise qualified for admission.
- j. **M.Tech.** (Electronics): Five seats of M.Tech. (Electronics) are reserved for candidates sponsored by industry / teaching / research organizations of Central / State Governments. The sponsored candidates must have a minimum experience of 3 years in the relevant field. Maximum age is fixed as 40 years as on 1st of August of the year of admission. One of the five seats is reserved exclusively for a candidate sponsored by the DRDO and this candidate is exempted from DAT, provided he/she is otherwise qualified for admission.
- k. **M.Tech.** (Engineering Statistics): Two seats of M. Tech. (Engineering Statistics) are reserved for candidates sponsored by R&D institutions of the Central / State Governments or Industrial establishments in the public / private sector or recognized Universities in India or the Department of Technical Education of the State.
- 1. **M.Tech.** (Industrial Catalysis): Five seats of M. Tech. (Industrial Catalysis) are reserved for candidates sponsored by Industries.



- m. **M.Tech.** (Ocean Technology): Two seats of M.Tech. (Ocean Technology) are reserved for candidates sponsored by R & D institutions of the Central / State Governments, industrial establishments in the Private / Public Sectors, recognized Universities in India or the Department of Technical Education of the State Government.
- n. **M.Tech. (Opt Electronics and Laser Technology):** Two seats of the M.Tech. (Opto-Electronics and Laser Technology) programme are reserved for candidates sponsored by industry or teaching / research organizations of Central / State Governments.
- o. **M.Tech.** (**Marine Bio-Technology**): Entrance examination will be conducted by Jawaharlal Nehru University (JNU) under the combined entrance examination. For more information visit JNU Website: <a href="www.inu.ac.in">www.inu.ac.in</a> or the concerned department website <a href="www.ncaah.org">www.ncaah.org</a>
- p. **M.Tech** (**Marine Engineering**): Four seats are reserved Marine Engineers and three seats for candidates sponsored by ship building/off shore industries/organizations. Admission to the balance and unfilled seats, if any, will be decided in the following orders of preference:
  - 1. Marine Engineers
  - 2. Naval Architects
  - 3. Mechanical B.Tech degree holders.
- q. M.Tech (Computer Science & Applications): 5 seats of M.Tech Computer Science & Applications are reserved for candidates sponsored by the Directorate of Technical Education, Kerala or Research Organizations of Central /State Governments/Computer Industry. The sponsored candidates must have been in employment with their sponsor for at least 3years at the time of submission of application. They have to appear for the Department Admission Test (DAT) if they do not have a valid GATE score. One of the 5 Seats is exclusively reserved for a candidate sponsored by the DRDO and this candidate is exempted from DAT, provided he/she is otherwise qualified for admission.
- 6. Army Quota for M.B.A. (Full-time): One seat of M.B.A. (Full-time) programme is reserved for Army officers recommended by the Army Head Quarters.
- 7. Sports Quota: Reservation under Sports Quota is available for the following programmes:
  - a. "Payment Category" of the B.Tech. Programmes offered by the SOE, CUCEK and the KunjaliMarakkar School of Marine Engineering.
  - b. B.Tech. Naval Architecture & Ship Building and Instrumentation Technology (one Supernumerary Seat)
  - c. P.G. programmes where the sanctioned intake is 30 or more
  - d. M.C.A "Cost-sharing" programmes at Thrikkakkara and Pulincunnoo campus (one seat supernumerary)

The candidate should forward a copy of the confirmation page of online registration along with attested photocopies of sports merit certificates (highest achievements in each event) to the Secretary, Kerala Sports Council, Thiruvananthapuram - 695001. The Sports Council will allot marks to the candidates



according to their proficiency in sports. The maximum mark for proficiency is 500. The minimum achievement required for consideration: Representing the Educational District / Sports School / Sports Hostels in the Kerala State Schools Championship and winning third place. The Sports Council shall forward the list along with the copy of the confirmation page of the students applied to CUSAT. The candidates should make sure that the list reaches the University before the deadline. (30th April 2015). The marks awarded to the candidates for proficiency in sports by the Kerala Sports Council will be added to the marks obtained by the respective candidates in the concerned Common Admission Test (provided they are ranked in the Common Admission Test). In the case of Management Programmes C-MAT(AICTE)/MAT(AIMA)/CAT(IIM) score (after normalization) will be added to the marks awarded by the Kerala Sports Council. The merit list for each course would be prepared on the basis of inter-se merit of the candidate computed as above. At the time of preparation of the rank list under sports quota, if there is any tie in the total marks, it will be resolved by the same principle of resolution of tie for the preparation of CAT Rank list. The seats under sports quota will be filled up according to the rank from inter-se Merit List prepared for Sports. The sports quota rank list will not be considered for filling up other categories of seats such as general merit. Candidates who claim reservation under Sports Quota should produce, at the time of counselling, a certificate of eligibility for selection under this quota issued by the Kerala Sports Council, as per the guidelines published by them. The achievements in two financial years (1st April to 31st March) previous to the year of selection shall alone be considered. However, in the case of competitions which are not organized annually the immediately previous competitions shall be deemed as held in the previous two financial years for the purpose of this selection.

- 8. Jew: In accordance with the relevant rules of the Government of Kerala, one seat as supernumerary in All India Merit category is available for candidates belonging to Jewish community for admission to B.Tech Engineering Programmes. In 2015 the seat for Jew Community is reserved in Electronics and Communication Engineering, School of Engineering, Kochi 22.
- 9. Children of CUSAT Staff: For the children of permanent employees of CUSAT one seat each is reserved as supernumerary in B.B.A.,LL.B(Hons.), B.Com.,LL.B(Hons.) and all professional Post Graduates Courses under Self-financing/Cost Sharing basis such as MBA, MCA etc. and in the All India Merit category of each branch of B.Tech Engineering programmes in SOE and CUCEK. SC/ST candidates who secure admission in this category are not eligible for any fee concession / refund as this is a privileged category seat.
- 10. Children of Ex-Servicemen: The reservation under this category is only for children of Ex-servicemen for one PG programme other than M.Tech./M.Phil./PG Diploma /Certificate programmes every year and this seat will be distributed among the teaching Departments in the alphabetical order of the name of the Department. In the academic year 2015, this seat is reserved for admission to M.Sc. Marine Geology offered at Department of Marine Geology and Geophysics, CUSAT.
- 11. Naval Candidates: Fifteen seats for B. Tech (Naval Architecture and Ship Building) are reserved for Naval Candidates sponsored by Indian Navy.
- 12. Foreign Students: Seats reserved for foreign students are indicated below:



Department / Programme	Number of Seats								
DEPARTMENT OF HINDI									
a. M.A. Hindi	3 seats								
b. M.Phil	1 seat								
c. P.G. Diploma in Translation and Functional Hindi	3 seats								
DEPARTMENT OF PHYSICAL OCEANOGRAPHY									
a) M.Sc. Physical Oceanography	2 seats for the first 4 years and 1 seat in the 5th year.								
	1 seat for the first 4 years								
b) M.Tech Ocean Technology	and 2 seats in the 5th year								
DEPARTMENT OF POLYMER SCIENCE AND RUBBER TECHNOLOGY									
a. B.Tech Polymer Science & Rubber Engineering	2 seats								
b. M.Tech (Polymer Technology)	1 seat								
DEPARTMENT OF STATISTICS									
a. M.Sc Statistics	2 seats								
b. M.Tech (Engineering Statistics) (No admission in 2015)	1 seat								
DEPARTMENT OF APPLIED CHEMISTRY									



Department / Programme	Number of Seats							
a. M.Sc (Chemistry)	1 seat							
b. M.Tech (Industrial Catalysis)	1 seat							
c. M.Phil	1 seat							
DEPARTMENT OF ATMOSPHERIC SCIENCES								
a. M.Sc Meteorology	1 seat							
b. M.Tech (Atmospheric Sciences)	1 seat							
DEPARTMENT OF APPLIED ECONOMICS								
a. M.A. Applied Economics	5 seats							
DEPARTMENT OF MATHEMATICS								
a. M.Sc. Mathematics	5 seats							
b. M.Phil. (Mathematics)	2 seats							
DEPARTMENT OF COMPUTER APPLICATIONS								
a. M.C.A.	2 seats							
SCHOOL OF MANAGEMENT STUDIES								



Department / Programme	Number of Seats
a. M.B.A. (Full Time)	5 seats
SCHOOL OF INDUSTRIAL FISHERIES	
a. M.Sc. Industrial Fisheries	3 seats
DEPARTMENT OF SHIP TECHNOLOGY	
a. B.Tech Naval Architecture & Ship Building	2 seats
b. MTech Computer Aided Structural Analysis and Design	2 seats
DEPARTMENT OF COMPUTER SCIENCE	
a. M.Tech Computer and Information Science	2 seats
b. M.Tech Software Engineering	2 seats



SCHOOL OF ENGINEERING	
a. B.Tech in Civil Engineering	2 seats
b. B.Tech in Computer Science	2 seats
c. B.Tech in Electronics and Communication	2 seats
d. B.Tech in Information Technology	2 seats
e. B.Tech in Mechanical Engineering	2 seats
f. B.Tech in Safety and Fire Engineering	5 seats
g. M.Tech in Civil Engineering (Part Time)	1 seat
h. M.Tech in Mechanical Engineering (Part Time)	1 seat
i . M.Tech in Chemical Engineering (Part Time)	1 seat
NATIONAL CENTRE FOR ACQUATIC ANIMAL HEALTH	
a. M.Tech Marine Biotechnology	1 seat
INTERNATIONAL SCHOOL OF PHOTONICS	
a. M.Tech Opto-Electronics & Laser Technology	1 seat
DEPARTMENT OF ELECTRONICS	
a. M.Tech Electronics	1 seat

Foreign Students are exempted from the Common Admission Test.



- 13. Non-Resident Indians / PIO / OCI: Any applicant is eligible for consideration under this quota subject to the rules of the University in force. (Sponsorship Certificates / Relationship Certificates are not required for applying under Non-Resident Indians (NRI) quota. Person of Indian Origin (PIO), living abroad, who have foreign passports and are holders of PIO cards of the Government of India are also eligible to admit their children against the seats reserved for children of Non Resident Indians. Overseas citizens of India (OCI) who possess OCI card are also eligible to be considered under this quota. 10% seats are reserved as N.R.I. Quota in each branch of all B.Tech courses in School of Engineering, Cochin University College of Engineering and Kunjali Marakkar School of Marine Engineering. Candidates applying under this quota are required to remit Rs.5000/- in addition to the normal application fee of Rs.1000/- as prescribed in the Notification. All applicants under the N.R.I. quota will have to qualify the Common Admission Test conducted by CUSAT and fulfill all eligibility criteria.
- 14. Kashmiri Migrants: One seat is reserved for the children of Kashmiri Migrants in the Professional courses (except M.Phil, Ph.D and Diploma/Certificate programmes) and each year the courses will be rotated in the alphabetical order of the names of the Departments where the courses are conducted. The candidates will have to qualify in the CAT and fulfill all eligibility criteria.
- 15. Candidates from Jammu & Kashmir: Two seats under supernumerary quota have been reserved in the University for students from Jammu & Kashmir for general courses as stipulated by the University Grants Commission(UGC)
- 16. CUSAT Staff: Three seats are reserved for the employees of CUSAT for 3 year LL.B.(Evening) course on supernumerary basis and one seat each is reserved for CUSAT staff in all other Evening self-financing courses.

All the aforesaid information is general in nature and all reservation will be subject to rules of the University in force at the time of admission. Communal/Special Reservation will be subject to satisfactory verification of duly required Certificates (in originals) produced at the time of Group Discussion /Interview/Counselling / Admission, whichever is held earlier, as directed by the University and will be governed by the rules of the University in force and as amended from time to time.



## CHAPTER 11

## **SCHEDULE OF FEES**

# NB:- The fee rates shown below are those applicable to 2014 admission and is given for indicative purpose only. The actual rates for 2015 admission will be made available soon.

SM-State Merit AIM-All India Merit

Sl No	Academic Programme	Tuition Fee	Other Fees	РТА	Caution Deposit Lab/ Computer	Caution Deposit Library	Total
	B.Tech.(Civil Engg., Computer Science &Engg., Electrical and Electronics Engg.,	36750 (SM)	6225	1575	525	525	45600
1	Electronics & Communication Engg.,	68250 (AIM)	15225	1575	525	525	86100
	Information Technology, Mechanical Engg., Safety & Fire Engg.)	100000 (NRI)	141225	1575	525	525	243850
2	Lateral Entry to B.Tech. for (Civil Engg., Computer Science &Engg., Electrical and Electronics Engg., Electronics &	32500	16225	1575	525	525	51350
3	Lateral Entry to B.Tech. for Instrumentation Engg.	12000	3065	1575	525	525	17690



4	Lateral Entry to B.Tech. for Polymer Science and Engineering	8400	3275	1575	525	525	14300
		115500 (SM)	44820	1575	1	0500	198255
5	B.Tech. (Marine Engineering)	168000 All India	85930	1575	1	0500	266005
		168000 (NRI)	85930+ \$5000	1575	1	0500	266005+ \$5000
6	B.Tech. (Instrumentation Technology)	12600	3065	1575	525	525	18290
7	B.Tech.(Naval Architecture & Ship Building)	8400	4695	1575	525	525	15720
8	B.Tech.(Polymer Science & Engineering)	8820	3450	1650	550	550	15020
9	5 year Integrated M.Sc. (Photonics)	15750	3065	1575	525	525	21440
10	M.A.Hindi	1575	1750	1050	525	525	5425
11	M.A. Applied Economics	2100	1820	1050		525	6020
12	M.Sc.Applied Chemistry, Environmental Technology (Stream I & II), Marine Biology, Marine Geology, Marine Geo	1575	1645	1050	525	525	5320
13	M.Sc. Hydrochemistry	4200	1855	1050	525	525	8155
14	M.Sc. Physics	1575	1645	1050	525	525	5320



15	M.Sc. Statistics	1575	1645	1050	525	525	5320
16	M.Sc Electronic Science	1575	2145	1050	525	525	5820
17	M.Sc Instrumentation	8400	1645	1050	525	525	12145
18	M.Sc Industrial Fisheries	1575	1645	1050	525	525	5320
19	M.Sc Oceanography	1575	1645	1050	525	525	5320
20	M.Sc Biopolymer Science	15000	3130		1000		19130
21	M.FSc. Seafood Safety & Trade	10500	1670	1050	1000		14220
22	5 Year B.B.A. L.L.B. (Hons.)	21000	1955	1575		525	25080
23	5 Year B.Com. L.L.B. (Hons.)	21000	1955	1575	25	525	25080
24	LL.B.(3 year)(Evening)	26250	1955	1575	25	525	30330
25	LL.M.	3150	1795	1050	25	525	6545
26	LL.M (IPR, Ph.D)	25000	3550		500		29050
27	MIP, Ph.D	25000	3550		500		29050
28	P.G.Diploma in Intellectual Property Rights	25000	4060	1575		500	31135



29	M.B.A.(Full-time)	21000	3955	1050	25	525	26555
30	M.B.A.(Part-time-Experienced)	21000	3955	1050	25	525	26555
31	M.B.A.(Part-time-Non Experienced)	15750	955	1050			17755
32	M.B.A (Travel & Tourism) Regular	21000	3955	1050	25	525	26555
33	M.B.A (Travel & Tourism) Cost Sharing	47250	3955	1050	25	525	52805
34	M.B.A.(International Business) Regular	21000	3955	1050	25	525	26555
35	M.B.A.(International Business) Cost Sharing	47250	3850	1050	25	525	52700
36	M.C.A.(Regular)	8400	1855	1575	525	525	12880
37	M.C.A.(Cost Sharing)	26250	1855	1575	525	525	30730
38	M.Phil(Applied Chemistry)	3150	1750	1050	525	525	7000
39	M.Phil Physics	3150	1750	1050	525	525	7000
40	M.Phil Mathematics	3150	1750	1050	525	525	7000
41	M.Phil( Marine Chemistry)	3150	1750	1050	525	525	7000
42	M.Phil ( Hindi)	3150	1700	1050	525	525	7000



43	M.Phil Applied Economics)	3150	1700	1050	1	050	7000
44	M.Phil Commerce	3150	1700	1050	525	525	7000
45	M.Phil (Life Science)	3150	2540	1050	525	525	7790
46	M.Phil (Fisheries Science)	3150	1750	1050	525	525	7000
47	M.Tech.(Atmospheric Science)	12600	1645	1050	525	525	16345
48	M.Tech.(Computer Aided Structural Analysis & Design)	15750	5010	1050	525	525	22860
49	M.Tech.(Computer Aided Structural Analysis & Design)-for sponsored candidates	21000	5010	1050	525	525	28110
50	M.Tech.Opto-Electr. & Laser Tech	12600	1645	1050	525	525	16345
51	M.Tech.Polymer Technology	13230	6490	1100	550	550	21920
52	M.Tech.Comp. &Info. Science	12600	1645	1050	525	525	16345
53	M.Tech. Marine Engineering	47250	2050	1050	1000		55415
54	M.Tech.(Electronics)	12600	1645	1050	525	525	16345
55	M.Tech.(Engineering Statistics) (no admission)	12600	1645	1050	525	525	16345
56	M.Tech.(Engineering Statistics)for sponsored candidates (no admission in 2015)	21000	2110	1050	525	525	25210
57	M.Tech.(Industrial Catalysis)	12600	1645	1050	525	525	16345
58	M.Tech. (Software Engg.)	12600	1645	1050	525	525	16345



59	M.Tech.(Ocean Technology)	12600	1645	1050	10	)50	16345
60	M.Tech.(Ocean Technology)for sponsored candidates	21000	2975	1050	10	050	26075
61	M.Tech.(Marine Biotechnology) applicable to each semesters	12600	1645	1050	525	525	16345
62	M.Tech. (Full-Time) in Mechanical Engineering (Thermal Engineering)	47250	1960	1050	3000	525	53785
63	M.Tech. (Full-Time) in Civil Engineering (Geotechnical Engineering)	47250	1960	1050	3000	525	53785
64	M.Tech. Software Systems.	47250	1960	1050	3000	525	53785
65	M.Tech. CS &Engg. with Network Computing	47250	1960	1050	3000	525	53785
66	M.Tech. Health, Safety & Environment Mgt.	47250	1960	1050	3000	525	53785
67	M.Tech. Wireless Technology	47250	1960	1050	3000	525	53785
68	M.Tech Civil Engineering (Construction Engg. & Management)	47250	1960	1050	3000	525	53785
69	M.Tech. Chemical Engineering (Process Engg.)	47250	1960	1050	3000	525	53785
70	M.Tech. Electrical & Electronics Engineering with specialization in Power Electronics	47250	1960	1050	3000	525	53785
71	M.Tech. Mechanical Engineering (Production Engineering)	47250	1960	1050	3000	525	53785



70	P.G. Diploma (PT) in Translation and Functional Hindi	5515	1110		220	6845
71	Integrated Diploma in French/German/Japanese/Russian/ Italian	2365	1115	105		3585
72	PG Diploma in Communicative English (PT)	5250	1575	10	210	7045
73	M.A.(Translation-German/Russian)	2365	1115	105		3585
74	P.G. Certificate (French, German, Japanese, Russian)	2365	1110	5	105	3585
75	Certificate (PT) in French, German, Japanese, Russian	2365	1115	105		3585

The following special fees will also be collected at the time of admission.

From B.Tech / P.G. Students	Rs.	B.Tech. Marine Engineering	Rs.
Matriculation fees	160/-	Admission fee (SM Seat)	10500/-
Medical Inspection fee**	55/-	Admission fee (All India Merit Seat)	15750/-
Quasi University Fee	160/-	Uniform (at the time of admission)	13125/-
Recognition Fee*	160/-	Mess Caution Deposit -do-	5250/-
Sports fee	265/-	Orientation fee -do-	5250/-
Students Aid Fund	105/-	Uniform (per year)	3990/-
University Union Fee	105/-	Hostel activities (per semester)	12600/-
		Books (per year)	5250/-
		Laundry (per semester)	1575/-



		Medical Inspection fee	210/-
--	--	------------------------	-------

<sup>\* (</sup>For students who have passed their qualifying examination from outside Kerala)

P.T.A fee of Rs.1575/-(for courses of duration above 3 years) Rs.1000/-(for courses of 3 year duration and below) and co-curricular fee of Rs.100/-(only for B.Tech self-financing courses) have to be paid by the candidate at the time of admission.

Fees for subsequent semesters/ examination fees / fees for issue of certificates, mark lists etc.; are to be paid separately as and when notified by the Departments/Schools concerned.

Fee for Foreign National: See chapter 7 on INTERNATIONAL CANDIDATES

SC/ ST candidates belonging to the state of Kerala need pay the caution deposit, PTA fee and Co-curricular fee only at the time of admission in All India Merit and State merit. IN THE CASE OF EVENING COURSES SC/ST STUDENTS ARE ALSO REQUIRED TO REMIT THE FULL FEES.

SC/ ST candidates from outside Kerala state are to pay all fees including caution deposits at the time of admission and also during subsequent semesters. Respective Heads of the Departments / Schools will however extend necessary assistance to get the fee remitted by these students reimbursed by the respective State Governments.

KPCR fee concessions are available only for programmes recognized specifically for the purpose by the Government of Kerala. Candidates, belonging to the State of Kerala and eligible for such concessions, as per rules, are required to pay the full fees at the time of admission and for subsequent semesters / years; however, the fees collected will be refunded to the candidates to the extent reimbursed by the Government, as and when necessary grants are received.

Important: The fee structure is subject to rationalization / revision and rates of fee prevalent at the time of counselling / admission will be applicable.

Candidates admitted directly to the third semester of B.Tech Engineering programme through lateral entry are to pay the fees applicable for admission against All India Merit under B.Tech Engineering programmes.

<sup>\*\* (</sup>Only for full-time students)



The application fee applicable for various categories are: Rs.1000/- for General category candidates and Rs.500/- for SC/ST category. Rs.6000/- for candidates who apply under NRI quota.

Candidates who have opted test centre at Dubai should remit an additional amount of Rs.10,000/-by Demand Draft in favour of "Registrar, CUSAT" payable at Cochin and send the same to "The Director, IRAA Unit, CUSAT, Kochi" 682022" along with a copy of the application print out before the last date prescribed.

For Diploma & Certificate Programmes - Rs. 100/- for general category and Rs.50/- for SC / ST category.

#### CHAPTER 12

## FEE REFUND RULES – RULES ARE IMPORTANT

Refund of fees if any will be governed by the following rules and regulations prescribed by the University.

- 1. When a candidate cancels his/her admission before the starting of classes; another candidate from the waiting list is to be given admission and the former be refunded the entire fee remitted after deducting a processing fee of Rs. 1000/- (Rupees One Thousand only).
- 2. When a candidate cancels his/her admission after the commencement of classes, full amount of tuition fee remitted by the candidate will be refunded to him/her irrespective of the fact that he/she attends or not attends the classes, if the subsequent vacancy is filled by another candidate.
- 3. When a candidate cancels his/her admission after the date of closure of admission for the current academic year he/she will not be eligible for any refund of fees.
- 4. When a student leaves the course midway, leaving the seat permanently vacant, the Head of Department/Director/Principal will examine the requests and issue Transfer Certificate and other documents after collecting the fee for the semester (combined fee for 1<sup>st</sup> and 2<sup>nd</sup> semester in the case of 1<sup>st</sup> semester BTech students) in which the student discontinued the course.
- 5. The certificates and other documents in original, who cancel their admission, will be returned to them without any delay.
- 6. Refund without interest will be made only in the next financial year.



7. The aforesaid rules are subject to amendments from time to time.

#### CHAPTER 13

## FEE CONCESSIONS - CHECK YOUR ELIGIBILITY

#### FEE CONCESSION FOR OEC

Candidates belonging to Other Eligible Communities (OEC) will be eligible for educational concessions applicable to SC / ST candidates, subject to satisfactory verification (at the time of Group Discussions and/or Interview/Counselling / Admission, whichever is held earlier) of certificates issued by competent Revenue authorities clearly indicating that the candidate is a member of OEC.

#### FEE CONCESSION UNDER KPCR

Fee concession under KPCR cannot be claimed as a matter of right and will be available only for programmes recognized specifically by the Government of Kerala for the purpose. Candidates will acquire eligibility for fee concession under KPCR only if the annual family income of their parent(s) / guardian conforms to the limits prescribed by the Government of Kerala from time to time.

Candidates, belonging to the State of Kerala and eligible for such concessions, as per rules, are required to pay the full fees at the time of admission and for subsequent semesters / years; however, the fees collected will be refunded to the candidates to the extent reimbursed by the Government, as and when necessary grants are received.

#### ANNUAL FAMILY INCOME LIMIT

Applicants seeking admission under communal reservation quota earmarked for SEBC candidates and/or fee concession under KPCR will acquire eligibility to be considered under the quota/ for fee concession only if the annual family income of their parent / guardian conforms to the limits as prescribed by the University. For Non- Professional and Professional programmes except for SC/ST, the prescribed maximum limit for gaining eligibility for SEBC candidates under reservation quota is Rs. 6,00,000/-



\*Limits prescribed as per University Rules at the time of admission will be applicable.

#### CHAPTER 14

## **HOSTEL FACILITIES**

Hostel accommodation for around 600 male and 700 female students is available for Undergraduate/ Postgraduate / Research students.

#### **Main Campus**

1. Sanathana, Siberia, Sarovar and Post metric hostels for boys

2. Aiswarya, Athulya , Anaswara and Post metric hostels for girls

3. OBC Post Metric Hostel for Girls

Men's Hostels Ladies' Hostels

Ladies' Hostel

## **Lakeside Campus**

Cochin University Marine Science Campus Hostel Men's Hostel

Application forms for admission to University Hostels are available online at the University website http://hostels.cusat.ac.in/. Printout of the completely filled in application form is to be submitted to the respective Department office. Head of Department will forward all the applications together to the hostel office after verification and giving priority number based on the distance of home town from the University.



Admission to hostels is not the right of any student. The Syndicate reserves the right to open or close any or all of the hostels, or parts thereof or deny admission to or expel any student, or shift a student from one hostel to another - all without assigning any reason.

Admission to the Hostel is open to full-time regular students admitted to a programme of study of not less than two semesters. Priority is given to SC/ST, physically challenged, foreign and to those students whose normal place of residence is more than 15 kms away from the campus. Separate accommodation is arranged for students under international collaboration.

Full-time research students and fellows working in sponsored research schemes in the University shall only be considered if seats are available. No Ph.D student will be allowed to stay in hostels for a total of more than 3 years in his/her academic career in the University. Full-time students under the 'Faculty Improvement Programme' drawing regular salary from their parent institutions are not eligible for hostel accommodation.

Accommodation in the hostels is limited to the duration of the programmes to which a student is admitted and he/she is required to vacate the hostel within seven days of his/her taking the last written/practical/viva-voce examination of the programme. No one is eligible for accommodation in the hostel for taking supplementary examinations.

A student admitted to an M.Phil programme will not be allowed accommodation beyond a period of 12 months from the date of admission to the hostel. During vacation the hostels will remain closed. All students shall remove their personal belongings and vacate the hostels during vacation. Payment of dues to hostels shall be made in the department/schools concerned. Detailed rules/fees etc. relating to admission to hostels will be supplied to students at the time of their admission to the hostel.



#### CHAPTER 15

## CAMPUS DISCIPLINE

The University provides the best education possible to enable the students to get the most from all aspects of life at the University. In this context, however, it is important that the students realize the symbiotic nature of this relationship and accept the responsibility inherent in this joint venture.

Ragging, use of drugs, drug trafficking, eve-teasing, physical assault / violence of any sort, etc. are criminal offences and are strictly forbidden. Persons found indulging in such activities will be subjected to strict disciplinary action including expulsion from the University, besides other measures under the law of the land. "The Cochin University Students (Conduct and Disciplinary) Code-2005" will be applicable to all students of the University and all its recognized institutions as per order No. Ac.A1/Disciplinary Actions/2004 Dated 18-07-05.

The students who indulge in ragging will be strictly dealt with. If any incident of ragging comes to the notice of the authorities, the student concerned (accused of indulged in ragging) will be given liberty to explain and if his /her explanation is not found satisfactory, he/she will be expelled from the institution.

The Syndicate of the University at its 480th meeting held on 18.12.2004 decided to evolve a code of conduct for the students studying in the University and to implement the Judgment of the Hon'ble High Court in R.P.No.435/2003.

## Responsibilities of the students.

It shall be the responsibility of the students:

- 8. To read, become familiar with and adhere to this Code and any amendment brought to this Code.
- 9. To foster and maintain a vibrant academic, intellectual, cultural and social atmosphere which is consistent with the objectives of the University.



- 10. To report any violation of this Code to the functionaries under this Code.
- 11. To access all educational opportunities and benefits available at the University and make good use of them to prosper academically and develop scientific temper.
- 12. To respect the laws of the country, human rights and to conduct in a responsible and dignified manner at all times.
- 13. To respect the cultural and societal values nurtured and followed by people in the State.

#### **Disciplinary Actions**

Any student/students exhibiting prohibited behaviour mentioned in Section (6) of the Code shall depending upon the gravity of the misconduct or depending on its recurrence be subjected to disciplinary actions, as per the Code.

#### Undertaking by the students

The students joining any academic programme of the University will have to give an undertaking to the effect that he/she will fully comply with the provisions envisaged in this Code in letter and spirit.

A Committee constituted in accordance with UGC guidelines on prevention of sexual harassment to women at the work place maintains vigil to prevent / combat the perpetration of any such attempts.

#### **CHAPTER 16**

## PARENT TEACHER ASSOCIATION – BRIDGING RELATIONSHIPS

#### **Aims and Objectives**

To foster and promote cordial relationship among the parents, teachers and students of the college/school/department.

To help guide and participate in various developmental activities of the college/school/departments.

To render all possible assistance for smooth working of the college/department/school and for maintaining good discipline in the campus.



To institute scholarships/awards for deserving students of the college/school/departments. To provide and ensure essential amenities to the students of the college/school/department. CHAPTER 17

## **HOW TO REACH CUSAT – THE WAY TO SUCCESS**

Kochi (erstwhile Cochin) is well connected by air, rail, road and sea.

#### By Air

The Cochin International Airport located at Nedumbassery is about 20 km and a mere 20 minutes' drive from the Main Campus of CUSAT.

#### By Rail

The Railway Station at Alwaye (Aluva) is 10 kms north of the Main Campus and has the convenience of an adjacent Bus Station, from where very frequent City Buses bound for Ernakulam and beyond will take you in 15 minutes to CUSAT bus-stop at Kalamassery. Auto-rickshaws are available at the South Kalamassery bus stop for transport to the Main Campus, 1 km away.

Alternatively, one may alight at Ernakulam Town (North) or Ernakulam Junction (South) Railway Stations, both of which are on the southern side of the Main Campus. However, note that all trains will not stop at both the stations. Buses bound for Alwaye are available from nearby bus stops for travel to South Kalamassery (13 kms).

The Lakeside Campus is only 2 km from the Ernakulam Junction (South) Railway Station.

## By Road

All long distance KSRTC and inter-state buses plying along National Highway 47 to Ernakulam from north have a 'Request Stop' at CUSAT bus-stop. . If travelling by City Buses, the Bus stop nearest to the Main Campus is South Kalamassery.

If travelling from the South, you may alight at Vytilla Mobility Hub and then take a City Bus bound to Alwaye to step down at South Kalamassery.

## By Sea



The Cochin Port is situated on Willington Island, which faces the City (Lakeside) Campus and is just across the adjoining back waters.

#### CHAPTER 18

## TEST CENTRES – WE ARE NEAR YOU

For First Degree Programmes (B.Tech and 5 year Integrated M.Sc. in Photonics): the CAT will be conducted on All India basis with test centres in Dubai\*, New Delhi, Kolkata, Mumbai, Chennai, Bangalore, Jamshedpur, Allahabad, Lucknow, Ranchi, Varanasi, Kota and all the District Head Quarters of Kerala; viz, Thiruvananthapuram, Kollam, Adoor(Pathanamthitta), Thodupuzha (Idukki), Alappuzha, Kottayam, Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode, Kannur, Kalpatta (Waynad) and Kasaragode.

For PG Programmes, 5 year BBA.,LL.B(Hons) / B.Com.,LL.B.(Hons.), MIP.,Ph.D and LL.M.,Ph.D: The CAT will be conducted at all the district headquarters of Kerala.

For Lateral Entry Tests and 3 Year LL.B: The CAT will be conducted only at the Ernakulam Centre.

\* If sufficient numbers of candidates are not opting for Dubai Centre, the Candidates who have opted for Dubai Centre will have to write test in Ernakulam centre.

The DATs are conducted in the University campus by the individual Departments/Schools/Centres of the University. The dates of these tests will be announced separately by the respective Departments.

The University reserves the right to cancel all or to shift or merge any of the notified test centres for administrative reasons.



#### CHAPTER 19

# INTIMATION OF SCHEDULE OF COUNSELLING/INTERVIEW/ADMISSION etc. -BE AWARE & BE ALERT-

## NB: NO INDIVIDUAL CALL LETTER / COMMUNICATION WILL BE SENT BY POST

Schedule of Counselling, Interview, Group Discussion, Admission etc. will be published in the website after the publication of Test Results. Students are advised to login to the website regularly for updates. Web ID: <a href="https://www.cusat.nic.in">www.cusat.nic.in</a>

Those who are appearing for DAT are advised to contact the respective Departments/Schools also.

#### CHAPTER 20

## IMPORTANT DATES AND TIME TABLE FOR CAT/LET 2015

TIME TABLE FOR CAT 2015						
02/05/2015, SATURDAY						
Time	Test Code	Subject				
09.30 a.m 12.30 p.m.	101	Test in Mathematics, Physics and Chemistry for 1st Degree Programmes in Engineering and Technology (B Tech/5 Yr. Integrated M.Sc. Photonics)				
09.30 a.m 11.30 a.m.	616	Test for MA Applied Economics				



02.00 p.m 04.00 p.m.	201	Aptitude Test for B.B.A., L.L.B. (Hons) / B.Com. LL.B(Hons.)
	301	Test for MA Hindi
02.00 p.m 05.00 p.m.	620	Aptitude Test for MIP.,Ph.D & LL.M.,Ph.D
	J	03/05/2015, SUNDAY
9.30.a.m 11.30.a.m.	601-604, 606-615, 617-618	Test for Post-Graduate programmes - Biotechnology (601), Botany(602), Chemical Engineering(603), Chemistry(604), Electronics(606), Engineering Science(607), Fisheries(608), Geology(609), Law (for LL.M)(610), Life Science(611), Mathematics(612), Physics(613), Statistics(614), Zoology(615), Instrumentation(617), Food Science(618)
12.00 noon - 02.00 p.m.	501	Aptitude Test for M.C.A
03.00 p.m 05.00p.m.	619	Aptitude Test for 3 year LL.B. Course (Test centre only at Ernakulam)
10/05/2015, SUNDAY		
10.00 a.m. to 1.00 p.m.	102	Test for Lateral Entry to B .Tech Programmes (Test centre only at Ernakulam)
Centre of Examination		As indicated in the downloaded Admit Card
Counselling		Dates will be announced later in the University websites www.cusat.nic.in, www.cusat.ac.in