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# ABOUT CUSAT

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| CHANCELLOR | His Excellency<br>Shri. H.R.Bhardwaj, Governor of Kerala |
| PRO CHANCELLOR | Shri. P.K.Abdu Rabb,<br>Minister for Education |
| VICE - CHANCELLOR | Dr. Ramachandran Thekkedath |
| PRO-VICE-CHANCELLOR | Dr. Godfrey Louis |
| REGISTRAR | Dr. A. Ramachandran |
| FINANCE OFFICER | Shri. Sebastian Ouseph |
| CONTROLLER OF EXAMINATIONS | Dr. A B Bhasi |

**THE UNIVERSITY:**

**VISION**

In keeping with the motto of the University; "Tejasvinavadhithamastu", which conveys, "May learning illumine us both, the teacher and the taught", the atmosphere in the campus is vibrant and intellectual. Cochin University of Science & Technology (*CUSAT*) is always on the move, girding up its loins with grit and determination to unravel the myriad, unexplored mysteries of knowledge.

**EVOLUTION**

Originally known as University of Cochin, the University came into being in 1971 through an Act of the Legislature resultant to a concerted campaign for quality postgraduate education in the State of Kerala. Reorganization of the University into Cochin University of Science and Technology (*CUSAT*) saw the fulfillment of the aspirations of the pioneers that spearheaded the movement for establishment of a Science & Technology University in the State. The process of reorientation resulted in redefining the objectives as "the promotion of graduate and post graduate studies and advanced research in applied science, technology, industry, commerce, management and social science."

The Syndicate, Academic Council and Senate are the Principal Authorities of the University. The academic structure comprises of nine Faculties viz. Engineering, Environmental Studies,

Humanities, Law, Marine Science, Medical Sciences and Technology, Science, Social Science and Technology. There are Boards of Studies in different Faculties also. A Sophisticated Test and Instrumentation Centre (STIC) was established in 1996 in collaboration with the Government of Kerala. The Government of Kerala has recently established three inter-university centres in CUSAT, in the areas of Nanotechnology, Intellectual Property Rights (IPR) and Marine Biotechnology. In addition to the support from the state Government, these centres get massive funding from the Department of Science and Technology and the Ministry of Human Resources Development (HRD), Government of India. The Union Ministry of HRD has declared the School of Legal Studies as a Depository of IPR and an IPR chair has been introduced. Another prestigious chair introduced by the Ministry of HRD is the Rajiv Gandhi Chair on Sustainable Development. By giving recognition to several well-established premier research institutions in the country and the Southern Naval Caoomand of Indian Navy, the University has brought within its reach the resources available in these institutions for the use of the academic community. Specializations are available in almost all Faculties / Departments for higher studeis and research.

**PRESENT :**

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 most friendly 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 Technology, Photonics, Safety and Fire Engineering and Marine Engineering 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 MNC for recruitment. CUSAT is also proud that its alumni adorn key positions in large number of highly acclaimed R & D institutions and companies in India and abroad. This pool of highly successful and talented alumni is a living testimony to the aspirations of this University.

## Faculties

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

## Teaching Departments / Schools

*CUSAT* has at present 27 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 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, achievement 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 catalyzed the spread of quality education and has paved the way for healthy interaction between academicians and scientists.

### CAMPUSES:

There are three separate campuses, two in Cochin and one at Pulinkunnoo, Alleppey about 65 kms south of Cochin.

## Main (Trikkakara) Campus

The Main Campus is located 1 km off the National Highway 47 at South Kalamassery. About 180 acres in extent, it houses the academic Departments / Schools in all the Faculties

(except in Marine Sciences), the Administrative Office, the University Library, the student hostels and staff quarters besides other support services.

**City (Lakeside) Campus**

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 Departments / Schools in the Faculty of Marine Sciences are located in this campus alongside a hostel for men students.

**Pulinkunnoo Campus**

The Pulinkunnoo Campus in Kuttanad (Alleppey District) is about 65 km away from the Main Campus. Kuttanad comprises Kerala's serene, picturesque backwaters, the enrapturing scenic beauty of which is to be seen to be believed. The Pulinkunnoo Campus is home to the Cochin University College of Engineering, Kuttanad (CUCEK).

# TEACHING DEPARTMENTS

## COCHIN UNIVERSITY COLLEGE OF ENGINEERING KUTTANAD (CUCEK)

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 65 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.

## SCHOOL OF ENGINEERING, THRIKKAKARA (SOE)

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. Research activities were introduced in 1981 with Ph.D. Programmes. The School introduced B.Tech. Programmes in Civil Engineering, Mechanical Engineering, Electronics and Communication Engineering, Computer Science and 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 & Electrical & Electronics Engineering in 2003.

The School has started full-time M.Tech. Programmes in Civil and Mechanical Engineering in 2012. It also offers M.Tech programme (part time) in Civil, Electrical, Mechanical and Chemical Engineering in every alternate years.

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 level journals.

## KUNJALI MARAKKAR SCHOOL OF MARINE ENGINEERING (KMSME)

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 Organisation (IMO), a special agency of United Nations Organisation. 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 is the state of the art facility catering hands-on-job experience for the Marine Engineering students for running and maintenance of a ship. Students are further getting trained in Full Mission Engine Room Simulator Lab. which is also installed in the School. School Library is stocked with 5028 books of original publication in all the subjects relevant for Marine Engineering studies.

B.Tech. Marine Engineering course is a full time residential programme. Therefore, the students' hostel is located within the campus in a most hygienic and student friendly atmosphere. Food is provided to the students through the mess run by the School, having most modern kitchen. The school and hostel facilities are under continuous surveillance and periodic inspection by Directorate General of Shipping, Government of India.

Academic programme in post graduation will also be started soon.

The present annual intake in B.Tech. Marine Engineering is 40, through Common Admission Test conducted by the university. This intake is expected to be increased to 80 from the coming academic year after the approval by Directorate General of Shipping.

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.

## SCHOOL OF ENVIRONMENTAL STUDIES

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 Modeling.

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 & Sono Photocatalysis, 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) Analyzer, Spectrophotometers, Pulse Field Gel Electrophoresis, Inverted

Microscope, CO2 Incubator, Electrophoretic Systems, Plant growth chamber, Lumino-meter 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.

## NATIONAL CENTRE FOR AQUATIC ANIMAL HEALTH

National Centre for Aquatic Animal Health (NCAAH) has been in active Research and Extension in Aquatic Animal Health and Marine Biotechnology since its inception in 2000. The Centre perpetuates its vision on holistic development and application of viable technologies for the management of aquatic animal health especially the species cultured, besides endeavouring on marine biotechnology to bring forth industrial development in India. In support of this vision it offers an M.Tech. Programme in Marine Biotechnology sponsored by Department of Biotechnology, Government of India to generate manpower as Scientists, Technocrats and Entrepreneurs. As a matter of policy the Centre collaborates with sister organizations to achieve its short and long term objectives in such a way that the problems related to aquatic animal health are sorted out and solved at National level.

A unique feature of the Centre is its in - house production facility for 'Aquaculture Medicine' in order to meet the needs of the aquaculture industry. The Centre has state-of-the-art facilities for research and development in Marine Biotechnology, Bacteriology, Virology Immunodiagnostics, Molecular diagnostics, Animal Tissue Culture, Aquatic Animal Health Assessment, Aquaculture Medicine Production, Bioassay System and Environmental Chemical Analysis. The identified thrust areas are Fish and Shellfish Health Management, Aquatic Animal Cell Culture, Aquaculture Bioremediation, Marine Genomics and Proteomics, Bio-security and High Health Brood Stock Development, Bio - prospecting, Aquaculture Medicine and Nano - Biotechnology.

The research programmes are supported by the National funding agencies besides the International agencies such as International Foundation for Science Sweden and Welcome Trust U.K. The Centre maintains strong links with several National Research Institutes and Universities by way of undertaking collaborative research programmes. The unique feature of the research programmes undertaken here is the close liaison being maintained with the Industry and the people around in the sense that all research programmes identified have emerged from the real life problems brought to the attention of the Centre by the people.
Active research wing at the NCAAH has attained its prime position among the Institution at National level through publications in peer reviewed research Journals, commercialized technologies such as Nitrifying Bioreactor and aquatic animal health management products (DETRODIGEST, ENTEROTROPHOTIC and PS-1 to mention a few)

In 2008 the Centre launched an M. Tech. programme in Marine Biotechnology, the only one of its kind in India, sponsored by Department of Biotechnology, Government of India under the net work programme in human resource development in Biotechnology in the country.
The quality of research undertaken and the extension and services offered to the aquaculture industry in Aquatic Animal Health enabled this centre to be recognized by Network in Aquaculture Centres in Asia - Pacific (NACA) as its Regional Recourse Centre in Aquatic Animal Health. NCAAH's unique Aquaculture Extension Cell (AEC) bridges the farmer and technology gap and provides a platform for interaction between Farmers, Scientists and Industry and promotes novel technologies in aquaculture.

The pursuit of knowledge and improved technologies offered by the Centre in the last one decade paved the way for sustainable aquaculture in the country. As its motto testifies the Centre has taken up its activities as 'Relentless efforts for the protection of health of aquatic animals and their environment'; the mission which made NCAAH India's leading knowledge hub in Aquatic Animal Health.

The Central laboratory is situated in the Lakeside Campus of *CUSAT* with four regional aqua-clinics.

## DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES

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. In 2003, the Department was reoriented as the Department of Culture and Heritage so as to pursue other academic concerns like History, Museology and Archaeology. However, in order to give supreme importance to language teaching and all 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.(Translation) Course in German and Russian 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 these courses are repeated every three months with an in-take of 25 students.

## DEPARTMENT OF HINDI

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 167 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 have been completed by the Department and the IIIrd phase of DRS project is going on from April 2007.

The Department Library has about 40000/- books and is currently subscribing 40 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

## SCHOOL OF LEGAL STUDIES

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 Programmeto 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 will also be introduced.

A Human Rights chair in the name of Justice V.R. Krishna Iyer has been established in the School. It enables interdisciplinary research and extension work in Human Rights values.

## SCHOOL OF INDUSTRIAL FISHERIES

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 has 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 elevated as a school in 1995 in due recognition of various academic and scientific achievements. Five divisions such as (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 thirteen international conferences, twenty-three 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 mostly 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 faculties of this School serve as members in various expert committees constituted at regional, national and international levels.

## SCHOOL OF MARINE SCIENCES

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.

## DEPARTMENT OF ATMOSPHERIC SCIENCES

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, 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 are 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, Bombay; 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, Effect of global warming and the land use changes on the weather and climate of Kerala under UGC - SAP - Level DRS Phase II from 2007 to 2012. The Department received ₹ 36.5 lakhs 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 lakhs as Special Assistance from UGC(SAP) for Augmentation of Infrastructure to Department of Atmospheric Sciences 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.

The Department received Rs.30 Lakhs towards infrastructure development under the FIST Programme of the Department of Science and Technology, Govt. of India.

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 a high speed computational facilities, an automatic weather station and a full-fledged surface weather observatory. 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 44 Ph. Ds and published about 240 research papers in reputed international and national scientific journals. In addition, more than 300 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, etc were successfully organized by the Department.

Students who complete their M.Sc. in Meteorology and M.Tech in Atmospheric Sciences get a strong background in this field and are qualified for the posts of Meteorologist/Scientists in India Meteorological Department, National Centre for Medium Range Weather Forecasting, New Delhi, Indian Institute of Tropical Meteorology, Pune, Indian Air Force, Space Applications Centre, Ahmedabad, National Remote Sensing Agency, Hyderabad, Defence Research and Development Organisation, Indian Space Research Organization, SHAR, National Institute of Oceanography, Goa, Tata Institute of Fundamental Research, Mumbai, C-MMACS, Bangalore, IISc, Bangalore, IITs, Agricultural Universities, R & D Institutions and as teachers in various Universities. Many of our students have also gone abroad for higher studies and employment in this field. At present the Department of Atmospheric Sciences is the main University centre providing trained manpower in Meteorology/Atmospheric Science to the need of research personnels to the prime research institutes in India.

## DEPARTMENT OF CHEMICAL OCEANOGRAPHY

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 member 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.

## DEPARTMENT OF MARINE BIOLOGY, MICROBIOLOGY & BIOCHEMISTRY

The Department of Marine Biology, Microbiology and Biochemistry is one of the first and foremost academic instituions in Marine Biology in the country. The M.Sc programme in Marine Biology was started in 1958. The Department also offers M.Phil in Life Sciences and PhD programme in various aspects of marine biology, microbiology and biochemistry. The Department is engaged in research and development activities right from its inception in 1938 and many students have been awarded Ph.Ds under the faculty of marine sciences. Around 900 research papers have been published. A team of dedicated and talented teachers trained in different areas of marine biology, microbiology and biochemistry constitute the faculty of the Department.

The Department has infrastructure for teaching, research and training in the basic and applied frontiers of these disciplines. The facilities include museum, aquarium and laboratories with sophisticated analytical equipments viz. Transmission Electron Microscope, Fluorescence Spectrophotometer, Atomic Absorption Spectrophotometer, Freeze Drier, HPLC, Gas Chromatograph,TOC analyser, Epiflourescence Microscope, Microbial ID System, Real Time PCR, Fermentor etc.

The Department is implementing several externally funded research projects by MoES, UGC, DST, DBT, MoEF, KSCSTE, KBB, DoECC and ICMAM. Department is also involved in the Artic research programme of Government of India siche 2009. The Department is supported by the FIST programme of DST, SAP programme of UGC and SARD programme of KSCSTE.

The Ministry of Earth Sciences, Govt. of India has established the ESTC (Earth Science and Technology Cell ) in the department with thrust area in marine benthos.

## DEPARTMENT OF MARINE GEOLOGY & GEOPHYSICS

Earth Science education is enhancing its relevance and scope globally owing to recent advances in geoexploration and the role it has in environmental and development 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 had 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 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.

## DEPARTMENT OF PHYSICAL OCEANOGRAPHY

Oceanography, the science of Oceans is of vital importance to India and particularly to the state of Kerala. As a flagship department of Cochin University (Estd. 1971) and fully autonomous since 1996 the department is offering full-fledged prestigious programmes of study in M Sc Oceanography and M.Tech. Ocean Technology. 40 Ph.D.s have graduated to date and currently 9 students are enrolled for their doctoral research work. The Department has placed emphasis on contemporary topics in Ocean studies, which have been selected as thrust area subjects by national / international agencies. The thrust areas of research include Coastal Zone Management, Ocean Remote Sensing, Estuarine Dynamics and Sedimentation, Coastal Hydrodynamics, Climate Change and Modeling.

The Department has been able to attract and secure major projects from national bodies such as UGC, DST, MHRM, SAC, MEF, AICTE and MoES to the tune of Rs.1.20 crore. The faculties of this Department are currently engaged in projects related to Estuarine processes, Coastal Oceanography, Coastal Area Management and Climate Change. Major publications are mostly in recognized foreign journals, namely Science of the Total Environment, Hydrobiologia, Environmental Geology, Ocean Science Journal, Journal of Coastal oceanography and Environmental Conservation plus reputed national journals. Research publications stand at 280 papers. Members of the faculty have been awarded international fellowships to conduct research abroad under fellowships such as Commonwealth, Russian Government etc. As many as 65 students from this Department have qualified themselves in national entrance test conducted by UGC/CSIR out of 120 who appeared.

The Department of Physical Oceanography has been the forerunner in this country in oceanographic studies and research for the past four decades. By a timely reorientation of the curricula and training methods, the faculty has been able to promote and develop a strong contingent of oceanographer's within this country and abroad.

## DEPARTMENT OF APPLIED CHEMISTRY

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 now grown and has 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 in Chemical Sciencesin 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. Research and development activities for the sake of industries are also conceived as a major goal of the Department.

The Department has more than 70 Ph.Ds, 300 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 prorammes 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, Thermo Gravimetric Analyzer, Surface area analyzer, FTIR, LCMS, 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 is conducting regular programmes in Science for school students.

The Department receives special assistance from the DST, Government of India under "Fund for improvement of S&T infrastructure"(FIST) programme and from UC under special assistance prorammes.

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.

## DEPARTMENT OF BIOTECHNOLOGY

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 world 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 55 Ph.Ds have been awarded to 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.

## DEPARTMENT OF MATHEMATICS

The combined Department of Mathematics and Statistics came into existence in November 1976, with the major objective of developing it to a Centre of Excellence in this region in mathematical sciences and applications 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 conducts a Masters Degree programme

in Mathematics, an M.Phil programme in Mathematics and Ph.D programme. Students of M.Sc (Mathematics) generally take up teaching positions or opt for research. The Department has produced about 60 Ph.D.s and has published about 270 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 was 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, Topology, Topological Dynamics and Fluid Mechanics. The department has been receiving a library grant from NBHM since 1991. 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.

## DEPARTMENT OF PHYSICS

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 49 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 are all 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.

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, Kalpakam; 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 possess 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. These facilities are thrown open for users within and outside the state on nominal charge depending on the availability of the instrument time.

## DEPARTMENT OF STATISTICS

The Department of Statistics was established in 1996 by bifurcating the erstwhile School of Mathematical Sciences. The Department offers M.Sc degree program 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 a FIST sponsored department by DST, Government of India. The Department has organized several seminars and workshops at the national and international level. The department library has about 2500 books in addition to subscribing to 20 journals. The Statistical Computing Laboratory of the department has several licensed softwares 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 fiels of social interest. The Department has close academic interaction with University of Waterloo, Delhousie University Canada, I.S.I. Calcutta, University of Dresden Germany and University of Warwick United Kingdom.

Consultancy services are being offered to some industrial establishents and R & D institutions in the State in the field of Data Analysis, Planning of Surveys and Quality Improvement.

## DEPARTMENT OF APPLIED ECONOMICS

The Department of Applied Economics was established in the University in the year 1979. It was originally envisaged primarily as a research oriented department with its focus on applied

economic problems. Situated in a Science and Technology academic environment, the Department promotes studies and research pertaining to the economic dimensions of science, technology and society as also the economic problems of the region.

## SCHOOL OF MANAGEMENT STUDIES

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 46th year.

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 2 months final 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 with 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 on line 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.

## DEPARTMENT OF ELECTRONICS

The Department of Electronics was established in 1975, as a post-graduate Department with Master's 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 fields such as Underwater Acoustics, Ocean Electronics, Microwave Propagation & Antennas, Microwave Material Studies, Image Processing, Pattern Recognition, Embedded Systems, Robotics and Signal Processing. 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 Deaprtment has well equipped laboratories for carrying out research work at M.Tech and Ph.D levels.

The Department was chosen for special assistance by the UGC under COSIST, DRS and the SAP. The UGC has sanctioned COSIST assistance in 1988 for development of post-graduate education and research in the areas of Microprocessor applications and Microwave Antennas. In 1994, the Department was selected for Departmental Research Support (DRS) in the field of Ocean Electronics. The Department has also been selected for the special assistance programme (SAP) of UGC at DSA level in the year 2000. The Department is currently undertaking research projects worth ` 200 lakhs from various agencies and has successfully completed 42 major research projects worth 929.995 lakhs. The Department has already established international collaboration with Delft University (The Netherlands), Polarizone (Malaysia) University of Surrey (UK), 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.

The University Grants Commission is also supporting the research activities by awarding research fellowships, viz., Research Fellowship in Science for Meritorious Students (RFSMS) which is later renamed as UGC BSR Fellowship. About 20 students have received research fellowship under this scheme since 2007.

The Department conducts two symposia as biennial events - the National Symposium on Antennas & Propagation (APSYM)and the Symposium on Ocean Electronics (SYMPOL) from 1988 onwards. These symposia are organized with the sponsorship of IEEE, ASA, AICTE,

DST, CSIR, etc. Also, the faculty members and research scholars regularly attend international conferences to present their research findings.

The Department has around 300 research publications and 25 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 subscribing more than 30 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.

## DEPARTMENT OF INSTRUMENTATION

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 has been started from 2011.

The Department has a very active research programme 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, STED (Kerala) and TWAS. It has been the venue for 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.

## DEPARTMENT OF POLYMER SCIENCE AND RUBBER TECHNOLOGY

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 the M.Tech. programme in the year 1985 was a major milestone in the growth of the Department. Teaching and research are intertwined in the four semesters of the M.Tech programme in Polymer Technology. The Department began research activities and Ph.D programmes in the year 1980. So far 80 PhD Degrees were awarded from the Department and currently 40 research scholars are working in the Department for their Ph.D. The highly motivated faculty members with experience in Universities outside India have to their credit about 600 research publications in internationally reputed journals. 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 in 2002 and thoroughly revised in 2009. 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 the design, production, characterization, processing and testing of polymers and polymer products. Practical trainings at the Rubber Research Institute of India, Central Institute of Plastic Engineering and Technology, other research institutions and in-plant trainings in Tyre / Polymer Industries are the highlights of this course.

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 Refractometer, Keithley2182 Nano Voltmeter, Gottfert Elastograph, Goetfert Viscotester, Waters515 HPLC, Brookfield Viscometer, Carl Zeiss Stereo Microscope and Thermo Haake(Rheomix) Poly Lab System, Buchi Parallel evaporator, Buchi Rotavapor, Ektron Mooney Viscometer and Ektron Flexometer. A limiting Oxygen Index facility manufactured by M/s.Dynisco of US is one of the recent acquisitions by the Department. The latest addition to our laboratory is the modern Micro injection Moulding Machine supplied by M/s. DSM of Netherlands.

## DEPARTMENT OF SHIP TECHNOLOGY

The Department is one of the pioneers in the field of Naval Architecture education in this country and was established with an aim to create a new and dynamic generation of Naval Architects to meet the requirements of the Indian Shipbuilding Industry, Ship Classification

Societies, R&D organizations, Indian Navy and related organizations. With this in view, a B.Tech. programme in Naval Architecture and Ship Building was started in 1975. This Department maintains active collaboration and interaction with IITs, foreign Universities, Shipyards and other industries. These organizations have been generous in extending their facilities and expertise to impart training to our students. The fruitful collaboration of this Department with Rostock University, Germany dates back to 1978 and remains as an important milestone in the development of this Department. The curriculum was drawn up and updated in consultation with experts from various academic institutions and industries. This has brought the course curriculum in conformity with international standards.
The Ministry of Surface Transport, Government of India approved the B.Tech. (Naval Architecture & Ship Building) course for the M.O.T. Certificate Examination, thus enabling the B.Tech. Graduates to venture into the field of Marine Engineering also. Yearly intake of the B.Tech programme in Naval Architecture and Ship Building course is 40 of which 12 is reserved for the personnel sponsored by Indian Navy.

The quality of education imparted and the resulting professional competence of the graduates enabled the department to achieve a unique record of 100 percent placement on its graduates in India and abroad. The Department conducts an M.Tech programme in Computer Aided Structural Analysis and Design (CASAD) and has Ph.D programmes too.

The Department provides consultancy services to small and medium sized Shipyards in India and also to Government Organizations like DRDO establishments (NSTL, NPOL, CVRDE), KSNIC, SILK etc. The members of the faculty have been active in conducting several research projects sponsored by D.S.T., Naval Research Board, D.R.D.O. establishments. The Society of Naval Architecture Students (SNAS) was established in 1981. The Society publishes an annual technical journal SHIPSTECHNIC with contributions from researchers and experts in ship related R&D, academic institutions. The journal has achieved repute as one of the few such publications in this country. The society also organizes seminars and lectures on various aspects of ship design, construction and related activities.

## INTERNATIONAL SCHOOL OF PHOTONICS

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 characterisation of polymer fibers, 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 an M.Phil in Photonics in addition to the 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 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 is one of the three actively participating Departments of the UGC Sponsored Centre of Excellence in Lasers and Optoelectronic Sciences (CELOS). ISP has strong collaboration and interaction with a number of institutions such as Eindhoven University of Technology, the Netherlands, Sulta Quaboos University in Oman, Nanyang Technological University in Singapore and Tampere University of Technology, Finland. Leading Organizations such as ISRO, SAMEER, NeST 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
- Laser Induced Plasma
- Photothermal Phenomena
- Laser control by Chaos
- Nonlinear Optics
- Polymer Optical

## 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 installment of grant of

Rs.5 crores. 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 fiber optic technology. Successful candidates who complete this M.Sc. Degree programme have plenty of opportunities in Photonics and Fiber Optics industry and for advanced studies like M.Tech and Ph.D. Most of the students from the first two 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 International School of Photonics and Department of Physics and Department of Electronics are directly participating in the programmes of CELOS.

## SCHOOL OF COMPUTER SCIENCE STUDIES

The School of Computer Science Studies was instituted in June 1996 as an umbrella unit to the Department of Computer Applications, the Department of Computer Science and the Department of Information Technology. While the first two departments have focus on PG programmes and in pursuing research, the third was concentrating on under graduate programmes. The B.Tech. Programme in Information Technology co-ordinated by Department of Information Technology, later became part of the School of Engineering in the University. The School of Computer Science Studies also provides technical and administrative support to the Computer Centre.

## DEPARTMENT OF COMPUTER APPLICATIONS

Computer Applications is one of the thrust areas in Science and Technology. In appreciation to its growing importance in business and visualizing the career prospects, the University established the Department of Computer Applications (DCA) to facilitate research and human

resource development in the subject. The MCA programme was started in 1994 with the financial support and a model curriculum prepared jointly by the UGC and the Department of Electronics, Government of India. The syllabus is updated periodically based on the latest trends and requirements of the industry. The Department has a proud alumni, most of them being placed with IT Giants IBM, HP, WIPRO, INFOSYS, TCS, CTS, etc. The research activities of the Department include the subject areas Information Security, Simulation, Cryptography & Coding Theory, Algorithm, Pattern Recognition, Web mining, Graph Theory and its Applications, Image Processing, Data Mining, Networking and Software Engineering. The Department is also doing consultancy work for public and private sector undertakings. The Department has an excellent library with more than 6000 books and various National, International and Online Journals. The Department has a well equipped laboratory which is being constantly updated with the latest computers and it provides 24 hour internet access through a dedicated link to the Campus Network. The Department has a Placement Cell managed by the students and actively assisted by the faculty members. The Students Association of the Department hosts special interest groups in subject areas like Data Mining, Image Processing, Artificial Intelligence, Robotics etc.

## DEPARTMENT OF COMPUTER SCIENCE

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, seek 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)

The programmes follow a choice based credit and semester system with progressive assessment towards grading in a 10 point scale. DCS is the only department in CUSAT which offers two full time M.Tech programmes, having due approval of the AICTE. Candidates with valid GATE scores only are eligible for admission under the general category, while those with a minimum of three years experience in the computer and systems related professions can seek admission under the sponsored category.

Aspirants for the part time programme need to have a minimum of one year experience in Industry / University / Institution recognized by appropriate statutory bodies. 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 the institution 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 Web-server 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.

# AUXILIARY CENTRES

1. Inter University Centre for Development of Marine Bio-Technology
2. Centre for National Technical Manpower Information System
3. Centre for Excellence in Lasers and Opto-Electronic Sciences
4. Centre for Study of Social Exclusion and Inclusive policy
5. International Centre for Economic Policy and Analysis
6. Centre for Adult Continuing Education and Extension
7. Inter University Centre for Nano Materials & Devices
8. Centre for Integrated Management of Coastal Zones
9. Ocean Science Technology on Marine Benthos
10. Sophisticated Test and Instrumentation Centre
11. Centre for Information Resource Management
12. National Centre for Aquatic Animal Health
13. Inter University Centre for IPR Studies
14. Centre for Economic Policy Analysis
15. Centre for Alternate Energy Sources
16. Centre for Techno Strategic Studies
17. Centre for Science Communication
18. Centre for Advanced Materials
19. Centre for Population Studies
20. Centre for Science in Society
21. Centre for Monsoon Studies
22. Centre for Neuroscience
23. Women's Studies Centre

# RECOGNIZED RESEARCH INSTITUTIONS

1. Model Engineering College, Kochi – 21
2. National Institute of Oceanography, Kochi – 18
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 – 21
10. Vikram Sarabhai Space Centre, Thiruvananthapuram 685022
11. Marine Products Export Development Authority, Kochi – 16
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, VikramSarabhai Space Centre, Tvm – 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

# ACADEMIC & STUDENTS SERVICES

## 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 of 30 departments 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 theses 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 http://library.cusat.ac.in/. 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. CENTRE FOR SCIENCE IN SOCIETY (C-SIS):

Brief History of the Department

The Centre for Science in Society was established in 1991 under the UGC VIIIth 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. During 2004-2005, Govt of India entrusted C-SiS to co-ordinate 'Year of Scientific Awareness' activities in Kerala.

In 2009, Department of Science and Technology (DST), Govt. of India has sanctioned a project entitled "Developing skills and expertise among the participating youngsters to design and develop innovative science based toys, models and teaching aids". This project is ongoing.

Facilities available in C-SiS

1. Science Park- The outdoor facility where the children can play and learn many science principles, using play models.
2. Science Pavilions (Physics & Biology), Exhibition halls- Here the participants can interact with various gadgets and models arranged in laboratory. The working principles, will be explained to them. In the biology section, a number of specimen are exhibited.
3. "See & Believe" Labs- Laboratory experiment sessions; (Physics, Chemisty and Biology) in which children can do themselves basic experiments 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 8000 popular science books and science journals, 250 CD's, Scientific American's Amateur Scientist Projects of the last 78 years, National Geographic Magazine, Rare Books like Hortus Malabaricus, Lakhupanineeyam, Ganithayukthibasha etc, 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 Rain Water harvesting unit and a biogas plant which are fully operational are also set up in the Science Park.

## Ongoing Programmes for Children 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 programme for batches of students from one or two schools which reserve the facilities of C-SiS for a day. Details are as follows:-

| Module/Batch | | Time |
|---|---|---|
| 1. | IODAP* | 9.00 - 5.00 |
| 2. | M1-ODAP | 9.00 - 3.00 |
| 3. | M2-ODAP | 10.30 - 4.30 |

* Intensive One Day Attachment Programme in which the participating children get more time and facilities in the labs,Science Park and library.

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): (Midsummer 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 (in 2012-13), with special attitude for science.
- The Early Mid-Summer Programme (EM-STDP- M1) starts in first week of April and will continue till the end of the Month. A Late-Mid Summer Programme (LM-STDP) suitable for Schools with vacation in May / June starts in 1st week of May and ends in the last weeks of the month.
- The Mid-Summer Programme, (M-STDP) will start from the first week of April and will continue till the end of May in two monthly modules.

## 3. SOPHISTICATED TEST AND INSTRUMENTATION CENTRE:

STIC is a joint venture of the Kerala State Council for Science, Technology and Environment (KSCSTE) and Cochin University of Science and Technoloy (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 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 establishment 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.

STIC has set up the following facilities to carry out its activities.

a. Calibration laboratories (Electro-Technical, Thermal, Mechanical - all with NABL accreditation)
b. Testing laboratories (Electrical, Plastics, Mechanical)
c. Sophisticated Analytical Instrument Facility (SAIF), supported by DST housing about a dozen analytical instruments.
d. Instrumentation R & D Laboratory.

More details are available at www.sticindia.com

## 4. NATIONAL TECHNICAL MANPOWER INFORMATION SYSTEM (NTMIS):

The NTMIS was set up by the Ministry of Human Resource Development, Government of India in 1984 to provide up-to-date and meaningful manpower information on a continuing basis to enable the concerned authorities to anticipate areas of growth in the field of Science and Technology and consequently plan for technical manpower development on a scientific basis.

The NTMIS comprises a lead Centre in the Institute of Applied Manpower Research, New Delhi and 20 Nodal Centers located at different parts of the country. The Kerala Centre is functioning in Cochin University of Science and Technology from 1984 and is attached to School of Engineering. This scheme is funded by the All India Council for Technical Education (AICTE). The AICTE is strengthening NTMIS with adequate infrastructure making it an up-to-date and dynamic national data base. The NTMIS is becoming a unique, reliable and comprehensive information system.

The main objective of NTMIS is to estimate the long term and short term requirement of technical manpower in the country and their supply on the basis of the intake and outturn figures and to provide forecasts about the adequacy and shortage of manpower requirements in future years.

The data collection work of NTMIS mainly consists of (1) Graduate Follow up Survey - Collection of details of all candidates of Engineering, Management, Hotel Management & Catering Technology and Pharmacy at diploma, degree and PG level in a prescribed format.

(2) Institutional Survey – Collection of details of facilities from diploma / degree level technical institutions in the prescribed format and (3) Establishment survey – Data collection from different establishments regarding the details of engineering and technical manpower employed. This work is done by the Board of Apprenticeship Training (BOAT), Chennai. The annual reports and other publications of NTMIS provide vital data for technical education planners, students, parents, institutions, industries and public.

## 5. DEPARTMENT OF YOUTH WELFARE:

The Youth Welfare Department is a formal platform inspired with all talents and creativity to develop confidence, competence and compassion among students. The Department will act as a driving force for the student community to epitomize their academic excellence through doing and learning. The department can take care of various aspects of student welfare like students. counseling, training, NSS, NCC, government and non government sponsored youth projects, housing, financial aid & scholarships, health care, games & sports, cultural activities etc.

### Objectives

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 affiliated institutes.
5. To coordinate the University 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.

### Areas of Services

- Campus Clubs
- Student Advisory Systems / Counselling
- Accommodation
- University Union
- NSS / NCC
- Common Facilities
- Extension / outreach activities
- Cultural Activities and Recreation
- Youth Research
- Cultural Exchange
- Placements
- University Alumni Association

## 6. DEPARTMENT OF PHYSICAL EDUCATION:

The objective of the Department is to provide future generations with the opportunity to improve their physical and mental well-being through programs of athletics, physical education and recreation.

Major Activities

1. To conduct University level Sports Meet
2. To represent University in various national and international tournaments
3. To provide training and special camp for students in athletics, sports and games.

## 7. CENTRE FOR INFORMATION RESOURCE MANAGEMENT:

The Center for Information Resource Management (CIRM) was established in 1998 with the help of the MHO-INFOCUS project of the Netherlands Government. In 2006, CIRM has been established as an Independent Centre with 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 provide the 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 India that possess a state of the art, reliable and scaleable campus wide network which support the information needs of the user community. All the departments in the main campus are interlinked with a fiber optic backbone. Also the Lakeside Campus 15 Km away from the main campus is connected to the main network.

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 as well as the Lake side Campus has been upgraded to 14 Mbps during the year 2009-10. With this new connectivity the users in the main campus and lake side campus can experience much higher band width.

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 web server is hosted in house and internet facility is extended to all *CUSAT* community on 24x7 basis.

### 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.

### E-Learning

There is support for E-learning to the *CUSAT* community through both the proprietary system of Blackboard and the open source platform Moodle, both maintained by CIRM.

### Voice Communication system

The voice communication system is installed with 600 lines both in the main and lakeside campuses.

### Edusat

Edusat transmission is made available by CIRM providing the facility to view the programmes in the Computer center as well as the Library. The same can also be made available for any department on demand.

### Projects

Project guidance to students of different colleges is provided in the department in the field of Bio- informatics and Computer Science.

### Major Projects Undertaken

Online Counseling software for admissions to different courses of the University is developed by the department under the open source platform. The software for Finance & Administration wing is being developed.

## 8. EMPLOYMENT INFORMATION AND GUIDANCE BUREAU:

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.

The objective of the Bureau is to provide career guidance (both individual & in groups) and is to disseminate occupational and vocational information to the student community so as to enable them to qualify/seek the job they aspire. Conducting coaching classes of various competitive examinations like UGC-CSIR JRF/NET, LDC, Bank P O, Junior Telecom Officers, etc is another important activities of the Bureau. We planned to offer personality Development Courses. We provide career talks for schools and colleges regularly. We conduct Career Seminars on career opportunities at different levels. Services offered by the Bureau are absolutely free of cost except coaching classes. For coaching classes, a fee of Rs.3000/- is charged for a programme of about 15 days duration.

Bureau conducted 217 coaching classes so far. 6270 students attended the coaching class. In 2009-10, we have conducted 11 coaching classes for UGC-CSIR JRF/NET, Bank Clerical Examination, Junior Telecom Officer and Personality Development Programme. 335 students participated in these classes.

We have conducted the free coaching for UGC-CSIR JRF/NET to the Scheduled Caste/Scheduled Tribe/Minority Community students with the aid of UGC.

We have opened a help desk for study in U.K.Association of British Council also conducted a seminar on U.K.Education at the Bureau. The Bureau brings out Vocational Guidance Information Bulletin regularly.

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.

## 9. CENTRE FOR THE STUDY OF SOCIAL EXCLUSION AND INCLUSIVE POLICY:

The 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 Center examines social exclusion as both 'a Process and a Status'. Developing on this scheme of examining social exclusion, the Center 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 center 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 Center's research will be a) Tribal Communities in Kerala b) Resource Based Industries in Kerala c) Rural population in Kerala d) Workers in unorganised sectors in Kerala.

## 10. CENTRE FOR NEUROSCIENCE, DEPARTMENT OF BIOTECHNOLOGY:

The Centre for Neuroscience after establishment conducted four National Symposia in Neuroscience, three international conferences in Biotechnology and Neuroscience, Advances in Neuroscience and Neuroscience Updates, Nine World Brain Awareness programmes and workshops in Neurobiology sponsored by National brain research centre, Government of India, two DST sponsored workshops for young scientists on live cell imaging and gene expression studies using real time PCR, India, China, Korea, Japan NBNI workshop and ISN, APSN, IBRO and SNCI school on Neurodegenerative diseases and 3rd Asia Pacific School of Neuroscience, the first in India, sponsored by International Brain Research Organization in the past 12 years. The Hon. Director of the Centre, Dr. C. S. Paulose, has received Sir Shriram Memorial Oration award by National Academy of Medical Sciences, 2007-2008 and Kamala B.K Anand Oration Award by All India Institute of Medical Sciences, New Delhi, 2009, for his outstanding contributions in neuroscience. Thirty two students completed their Ph.D. and a total value of 5.06 crores worth sponsored projects by DBT, DST, ICMR, Government of India and KSCSTE, Government of Kerala has been awarded to the Centre for Neuroscience. Also, the Centre has to its credit 154 publications in Neuroscience area.

## 11. DIRECTORATE OF PUBLIC RELATIONS AND PUBLICATIONS:

The Directorate of Public Relations and Publications was established with the intention of strengthening the public relations, media and all publication activities of the University. The activities of the Directorate of Public Relations and Publications help the University to boost its image as a public organization committed to the cause of higher learning. The Directorate takes all efforts to provide up-to-date information to other academic institutions, research scholars, students and to the general public regarding higher education and related opportunities. It also assists various departments in organizing seminars, workshops and symposia by ensuring an excellent media coverage. Timely and effective briefing of the media by the Directorate of Public Relations provides a sustainable source of authentic information for all who are in pursuit of excellence in learning.

The staff of the Directorate takes all efforts in clearing the doubts of the general public regarding various academic programmes of CUSAT directly and over phone besides propagating the message of science and technology awareness/ scientific temper among the public, as science Communication is one of the thrust areas of the Directorate. Many of the dignitaries from India and abroad, who visit the University are welcomed by the Directorate of Public Relations and Publications.

The Directorate gives wide publicity through the media to the Common Admission Test conducted on a national level by the University for which an overwhelming response is usually received. It has been successful in bringing out the University Diary in time every year with

up-to-date information of the University and circulated to all concerned, besides the collection, compilation and publication of Annual Report of the University. More than 1000 press releases and relevant notifications and advertisements are issued annually through the Directorate to dailies in both Malayalam and English and to the Electronic Media. The Directorate facilitates the release of the interdisciplinary journal "Science Communicator" published by the Centre for Science Communication.

The University has entrusted all publication activities with the Directorate a couple of years ago and the mandate was accomplished by the Directorate by releasing around a dozen books in spite of the meager facilities available. Most books are edited by the Director, Public Relations and Publications. The Directorate has published around 75 books till date from its inception in 2005.

## 12. CENTRE FOR SCIENCE COMMUNICATION:

The Centre for Science Communication was launched in early 2007 with the specific aim of popularizing Science and Technology among the masses of the country. Its fundamental task is to create scientific temper and the "spirit of inquiry and reform' among the fellow citizens, as encoded in the Constitution of India under "Fundamental duties".

An independent academic entity of Cochin University with an interdisciplinary frame-work,the Centre for Science Communication has as its main focus the acquisition and propagation of scientific and technological research output and to translate the same to the layman's level with a view to making use of it for the overall development of the society. Special attention is being given to the development of Science Communication in the regional languages especially in Malayalam. Providing an academic framework to the area of Science Communication and Science Journalism is another area of interest.

It is worth mentioning that every year, the Centre, usually in collaboration with the Directorate of Public Relations and Publications, conducts the National workshop on Science Writing and Reporting with the support of the Kerala State Council for Science, Technology and Environment, (KSCSTE), Government of Kerala. The National Science Day is celebrated by the Centre by conducting Science Day Orations with popular science writers and scientists of national reputation as the Guest speakers. The Centre also holds competitions for school/college students on science-related subjects, conducts thematic workshops for journalists, round-table conferences and national workshops for media-students with the intention of popularization of science. Several projects with financial backing of Government organizations like KSCSTE have been successfully carried out by the Centre, among which the Handbook -cum-Scientific Terminology Guide for Journalists in Malayalamhas been a milestone in the history of scientific publishing and a boon for journalists reporting on science.

The Centre, together with the Directorate of Public Relations and Publications publishes the inter-disciplinary journal for Science Communication and Journalism named "Science Communicator". The Centre also works as a facilitator for the popularization of science and science communication. The Centre actively participates in and facilitates various science communication programmes throughout the country intensively to inculcate scientific awareness and scientific temper.

## 13. INTER UNIVERSITY CENTRE FOR IPR 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.

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.

# RECOGNIZED INSTITUTIONS

1. Indian Institute of Information Technology and Management-Kerala (IITM-K), 'Nila', Technopark, Thiruvananthapuram-695581
2. ER & DCI Institute of Technology, P.B.No 6520, Vellayambalam, Thiruvananthapuram 695 033
3. M.G. College of Engineering, Thrikkanamangalam, Thiruvallam, Thiruvananthapuram 695 027
4. Recognized Institutions under Southern Naval Command Head Quarters, Kochi (SNCHQ)
5. Conspi Academy of Management Studies, Plankalamukku, Thiruvananthapuram 695 109
6. Central Institute of Fisheries,Nautical & Engineering Training (CIFNET), Kochi 682 016
7. Sarabhai Institute of Science and Technology, Vellanada, Thiruvananthapuram 695 543
8. Co-operative Institute of Technology, Palayanada P.O., Vadakara, Kozhikode 673 530
9. T.K.M. Institute of Technology, Karuvelil, Musaliar Hills, Ezhukone, Kollam 691 505
10. College of Engineering, Kuriottumala, Piravanthoor, Pathanapuram, Kollam 689 696
11. CMC Nursing college, Campus of the Co-operative Medical College, Kochi 683 503
12. College of Engineering, GovT. ITI Campus, Attingal, Thiruvananthapuram 695 101
13. K.V.M. College of Engineering and Information Technology, Alleppey 688 583
14. Toc-H Institute of Science and Technology, Arakunnam.P.O., Kochi 682 313
15. College of Engineering, Thrikkaripur, Cheemeni.P.O., Kasargod 671 313
16. The Co-operative Medical College, H.M.T. Colony.P.O., Kochi 683 503
17. College of Engineering, Poonjar, Thekkekkara.P.O., Kottayam 686 583
18. College of Engineering, Pallipuram, Cherthala, Allapuzha 688 541
19. College of Engineering, Perumon, Perinad.P.O., Kollam 691 501
20. Model Engineering College, BMC P.O., Thrikkakkara, Kochi-21
21. College of Engineering, Kallooppara, Pathanamthitta 689 603
22. College of Engineering, Chengannoor, Alappuzha – 689 121
23. College of Engineering, Karunagapally, Kollam 690 518
24. College of Engineering, Adoor, Pathanamthitta 691 523
25. College of Engineering, Kidangoor, Kottayam 686 583
26. College of Engineering, Kottarakkara, Kollam 691 531
27. College of Engineering, Thalassery, Kannur 670 107
28. College of Engineering, Munnar, Idukki 685 612

# INTERNATIONAL RELATIONS AND ACADEMIC ADMISSIONS (IRAA)

| | | |
|---|---|---|
| DIRECTOR | Dr.DAVID PETER S | Tel:91-484-2577688<br>:91-484-2862289<br>Fax:91-484-2577688 |
| ASSISTANT REGISTRAR | SRI. UBAID RAHIMAN | Tel:91-484-2862290<br>:91-484-2577159 |
| ENQUIRY : 91-484-2862256 / 57 | | |

The Unit for International Relations and Academic Admissions (IRAA) leads *CUSAT*'s international outreach and academic admission activities. It 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 admissions to its academic programmes. 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 debut into new and varied areas of academic administration/management such as conduct of training programmes/competitive examinations etc.

# WHO CAN APPLY FOR CAT

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"). Students who have passed the qualifying examination (prescribed under 'Eligibility Criteria') shall be eligible to apply for the CAT. **All UGC specified Degrees, Diplomas etc. awarded by the UGC approved statutory Universities are recognized by the University for admission to courses. However, distance education courses of IGNOU will only be considered.** However, students who have passed all the courses except those prescribed for the final year / semester of the qualifying degree / diploma / certificate may be considered for admission, if they have appeared or are appearing for all the examinations in the courses of the final year / semester of the qualifying degree / diploma / certificate. (This provision is not applicable to the students appearing for compartmental / improvement examinations.) Such candidates have to produce, the original mark lists of all relevant and previous, (including the penultimate) examinations, the Transfer Certificate and a Certificate from the Head of the Institution last attended *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 Group Discussion / Interview / Counselling, whichever is held earlier, failing which they will not be permitted to attend the same as the case may be. If such students admitted to a programme of study (except B.Tech) in the University fail to attain the prescribed eligibility for admission before the date of registration for the regular first semester examination of the programme to which they were granted admission, 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 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.**

Admission to the B.Tech programmes of the University for those, who pass the Plus Two or equivalent qualifying examination in subsequent chances in the same year, shall be governed by the current rules prescribed in the matter by the Government of Kerala.

# ADMISSION PROCEDURE - ACADEMIC ADMISSIONS – 2013

## A. ACADEMIC PROGRAMMES OF THE UNIVERSITY

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

### A 1. Under Graduate Programmes

Admission to seats for the various under graduate programmes offered at the School of Engineering, Kunjali Marakkar School of Marine Engineering, Cochin University College of Engineering Kuttanad (including 10% NRI seats) and under graduate programmes offered in the Department of Instrumentation, School of Legal Studies, Ship Technology, Polymer Science and Rubber Technology and Centre of Excellence in Lasers & Opto Electronic Sciences (CELOS) will be based on the "Common Admission Test" (CAT) of *CUSAT*, open to all Indian nationals with test centres in all district headquarters in Kerala, and in selected centres outside Kerala.

### A 2. Post Graduate Programmes

Admission to seats for the various post graduate programmes except M.Phil and M.Tech programmes of the University will be based on the Common Admission Test (CAT) of *CUSAT*, open to all Indian nationals, with test centres in all district headquarters in Kerala.

### A 3. Lateral Entry to III semester B.Tech Programme

The University offers admission to the third semester of B.Tech. Programmes in B.Tech. in Civil Engg., Computer Science & Engg., Electrical & Electronics Engg., Electronics & Communication Engg., Information Technology, Instrumentation Technology, Mechanical Engg., Polymer Science & Engineering and Safety & Fire Engg. conducted by the Cochin University College of Engineering, Kuttanad; School of Engineering; Department of Instrumentation and Polymer Science & Rubber Technology, Thrikkakara campus through Lateral Entry Scheme.

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 2013.

Admissions will be based on the rank in the admission test, conducted for the purpose. Selected candidates will have to undergo remedial courses as decided by the University. Details regarding age limit, eligibility criteria etc. will be published in the Notification. Test Centre for Lateral Entry to B.Tech Programmes (LET) will be only at Ernakulam.

## B. ADMISSION TESTS.

### B 1.THE COMMON ADMISSION TEST (CAT)

**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.
Negative marks will be given for each wrong answer. In case of a tie, the existing University norms will be followed.

**The Structure of CAT**
The CAT comprises the following:

| Subject of Tests | 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 conducted by AICTE 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 |
| M.A. Applied Economics | 616 |
| Instrumentation | 617 |
| Food Science | 618 |
| Aptitude Test for 3 year LL.B (Regular)(Evening) | 619 |
| Aptitude Test for MIP.,Ph.D and LL.M.,Ph.D | 620 |

**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 AICTE C-MAT score 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**

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 and performance at Group Discussion and Interview as indicated below :

**M.B.A (F.T) / (P.T), M.B.A (I.B) & M.B.A. (T.T.)**

| | |
|---|---|
| AICTE C-MAT Score | 70% |
| Group Discussion | 15% |
| Interview | 15% |
| Total | 100 |

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:

**M.Sc. Industrial Fisheries**

| | |
|---|---|
| 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, $\frac{n-p}{n} \times 100$ 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.

Candidates, appearing for Test 101, 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.

### B.1.i) Test for First Degree programmes in Engg. & Technology

The test(Test 101) 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, Electrical & 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

### B.1.ii) Test for Lateral Entry to III Semester B.Tech Programme

The Lateral Entry Test (LET) (Test 102) 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.

### B.1.iii) Aptitude Test for B.B.A.,LL.B. (Hons.) / B. Com.,LL.B.(Hons.)

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

### B.1.iv) Test for LL.M.

The Test for LL.M. (Test 610) comprises two parts:

Part I – Proficiency in English, Analytical & other abilities and General Knowledge
Part II –Proficiency in the related subjects.

### B.1.v) Test for M.A. in Hindi

The Test for M.A. in Hindi (Test 301) comprises 150 objective type questions at a level answerable by candidates with Hindi as a second language at degree level. It is open to all candidates, subject to their satisfying the respective eligibility criteria prescribed.

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

### B.1.vi) 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 2013 batch will be based on score in the aptitude test conducted by AICTE (C-MAT). <u>However, they must also submit their applications through online to the University.</u>

### B.1.vii) Aptitude Test for MCA

The aptitude Test for MCA (Test 501) 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.

**B.1.viii) 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 test the proficiency of the applicant at the Graduate level in the subject of his / her choice. 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. The table, Selection of Test Subjects - CAT for PG Programmes, given at the last pages of this book, is a quick reference chart of the subjects in which the CAT for PG programmes is conducted and the programmes for which admission can be sought by taking the Test in a particular subject. 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.

**B.1.ix)Test for M.A. Applied Economics (Test 616)**

The Test for M.A. Applied Economics (Test 616) comprises 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.)

**B.1.x) Test in Engineering Science (Test 607)**

This is for testing the aptitude of an applicant for admission to the interdisciplinary programme M.Sc. Environmental Technology (Stream 1).

**B.1.xi) Test in Life Science (Test 611)**

This is for testing the subject knowledge as well as aptitude of an applicant for admission to the interdisciplinary programmes of M.Sc. Biotechnology and M.Sc. Environmental Technology (Stream II). 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.

### B.1.xii) 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. There will be no negative marks.

Applicants for the above irrespective of whether or not they are applicants for any other programmes, have to necessarily take the Test 619.

### B.1.xiii) 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 (Test 620) 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 capability (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.

## B 2. DEPARTMENT ADMISSION TEST (DAT)

Applicants for all Certificate / Diploma programmes, MA Translation (German/Russian), All M. Tech. / M. Phil. and Ph. D programmes will be required to appear for the Departmental Admission Test conducted in the respective Department / School of *CUSAT* on dates to be announced later and to be intimated individually to the applicants.

Procedures specific to M. Tech., M.Phil and Ph. D programmes are outlined below.

### B.2.(a). M. Tech. Programmes

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 number of applicants with valid GATE Score are not available. Candidates, including sponsored ones, not possessing a valid GATE Score and seeking admission to M.Tech.

programmes where a valid GATE Score is necessary, will have to appear for a Departmental Admission Test (DAT) to be conducted in Ernakulam by the Department/ School concerned, unless otherwise specified.

Depending upon the combination of programmes an applicant chooses, he / she may have to appear for the CAT (and / or Group Discussion/ Interview) and the DAT. Candidates are advised to read carefully the rules in this regard and appear for such examinations that would make them eligible for the programmes they prefer to get admitted to. 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.

**Exception: 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: www.jnu.ac.in. For details on (NCAAH) please visit www.ncaah.org**

### B.2.(b). 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. Candidates who have passed the Master's degree examination in the Distance/Continuing Education mode are eligible for admission only if their degree is awarded by Indira Gandhi National Open University (IGNOU).

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.

### B.2.(c). Ph. D Programmes

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

i. 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 upto 10% marks for admission provided that he/she has a pass in the qualifying examination.**

ii. Candidates seeking registration shall have passed the Departmental Admission Test and ranked as per the norms laid down in the regulation.

iii. 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 (ii) above.

iv. 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 (ii) above.

## Admission

1) The Departmental Admission Test (DAT) shall have two parts.
   a) Written test (b) Interview
2) Candidates who have scored at least 50% marks in the written examination alone will be eligible to be ranked for admission. For Ph.D Programmes Candidates belonging to SC/ST communities are entitled to a concession of 5% marks in the written examination of the DAT.

3) The weightage for written test and interview for ranking will be as follows.

| | |
|---|---|
| a. Marks obtained in the Master's Degree Level | 30% |
| b. Marks obtained in the written test | 50% |
| c. Marks obtained in the interview | 20% |
| Total | 100 |

## Interview for Admission

All candidates seeking admission to the PhD Programme who have passed the admission test with a minimum of 50% score, or who are exempted from the admission test under clause 2(c) (iii) above, shall be required to present themselves for an interview with the Research Committee or with a Sub Committee appointed by it. It 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 new Ph.D regulations please visit website (cusat.ac.in) > Current Student > academic regulations.

## C. RESERVATIONS

Reservations shall be as per the prevailing rules of the Government of Kerala and implemented by the University.

### C.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 that 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.

The percentage-wise reservation in force is given below:

### C.1.a) Non-Professional Programmes

| | | |
|---|---|---|
| SC/ST | | 20% |
| SEBC (Socially and Educationally Backward Communities) | | 20% |
| Ezhava / Thiyya / Billava (ETB) | 8% | |
| Muslim (MSM) | 7% | |
| LCC / SIUC | 1% | |
| Other Backward Christian (OBX) | 1% | |
| Other Backward Hindu (OBH) | 3% | |
| Reservation for Economically Backward Class among Forward Caste (BGN) and this is treated as supernumerary | 7.5% | |
| Total | | 40% |

### C.1.b) Professional Programmes

| | |
|---|---|
| SC | 8% |
| ST | 2% |
| <u>SEBC (Socially and Educationally Backward Communities)</u> | |
| Ezhava /Thiyya / Billava (ETB) | 9% |
| Muslim (MSM) | 8% |
| Other Backward Hindus (OBH) | 5% |
| Latin Catholic other than Anglo-Indians(LCC) | 2% |
| Other Backward Xi'an | 1% |
| Kudumbi | 1% |
| Total | 36% |

"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 payment 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 / Counseling / 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.

Candidates belonging to states other than Kerala are not eligible for communal reservation.

## C.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.

### C.2.I. 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 counselling / 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.

### C.2.II. 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).

### C.2.III. Experienced Candidates

#### (a) M.B.A. (Part-time)

Fifty per cent of the 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.Phil programmes

Fifty per cent of the seats of the M.Phil. programmes are reserved for University / College teachers having not less than three years of teaching experience. Teacher candidates coming under FIP of the UGC or QIP of AICTE will be given preference.

### C.2.IV. 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 two 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.

**(d). M.Sc. (Industrial Fisheries)**

Five seats of the M.Sc. (Industrial Fisheries) programme are reserved for candidates sponsored by the Government of Kerala, of which two are for officers of the Department of Fisheries and three are for candidates belonging to the fishermen community. **Candidates belonging to the fishermen community have to route a copy of their confirmation page of online registration through the Director, Department of Fisheries, Vikas Bhavan, Thiruvananthapuram.**

**(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.

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) (No admission in 2013)**

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.

**(l). 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. (Opto 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: www.jnu.ac.in or the concerned department website www.ncaah.org

## C.2.V. Army Quota

**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.

## C.2.VI. Sports Quota

Reservation under Sports Quota is available for the following programmes :

i) "Payment Category" of the B.Tech. Programmes offered by the SOE, CUCEK and the Kunjali Marakkar School of Marine Engineering.

ii) B.Tech. Naval Architecture & Ship Building and Instrumentation Technology (Supernumerary Seats)

iii) P.G. programmes where the sanctioned intake is 30 or more

iv) M.C.A "Cost-sharing" programmes at Thrikkakkara and Pulincunnoo campus

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.(25th May 2013)

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 admission C-MAT score 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.

### C.2.VII. Anglo – Indian / Jew

In accordance with the relevant rules of the Government of Kerala, a combined quota of one seat as supernumerary in payment category is available for candidates belonging to Jewish and Anglo-Indian communities for admission to B.Tech Engineering Programmes. The seat will be rotated between Jew and Anglo-Indian communities in alternate years. In 2013 the seat is reserved for Jew community in Computer Science and Engineering, School of Engineering.

### C.2.VIII. 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.) and in the payment 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.

### C.2.IX. 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 2013, this seat is reserved for admission to M.B.A.(Full Time) Programme offered at School of Management Studies, CUSAT.

### C.2.X. Naval Candidates

Twelve seats for B. Tech (Naval Architecture and Ship Building) are reserved for Naval Candidates sponsored by Indian Navy.

### C.2.XI. Foreign Students

Seats reserved for foreign students are indicated below:

| Department / Programme | Number of Seats |
|---|---|
| DEPARTMENT OF HINDI | |
| a. M.A. Hindi<br>b. M.Phil<br>c. P.G. Diploma in Translation and Functional Hindi | 3 seats<br>1 seat<br>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. |

| Department / Programme | Number of Seats |
|---|---|
| b. M.Tech Ocean Technology | 1 seat for the first 4 years and 2 seats in the 5th year |
| DEPARTMENT OF POLYMER SCIENCE AND RUBBER TECHNOLOGY | |
| a. B.Tech<br>b. M.Tech (Polymer Technology) | 2 seats<br>1 seat |
| DEPARTMENT OF STATISTICS | |
| a. M.Sc Statistics<br>b. M.Tech (Engineering Statistics)– No admission in 2013 | 2 seats<br>1 seat |
| DEPARTMENT OF APPLIED CHEMISTRY | |
| a. M.Sc (Applied Chemistry)<br>b. M.Tech (Industrial Catalysis)<br>c. M.Phil | 1 seat<br>1 seat<br>1 seat |
| DEPARTMENT OF ATMOSPHERIC SCIENCES | |
| a. M.Sc Meteorology<br>b. M.Tech (Atmospheric Sciences) | 1 seat<br>1 seat |
| DEPARTMENT OF APPLIED ECONOMICS | |
| a. M.A. Applied Economics | 5 seats |
| DEPARTMENT OF MATHEMATICS | |
| a. M.Sc.<br>b. M.Phil. (Mathematics) | 5 seats<br>2 seats |
| DEPARTMENT OF COMPUTER APPLICATIONS | |
| a. M.C.A. | 2 seats |
| SCHOOL OF MANAGEMENT STUDIES | |
| a. M.B.A. (Full Time) | 5 seats |

| Department / Programme | Number of Seats |
|---|---|
| SCHOOL OF INDUSTRIAL FISHERIES | |
| a. M.Sc. | 3 seats |
| DEPARTMENT OF SHIP TECHNOLOGY | |
| a. B.Tech | 2 seats |
| DEPARTMENT OF COMPUTER SCIENCE | |
| a. M.Tech Computer and Information Science<br>b. M.Tech Software Engineering | 2 seats<br>2 seats |
| SCHOOL OF ENGINEERING | |
| a. B.Tech in Civil Engineering<br>b. B.Tech in Computer Science<br>c. B.Tech in Electronics and Communication<br>d. B.Tech in Information Technology<br>e. B.Tech in Mechanical Engineering<br>f. B.Tech in Safety and Fire Engineering | 2 seats<br>2 seats<br>2 seats<br>2 seats<br>2 seats<br>5 seats |

**Foreign Students are exempted from the Common Admission Test.**

### C.2.XII. 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 posses 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 Marrakar School of Marine Engineering. Candidates applying under this quota are required to remit Rs.5000/- in addition to the normal application fee of Rs.950/- as prescribed in the Notification. All applicants under the N.R.I. quota will have to qualify in the Common Admission Test conducted by *CUSAT* and fulfill all eligibility criteria.

### C.2.XIII. 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. This year reservation will be in M.Sc Environmental Technology (Stream I – Environmental Engineering) offered in the School of Environmental Studies, CUSAT. The candidates will have to qualify in the CAT and fulfill all eligibility criteria.

### C.2.XIV. Fishermen Community

The students hailing from the families of all registered fishermen pursuing their studies in *CUSAT* are eligible for the benefit of fees and other educational concessions as applicable to the students of SC/ST/OEC communities, through Fisheries Department, except availability of the seat, subject to satisfactory verification (at the time of Group Discussion and/or Interview/Counselling / Admission, whichever is held earlier) of certificates issued by competent authorities clearly indicating that the candidate is a member of Fishermen Community.

### C.2.XV. CUSAT Staff

Three seats are reserved for the employees of CUSAT for 03 year LL.B.(Evening) course on supernumerary basis.

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.

## D. 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.

## E. 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.

## F. 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. 4,50,000*/-

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

## G. HOSTEL FACILITIES

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

**Main Campus**

| | |
|---|---|
| Sanathana, Siberia, Sarovar and Post metric hostel for boys | Men's Hostels |
| Aiswarya, Athulya , Anaswara and Post metric hostel for girls | Ladies' Hostels |
| OBC Post Metric Hostel for Girls | Ladies' Hostel |

**Lakeside Campus**

| | |
|---|---|
| CUMS | Men's Hostel |

Application forms for admission to University Hostels are available online at the University website http://www.cusat.ac.in/hostel/index.php. 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.

## H. 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:

i. To read, become familiar with and adhere to this Code and any amendment brought to this Code.
ii. To foster and maintain a vibrant academic, intellectual, cultural and social atmosphere which is consistent with the objectives of the University.
iii. To report any violation of this Code to the functionaries under this Code.
iv. To access all educational opportunities and benefits available at the University and make good use of them to prosper academically and develop scientific temper.
v. To respect the laws of the country, human rights and to conduct in a responsible and dignified manner at all times.
vi. 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.

## I. PARENT TEACHER ASSOCIATION

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.

## J. HOW TO REACH *CUSAT*

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 (red - coloured) City Buses bound for Ernakulam and beyond will take you in 15 minutes to South 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 Bus Stop' at Cochin University Junction. 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 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 Willingdon Island, which faces the City (Lakeside) Campus and is just across the adjoining back waters.

## K. INTERNATIONAL (FOREIGN) STUDENTS

International students are exempted from the requirement of admission tests for the academic programmes of the University. They can apply either on self-financing 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 Programme Director<br>Indian Council for Cultural Relations<br>Azad Bhavan, Indraprastha Estate,<br>New Delhi - 110 002<br>Tel. : 91-011-23379309 / 23379310<br>Fax : 91-011-23378639 / 23378647 / 23370732 / 23378783<br>E-mail : iccr@giasdl01.vsnl.net.in<br>Website:http://www.iccrindia.org | The Regional Officer<br>Indian Council for Cultural Relations<br>TC 16/131, Rohini<br>Easwara Vilasam Road,<br>Thiruvananthapuram - 695014.<br>Tel. :0471 - 2326712 /2320825<br>Fax :0471 - 2332479<br>E-mail :iccrtvm@sancharnet.in<br>Website:http://www.iccrindia.org |

The international students are required to submit the application through 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 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 through the Embassy of India in the respective country.**

- Curriculum vitae.
- Copies of mark lists / transcripts of all examinations undergone.
- Two copies of recent passport size photographs.
- Character certificate from the Head of the 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. But 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 academic year of CUSAT commences in July.**

# ELIGIBILITY CRITERIA

| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/ Non-Professional | Intake |
|---|---|---|---|---|---|
| Cochin University College of Engineering, Kuttanad | | Faculty of Engineering | | | Ph:0477-2707500 |
| B. Tech. Computer Sci. &Engg. | Pass in the 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. | Full-Time (Self-financing) | Professional | 60 |
| B. Tech. Electrical and Electronics Engg. | | | | | 60 |
| B. Tech. Electronics &Comm. Engg. | | | | | 60 |
| B.Tech. Information Tech | | | | | 60 |
| B.Tech. Mechanical Engg. | | | | | 60 |
| B.Tech. Civil Engg. | | | | | 60 |

| School of Engineering, Trikkakara | | Faculty of Engineering | | | Ph:0484-2556187 |
|---|---|---|---|---|---|
| B. Tech. Civil Engg. | Pass in the 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. | Full-Time (Self-financing) | Professional | 90 |
| B. Tech. Computer Sci. & Engg. | | | | | 90 |
| B. Tech. Electrical & Electronics Engg. | | | | | 60 |
| B. Tech. Electronics & Communication Engg. | | | | | 90 |
| B. Tech. Information Tech. | | | | | 90 |
| B. Tech. Mechanical Engg | | | | | 90 |
| B. Tech. Safety & Fire Engg. | | | | | 60 |

**Note:**

For all Under Graduate Programmes (except Marine Engineering) the minimum eligibility for SEBC candidates eligible 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 free seats, 40% payment and 10% are NRI payment seats. The free 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. 4,50,000/- are not eligible for free/payment seats under the respective community quota. Seats reserved under sports quota will come under payment seats 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 lakhs.

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

For all regular PG programmes including subsidised 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.

For P.G. programmes under self financing 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.

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 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.

| **Kunjali Marakkar School of Marine Engineering** | **Faculty of Engineering** | | | | **Ph:0484-2576606** |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/ 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. Should have passed English at 10th or 12th Standards with 50% marks. **(applicable to SC/ST candidates also)**<br>Vocational/Diploma students are not eligible to apply.<br>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 Sem. | Full-time (Self-financing) | Professional | 40 |

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 done 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. As of now, 100% placement service is rendered.

**For B.Tech. Marine Engineering programme a 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.**

| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
|---|---|---|---|---|---|
| M. Tech Civil Engineering | **a)** Should have passed B.Tech/B.Sc Engg. Degree Examination in the respective branch with a minimum of 50% marks.<br>**b)** Candidates who have passed sections A and B examinations in respective/allied branches conducted by Institution of Engineer's (India), Institution of Electronics and Telecommunication Engineers and Indian Institute of Chemical Engineers are also eligible for admission if they have an Engineering Diploma or a basic degree in Science.<br>**c)** Should have a minimum of 2 years experience in the concerned field after acquiring qualifying degree. This may be relaxed if sufficient number of candidates with the minimum prescribed experience is not available.<br>**d)** Open seats will be allotted on the basis of the score in Departmental Admission Test, marks obtained in the qualifying examination and experience. | 6 Sem. | Part-time (Cost sharing) | Professional | 15 |
| M. Tech Chemical Engineering | | 6 Sem. | Part-time (Cost Sharing) | Professional | 15 |
| M.Tech Electrical Engineering with specialization in Power Electronics | | 6 Sem. | Part-time (Cost Sharing) | Professional | 13 |
| M. Tech Mechanical Engineering | | 6 Sem. | Part-time (Cost Sharing) | Professional | 15 |
| M. Tech. Civil Engineering with specialization in Geotechnical Engineering | a) Should have passed B.E/B.Tech Degree Examination in the respective /allied branch or equivalent Degree with a minimum of 60% marks or CGPA 6.5 in 10 point scale.<br>b) A valid GATE score in Civil Engineering.<br>In the absence of GATE qualified candidates non GATE candidates can be admitted on the basis of a Departmental Admission Test (DAT) | 4 sem | Full-time (Self financing) | Professional | 18 |
| M. Tech Mechanical Engineering with specialization in Thermal Engineering | a) Should have passed B.E/B.Tech Degree Examination in the respective/allied branch or equivalent degree with a minimum of 60% marks or CGPA 6.5 in 10 point scale.<br>b) A valid GATE score in Mechanical Engineering.<br>In the absence of GATE qualified candidates non GATE candidates can be admitted on the basis of a Departmental Admission Test (DAT) | 4 sem | Full-time (Self financing) | Professional | 18 |
| Ph. D | | | | | |

**School of Environmental Studies** **Faculty of Environmental Studies** **Ph:0484-2577311**

| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
|---|---|---|---|---|---|
| M. Sc. Environmental Tech. | | | | | |
| Stream 1. Env. Engg. | Graduate in Chemistry with Physics and Mathematics as subsidiaries or graduate in Engg. (Civil/Public Health /Environmental or Chemical) with 55% marks. | 4 Sem. | Regular-Day | Professional | 6 |
| Stream 2. Env. Biotech | Graduate in Life Sciences/ Environmental Sciences/ Zoology/ Botany/ Microbiology with 55% marks. | 4 Sem. | Regular-Day | Professional | 6 |
| M.Tech Marine Biotechnology (offered at National Centre for Aquatic Animal Health) (sponsored by Department of Bio-Technology, Government of India) | B.Tech/BE in chemical Engg., Bio-Chemical Engg., Industrial Biotechnology, Leather Biotechnology, Chemistry/Biotechnology, Biomedical Engg., B.Pharma, Chemical Technology.<br>**Or**<br>MSc. in Biotechnology, Marine Biotechnology, Life Sciences, Botany/Zoology/Biochemistry, Micro biology/Genetics, Biophysics,Microbial Genetics and Bioinformatics, Marine Biology/Aquatic Biology and Fisheries/Environmental Biotechnology/Mari culture with 60% marks<br>**Or**<br>equivalent CGPA from any recognized Indian or foreign University<br>(The selected candidates will be receiving a monthly stipend of Rs.8000/-) | 4 Sem | Regular-Day | 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: www.jnu.ac.in. For details on (NCAAH) please visit www.ncaah.org**

Ph. D

| Department of English and Foreign Languages | Faculty of Humanities | | | | Ph:0484-2575180 |
|---|---|---|---|---|---|
| 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 |
| Ph. D. | | | | | |

| Department of Hindi | Faculty of Humanities | | | | Ph:0484-2575954 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. A. Hindi Language and Literature | B.A./B.Sc.degree with Hindi as a subject of study with at least 45% marks in Hindi. | 4 Sem. | Regular-Day | Non-Professional | 28 |
| M. Phil. Hindi | Master's Degree in Hindi with at least 55% marks. | 2 Sem. | Regular-Day | Non-Professional | 10 |
| P. G. Diploma in Translation and Functional Hindi | Bachelor's degree with Hindi as one of the subjects. | 1 year | Part-time | Non-Professional | 28 |
| Ph. D. | | | | | |

| School of Legal Studies | Faculty of Law | | | | Ph:0484-2575465 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Prof./Non-Prof | Intake |
| 5 Year B.B.A. LL. B. (Hons.)* | i) Pass in Plus 2 examination with 60% marks in Science / Commerce group or 55% marks in Arts / Humanities.<br>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. | 10 Sem. | Regular-Day (Cost-sharing) | Professional | 30 |
| 5 Year B.Com. LL.B. (Hons.)* | (i) Pass in Plus 2 examination with 60% marks in Science group or 55% marks in Commerce / Arts / Humanities.<br>(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. | 10 Sem. | Regular-Day (Cost-Sharing) | Professional | 30 |
| 3 Year LL.B (regular)# | Pass in Degree with not less than 40% marks in the aggregate (35% for SC/ST candidates) | 6 Sem. | Regular (Cost-Sharing) | Professional | 40 |
| LL. M. | Bachelor's degree in Law with at least 45% marks. | 4 Sem. | Regular-Day | Professional | 36 |
| *(For students who had 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 declared ineligible for admission to this course) | | | | | |
| #(evening) | | | | | |
| Ph.D | | | | | |

| Inter University Centre for Intellectual Property Rights Studies | | Faculty of Law | | Ph:0484-2575465 | |
|---|---|---|---|---|---|
| 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 Syndicate as equivalent thereto and to have obtained rank in CAT conducted by the University.<br>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 Syndicate as equivalent thereto and to have obtained rank in CAT conducted by the University.<br>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 | Faculty of Marine Sciences | | | | Ph:0484-2354711 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Prof./NonProf. | 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).<br>** Reserved for fishermen community<br>*Sponsored by Kerala Fisheries Department | 4 Sem. | Regular-Day | Professional | 14+ 3**+ 2* |
| 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-Day | Non Professional | 10 |
| M .F.Sc Seafood Safety and Trade | Bachelor's degree in Fisheries / Food Technology / Food Science / Food 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 |
| Ph.D. | | | | | |

| Department of Atmospheric Sciences | Faculty of Marine Sciences | | | | Ph:0484-2353662 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | 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-Day | Professional | 12 |
| M. Tech (Atmospheric Science) | 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.<br>ii) A valid GATE score or a pass in the Joint UGC - CSIR Test (NET) for JRF | 4 Sem. | Regular-Day | Professional | 12* |
| Ph. D. | | | | | *2 sponsored students |

| Department of Chemical Oceanography | Faculty of Marine Sciences | | | | Ph:0484-2382131 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Sc. Hydrochemistry | 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/ Petrochemicals/ 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-Day | Professional | 12 |
| M. Phil. Marine Chemistry | Master's Degree in Hydrochemistry, Chemistry or any other branch of Chemistry with a minimum of 55% marks in aggregate or equivalent grade.. | 2 Sem. | Regular-Day | Non-Professional | 10 |
| Ph. D. | | | | | |

| Department of Marine Biology, Microbiology & Biochemistry | Faculty of Marine Sciences | | | | Ph:0484-2368120 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Sc. Marine Biology | B.Sc. degree with 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 atleast 55% marks in the optional subjects. | 4 Sem. | Regular-Day | Professional | 19+1* |
| M. Phil. Life Sciences | Master's degree in any branch of Life Sciences with 60% marks. | 2 Sem. | Regular-Day | Non-Professional | 6 |
| Ph. D. | | | | | *reserved for physically challenged |

| Department of Marine Geology and Geophysics | Faculty of Marine Sciences | | | | Ph:0484-2366478 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Sc. Marine Geology | B.Sc degree in Geology/Mathematics/Physics/Chemistry with 55% aggregate marks in optionals. | 4 Sem. | Regular-Day | Professional | 10 |
| M. Sc. Marine Geophysics | B.Sc degree with at least 55% aggregate marks with<br>**(a)** Geology main with Mathematics and Physics or Chemistry as subsidiaries;<br>**(b)** Physics main with Mathematics and Geology or Chemistry or Electronics as subsidiaries;<br>**(c)** Mathematics main with Physics and Geology or Chemistry as subsidiaries. | 4 Sem. | Regular-Day | Professional | 10 |
| Ph. D. | | | | | |

| Department of Physical Oceanography | Faculty of Marine Sciences | | | | Ph:0484-2363950 |
|---|---|---|---|---|---|
| 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-Day | Professional | 15 |
| M. Tech. Ocean Technology | (i) M.Sc. degree in Oceanography/ Physics / Marine Geology / Meteorology / Marine Geophysics / Environmental Sciences or M.Sc. (Tech) Degree in Marine Geophysics<br>**or**<br>B.Tech<br>**or**<br>equivalent degree/AMIE in Civil Engineering/ Environmental Sciences with 60% marks from any recognized University or Institution.<br>(ii) A valid GATE score with any of the subjects mentioned above as the second paper | 4 Sem. | Regular-Day | Professional | 12 |
| Ph. D. | | | | | |

| Department of Applied Chemistry | Faculty of Science | | | | Ph:0484-2575804 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Sc. Applied Chemistry | B.Sc. degree with Chemistry/Polymer Chemistry/ Environmental Chemistry/Industrial Chemistry/ Petrochemicals (main) with Mathematics as one of the subsidiary subjects with atleast 55% marks in the main subject. | 4 Sem. | Regular-Day | 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 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-Day | 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-Day | Professional | 10+ 5(sponsored) |
| Ph. D. as per 2010 regulations | | | | | |

| Department of Biotechnology | Faculty of Science | | | | Ph:0484-2576267 |
|---|---|---|---|---|---|
| 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-Day | Professional | 12 |
| Ph. D. | | | | | |

| Department of Mathematics | Faculty of Science | | | | Ph:0484-2577518 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Sc. Mathema-tics | B.Sc. degree with Mathematics main with at least 55% marks for optional subjects taken together. | 4 Sem. | Regular-Day | Non-Professional | 30 |
| M.Phil (Mathematics) | M.Sc degree in Mathematics with at least 55% Marks, or equivalent grade. | 2 Sem. | Regular-Day | Non-Professional | 10 |
| Ph. D. | | | | | |

| Department of Physics | Faculty of Science | | | | Ph:0484-2577404 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Sc. Physics | B.Sc. degree with Physics main and Mathematics subsidiary with at least 55% marks in Physics. | 4 Sem. | Regular-Day | Non-Professional | 25 |
| M. Phil. Physics | M.Sc. degree in Physics with at least 55% marks. | 2 Sem. | Regular-Day | Non-Professional | 8 |
| Ph. D. | | | | | |

| Department of Statistics | Faculty of Science | | | | Ph:0484-2575893 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | 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-Day | Non-Professional | 20 |
| M.Tech. Engineering Statistics (no admission in 2013) | 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-Day | Professional | 8 |
| Ph. D. | | | | | |

| Department of Applied Economics | Faculty of Social Sciences | | | | Ph:0484-2576030 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | 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-Day | Non-Professional | 10 |
| 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 subject or B.Sc Mathematics or Statistics with 65% marks. Pass for SC / ST candidates. | 4 Sem | Regular-Day | Non-Professional | 15 |
| Ph. D. | | | | | |

| School of Management Studies | Faculty of Social Sciences | | | | Ph:0484-2575310 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. B. A. (Full-time) | Bachelor's degree in any subject with 50% marks in aggregate. | 4 Sem. | Regular-Day | Professional | 60 |
| M. B. A. (Part-time) | (i) Bachelors degree in any subject with 50% marks in aggregate.<br>(ii) 50% of the seats are reserved for candidates having 3 years of supervisory/executive experience after taking the degree.<br>(iii) In the absence of such candidates as mentioned in (ii) vacancies will be offered to any other candidates satisfying eligibility as per (i). | 6 Sem. | Part-time (Evening) | Professional | 30 |
| M.B.A (International Business) | Bachelor's degree in any discipline recognized by the University with 50% marks in aggregate | 4 Sem. | Regular-Day | 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-day | Non- Professional | 6 |
| Ph. D. | | | | | |

| Centre of Excellence in Lasers and Opto-electronic Sciences | Faculty of Technology | | | Ph:0484-2577540 | |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| 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 |

| Cochin University College of Engineering, Kuttanad | Faculty of Technology | | | Ph:0477-2707500 | |
|---|---|---|---|---|---|
| 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 languages and humanities. | 6 Sem. | Full-time (Cost-sharing) | Professional | 30 |
| | | | Full-time (Regular) | Professional | 30 |

| Department of Electronics | Faculty of Technology | | | | Ph:0484-2576418 |
|---|---|---|---|---|---|
| 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 Technology) | First Class B.Sc. degree (with not less than 60% aggregate marks) in Electronics or Physics. | 4 Sem. | Regular-Day<br>Sponsored | Professional | 25<br>05 |
| 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.<br>ii) A valid GATE score in Electronics/Electronics and Communication Engg.<br>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.<br>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-Day<br>Sponsored | Professional | 20<br>05 |
| Ph. D. | | | | | |

| Department of Instrumentation | Faculty of Technology | | | | Ph:0484-2575008 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| B. Tech. Course in Instrumentation Technology | 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.<br>The candidate shall have secured a minimum of 60% marks in 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 Day | Professional | 28 |
| M.Sc Instrumentation | B.Sc Degree in Instrumentation / Physics / Electronics with 60% marks from any recognized University | 4 Sem. | Regular Day | Professional | 15 |
| Ph. D. | | | | | |

| Department of Polymer Science & Rubber Technology | | Faculty of Technology | | Ph:0484-2575723 | |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| B. Tech. in Polymer Science & Engineering | 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-Day | Professional | 20 |
| M. Tech. Polymer Technology | 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.<br>ii) A valid GATE score | 4 Sem. | Regular-Day | 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-Day | Professional | 20 |
| * offered at Centre for Bio-Polymer Science & Technology, A Unit of CIPET, Eloor, Kochi 683 501 | | | | | |
| Ph. D. | | | | | |

| Department of Ship Technology | | Faculty of Technology | | | Ph:0484-2575714 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| B. Tech. Naval Arch. & 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 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 Day | Professional | 40 (12 seats reserved for Naval candidates) |
| M. Tech. Computer Aided Structural Analysis & Design | 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.<br>ii) A valid GATE score. | 4 Sem. | Cost - sharing | Professional | 18 |
| Ph.D. | | | | | |

| International School of Photonics | Faculty of Technology | | | Ph:0484-2575848 | |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Tech. Opto-Electronics and Laser Technology | i) Master's degree in Physics / Electronics/Photonics or B.Tech /B.E Degree in Electronics and Communication Engineering / Electronics Engineering / Electrical Engineering / Electrical & Electronics with a first class (60%) from any recognized University or institution<br>ii) A valid GATE score (in the concerned branch of study)<br>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. | 2 years. | Regular-Day | Professional | 10 |
| Ph. D. | | | | | |

| Department of Computer Applications | Faculty of Technology | | | Ph:0484-2576253 | |
|---|---|---|---|---|---|
| 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 languages and humanities. | 6 Sem. | Regular | Professional | 30 |
| | | 6 Sem. | Cost-sharing | Professional | 30 |
| Ph. D. | | | | | |

| Department of Computer Science | Faculty of Technology | | | | Ph:0484-2577126 |
|---|---|---|---|---|---|
| Programme Name | Eligibility Criteria for Admission | Duration | Nature of Programme | Professional/Non-Professional | Intake |
| M. Tech. Computer and Information Science | i) B.Tech or equivalent degree or AMIE/AMIETE in Computer Science/Information Technology or M.Sc. in Computer Software/Operational Research and Computer Applications or M.C.A. with a first class (60%) marks from any recognized University or Institution.<br><br>ii) A valid GATE score. | 4 Sem. | Regular-Day | Professional | 14 |
| M. Tech. Software Engg. | | 4 Sem. | Regular-Day | Professional | 13 |
| M.Tech Computer Science with Specialization in Embedded Systems (Part-Time) | i) First Class B.Tech degree in Computer Science & Engineering / Electronics Engg. / Information Technology / Electrical Engg. or equivalent branches or M.C.A with 60% marks or equivalent CGPA<br><br>ii) Minimum of 1 year experience in Industry / University / Institution recognized by appropriate statutory bodies. | 5 Sem. | Part-time (evening) | Professional | 15 |
| Ph.D | | | | | |

## 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 under the section on 'Eligibility Criteria'.

## ‘Self-financing’ Programmes

Specified academic programmes of the University are “Self-financing” programmes, which have a different fee-structure.
B.Tech programme in Marine Engineering offered at the Kunjali Marakkar School of Marine Engineering, Thrikkakara campus, B.Tech Engineering programmes offered at the School of Engineering, Trikkakara campus, and at Cochin University College of Engineering Kuttanad, Pulincunnoo campus pertain to the category of self-financing programmes. 50% of the seats of these programmes are treated as ‘Free Seats’ carrying lower rate of fees. The remaining 40% of seats are ‘Payment Seats’ carrying higher rate of fees and 10% reserved as NRI payment seats (see schedule of fees). Communal reservation rules are applicable to these programmes; 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 student and the institution.

## ‘Regular’ Programmes

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

## COURSES OF STUDY

| SL. NO | Name of programmes | Dept/School | Phone no: |
|---|---|---|---|
| **FIRST DEGREE PROGRAMMES** | | | |
| **B.Tech in :** | | | |
| 1 | Computer Sci. & Engineering | Cochin University College of Engineering Kuttanad,Pulinkunnoo, Alappuzha | 0477-2707500 |
| 2 | Electrical & Electronics Engineering | | |
| 3 | Electronics & Comm. Engineering | | |
| 4 | Information Tech. | | |
| 5 | Mechanical Engineering | | |
| **B.Tech in :** | | | |
| 1 | Civil Engineering | School of Engineering,Thrikkakara | 0484-2556187 |
| 2 | Computer Sci. & Engineering | | |
| 3 | Electrical & Electronics Engineering | | |
| 4 | Electronics & Comm. Engineering | | |
| 5 | Information Tech. | | |
| 6 | Mechanical Engineering | | |
| 7 | Safety & Fire Engineering | | |
| 8 | Marine Engineering (Residential Programme) | Kunjali Marakkar School of Marine Engineering,Thrikkakkara,Kochi-22 | 0484-2576606 |
| 9 | Instrumentation Technology | Instrumentation | 0484-2575008 |
| 10 | Polymer Science & Engineering | Polymer Science & Rubber Technology | 0484-2575723 |
| 11 | Naval Arch. & Ship Building | Ship Technology | 0484-2575714 |
| **PROGRAMMES OTHER THAN B.TECH** | | | |
| 1 | 5 Year Integrated M.Sc in Photonics | Centre of Excellence in Lasers and Opto-Electronic Sciences | 0484-2577540 |
| 2 | 5 year B.B.A., LL.B.(Hons.) | Legal Studies | 0484-2575465 |
| 3 | 5 year B.Com.,LL.B.(Hons.) | | |
| 4 | 3 year LL.B course (Evening) | | |
| **DUAL DEGREE PROGRAMMES** | | | |
| 1 | Master of Intellectual Property (MIP),Ph.D. | Inter University Centre for Intellectual Property Rights Studies | 0484-2862491 |
| 2 | LL.M (IPR) Ph.D Degree | | |

| COURSES OF STUDY | | | |
|---|---|---|---|
| SL. NO | Name of programmes | Dept/School | Phone no: |
| PG PROGRAMMES | | | |
| 1 | LL.M | Legal Studies | 0484-2575465 |
| 2 | M.A Hindi Language and Literature | Hindi | 0484-2575954 |
| 3 | M.A Translation in German/ Russian | English and Foreign Languages | 0484-2575180 |
| 4 | M.A. Applied Economics | Applied Economics | 0484-2576030 |
| 5 | M.B.A.(International Business) | Management Studies | 0484-2575310 |
| 6 | M.B.A(Full-time & Part-time) | | |
| 7 | M.B.A. (Travel & Tourism) | | |
| 8 | M.Sc Applied Chemistry | Applied Chemistry | 0484-2575804 |
| 9 | M.Sc Biotechnology | Biotechnology | 0484-2576267 |
| 10 | M.Sc Hydrochemistry | Chemical Oceanography | 0484-2382131 |
| 11 | M.Sc Industrial Fisheries | Industrial Fisheries | 0484-2354711 |
| 12 | M.F.Sc in Seafood Safety and Trade | | |
| 13 | M.Sc Instrumentation | Instrumentation | 0484-2575008 |
| 14 | M.Sc Marine Biology | Marine Biology,Microbiology & Biochemistry | 0484-2368120 |
| 15 | M.Sc Marine Geology | Marine Geology & Geophysics | 0484-2366478 |
| 16 | M.Sc Marine Geophysics | | |
| 17 | M.Sc Mathematics | Mathematics | 0484-2577518 |
| 18 | M.Sc Meteorology | Atmospheric Sciences | 0484-2353662 |
| 19 | M.Sc Oceanography | Physical Oceanography | 0484-2363950 |
| 20 | M.Sc Physics | Physics | 0484-2577404 |
| 21 | M.Sc Statistics | Statistics | 0484-2575893 |
| 22 | M.Sc Environmental Tech. | Environmental Studies | 0484-2577311 |
| | Stream 1.Environmental Engineering | | |
| | Stream 2.Environmental Biotechnology | | |
| 23 | M.Sc Electronic Science | Electronics | 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 Engineering,Kuttanad | 0477-2707500 |
| | | Computer Applications | 0484-2576253 |

| COURSES OF STUDY | | | |
|---|---|---|---|
| SL. NO | Name of programmes | Dept/School | Phone no: |
| M.TECH PROGRAMMES | | | |
| 1 | M.Tech.Marine Biotechnology | Enviormental Studies | 0484-2577311 |
| 2 | M.Tech Atmospheric Sciences | Atmospheric Sciences | 0484-2353662 |
| 3 | M.Tech Ocean Technology | Physical Oceanography | 0484-2363950 |
| 4 | M.Tech. Industrial Catalysis | Applied Chemistry | 0484-2575804 |
| 5 | M.Tech Engineering Statistics (no admission in 2013) | Statistics | 0484-2575893 |
| 6 | M.Tech.Electronics | Electronics | 0484-2576418 |
| 7 | M.Tech Polymer Technology | Polymer Science & Rubber Technology | 0484-2575723 |
| 8 | M.Tech Computer Aided Structural Analysis & Design | Ship Technology | 0484-2575714 |
| 9 | M.Tech.Opto-Electronics and Laser Technology | International School of Photonics | 0484-2575848 |
| 10 | M.Tech .Computer and Information Science | Computer Science | 0484-2577126 |
| 11 | M.Tech Software Engineering | | |
| 12 | M.Tech Computer Science with specialization in Embedded systems (part time) | | |
| 13 | M.Tech Civil Engineering (Part Time) | School of Engineering | 0484-2556187 |
| 14 | M.Tech Chemical Engineering (Part Time) | | |
| 15 | M.Tech Mechanical Engineering (Part Time) | | |
| 16 | M.Tech Electrical Engg. with specialization in Power Electronics (Part Time) | | |
| 17 | M.Tech in Mechancial Engg. (Thermal Engg.)(Full Time) | | |
| 18 | M.Tech in Civil Engg. (Geotechnical Engg.) (Full Time) | | |

| COURSES OF STUDY | | | |
|---|---|---|---|
| SL. NO | Name of programmes | Dept/School | Phone no: |
| M.PHIL PROGRAMMES | | | |
| 1 | Chemistry | Applied Chemistry | 0484-2575804 |
| 2 | Marine Chemistry | Chemical Oceanography | 0484-2382131 |
| 3 | Fisheries Science | Industrial Fisheries | 0484-2354711 |
| 4 | Mathematics | Mathematics | 0484-2577518 |
| 5 | Commerce | Management Studies | 0484-2575310 |
| 6 | Physics | Physics | 0484-2577404 |
| 7 | Applied Economics | Applied Economics | 0484-2576030 |
| 8 | Life Sciences | Marine Biology, Micro Biology &Biochemistry | 0484-2368120 |
| 9 | Hindi | Hindi | 0484-2575954 |
| DIPLOMA PROGRAMMES | | | |
| 1 | P.G.Diploma in Communicative English | English and Foreign Languages | 0484-2575180 |
| 2 | Diploma Programmes in French/German/Japanese/Russian | | |
| 3 | Integrated Diploma in French/German/Japanese/Russian | | |
| 4 | Integrated Diploma in Italian | | |
| 5 | P.G Diploma in Translation and Functional Hindi | Hindi | 0484-2575954 |
| 6 | P.G. Diploma in Intellectual Property Rights. | Inter University Centre for Intellectual Property Rights Studies | 0484-2862491 |
| CERTIFICATE PROGRAMMES | | | |
| 1 | Certificate Programmes in French/German/Japanese/Russian | English and Foreign Languages | 0484-2575180 |

# SCHEDULE OF FEES

| Sl. No. | Name of Programme | Rates of Fees | | PTA | Caution Deposit | | Total |
|---|---|---|---|---|---|---|---|
| | | Tuition fees | Other fees | | Lab/Computer | Library | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | B.Tech.(Civil Engg., Computer Science & Engg., Electrical and Electronics Engg., Electronics & Communication Engg., Information Technology, Mechanical Engg., Safety & Fire Engg.) | 35000 (Free) | 5800 | 1500 | 500 | 500 | 43300 |
| | | 65000 (Payment) | 14800 | 1500 | 500 | 500 | 82300 |
| | | 100000 (NRI) | 140800 | 1500 | 500 | 500 | 243300 |
| 2 | **Lateral Entry to B.Tech. for** (Civil Engg., Computer Science & Engg., Electrical and Electronics Engg., Electronics & Communication Engg., Information Technology, Mechanical Engg., Safety & Fire Engg. | 32500 | 14950 | 1500 | 500 | 500 | 49950 |
| 3 | **Lateral Entry to B.Tech. for** Instrumentation Engg. | 12000 | 2750 | 1500 | 500 | 500 | 17250 |
| 4 | **Lateral Entry to B.Tech. for** Polymer Science and Engineering | 8000 | 3350 | 1500 | 500 | 500 | 13850 |
| 5 | B.Tech. (Marine Engineering) | 110000(Free) | 66250 | 1500 | 10000 | | 187750 |
| | | 160000(Payment) | 81250 | 1500 | 10000 | | 252750 |
| | | 160000(NRI) | 366250 | 1500 | 10000 | | 537750 |
| 6 | B.Tech. (Instrumentation Technology) | 12000 | 2750 | 1500 | 500 | 500 | 17250 |
| 7 | B.Tech.(Naval Architecture & Ship Building) | 8000 | 4200 | 1500 | 500 | 500 | 14700 |
| 8 | B.Tech.(Polymer Science & Engineering) | 8000 | 3350 | 1500 | 500 | 500 | 13850 |
| 9 | 5 year Integrated M.Sc. (Photonics) | 15000 | 2650 | 1500 | 500 | 500 | 20150 |
| 10 | M.A.(Hindi) | 1500 | 1150 | 1000 | - | 500 | 4150 |
| 11 | M.A. Applied Economics | 2000 | 1625 | 1000 | 500 | 500 | 5625 |
| 12 | M.Sc.(Applied Chemistry, Environmental Technology (Stream I & II), Marine Geology,Marine Geo Physics, Biotechnology, Meteorology, Mathematics, Statistics, Industrial Fisheries, Oceanography) | 1500 | 1450 | 1000 | 500 | 500 | 4950 |
| 13 | M.Sc. Hydrochemistry | 4000 | 1650 | 1000 | 500 | 500 | 7650 |
| 14 | M.Sc. Physics | 1500 | 1550 | 1000 | 500 | 500 | 5050 |

| Sl. No. | Name of Programme | Rates of Fees | | PTA | Caution Deposit | | Total |
|---|---|---|---|---|---|---|---|
| | | Tuition fees | Other fees | | Lab/Computer | Library | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 15 | M.Sc Marine Biology | 1500 | 1950 | 1000 | 500 | 500 | 5450 |
| 16 | M.Sc Electronic Science | 1500 | 1950 | 1000 | 500 | 500 | 5450 |
| 17 | M.Sc Instrumentation | 8000 | 1650 | 1000 | 500 | 500 | 11650 |
| 18 | M.Sc Biopolymer Science | 15,000 | 3,130 | -- | 1,000 | | 19,130 |
| 19 | M.FSc. Seafood Safety & Trade | 10000 | 1450 | 1000 | 1000 | | 13450 |
| 20 | 5 Year B.B.A. L.L.B. (Hons.) | 20000 | 1700 | 1500 | - | 500 | 23700 |
| 21 | 5 Year B.Com. L.L.B. (Hons.) | 25000 | 1700 | 1500 | - | 500 | 28700 |
| 22 | LL.B.(3 year)(regular)(Evening) | 25000 | 1700 | 1500 | - | 500 | 28700 |
| 23 | LL.M. | 3000 | 1550 | 1000 | - | 500 | 6050 |
| 24 | LL.M (IPR, Ph.D) | 25000 | 3550 | - | 500 | | 29050 |
| 25 | MIP, Ph.D | 25000 | 3550 | - | 500 | | 29050 |
| 26 | P.G.Diploma in Intellectual Property Rights | 25000 | 3550 | - | 500 | | 29050 |
| 27 | M.B.A.(Full-time) | 20000 | 5200 | 1000 | - | 500 | 26700(1) |
| 28 | M.B.A.(Part-time)(Experienced) | 20000 | 4800 | 1000 | - | 500 | 26300(1) |
| 29 | M.B.A.(Part-time)(Non-Experienced) | 15000 | 4800 | 1000 | - | 500 | 21300(1) |
| 30 | M.B.A (Travel & Tourism) | 45000 | 5200 | 1000 | - | 500 | 51700(1) |
| 31 | M.B.A.(International Business) | 45000 | 5200 | 1000 | - | 500 | 51700(1) |
| 32 | M.C.A.(Regular) | 8000 | 1850 | 1500 | 500 | 500 | 12350 |
| 33 | M.C.A.(Cost Sharing) | 25000 | 1850 | 1500 | 500 | 500 | 29350 |
| 34 | M.Phil(Applied Chemistry) | 3000 | 1400 | 500 | 500 | 500 | 5900 |
| 35 | M.Phil Physics | 3000 | 1500 | 500 | 500 | 500 | 6000 |
| 36 | M.Phil Mathematics | 3000 | 1400 | 1000 | 500 | 500 | 6400 |
| 37 | M.Phil( Marine Chemistry) | 3000 | 1400 | 1000 | 500 | 500 | 6400 |
| 38 | M.Phil ( Hindi) | 3000 | 1000 | 1000 | - | 500 | 5500 |
| 39 | M.Phil Applied Economics | 3000 | 1650 | 1000 | 500 | | 6150 |
| 40 | M.Phil Commerce | 3000 | 2400 | - | - | 500 | 5900 |

| Sl. No. | Name of Programme | Rates of Fees | | PTA | Caution Deposit | | Total |
|---|---|---|---|---|---|---|---|
| | | Tuition fees | Other fees | | Lab/Computer | Library | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 41 | M.Phil (Life Science) | 3000 | 2300 | 1000 | 1100 | 500 | 7900 |
| 42 | M.Phil (Fisheries Science) | 3000 | 2550 | - | 500 | 500 | 6550 |
| 43 | M.Tech.(Atmospheric Science) | 12000 | 1750 | 1000 | 500 | 500 | 15750 |
| 44 | M.Tech.(Computer Aided Structural Analysis & Design) | 15000 | 4400 | 1000 | 500 | 500 | 21400 |
| 45 | M.Tech.(Computer Aided Structural Analysis & Design)-for sponsored candidates | 20000 | 4400 | 1000 | 500 | 500 | 26400 |
| 46 | M.Tech.Opto-Electr. & Laser Technology | 12000 | 1450 | 1000 | 500 | 500 | 15450 |
| 47 | M.Tech.Polymer Technology | 15000 | 2900 | 1000 | 500 | 500 | 19900 |
| 48 | M.Tech.Comp. & Info.Science | 12000 | 2200 | 1000 | 500 | 500 | 16200 |
| 49 | M.Tech Computer Science with specialization in embedded systems (part time) | 28000 | 2150 | 1500 | 500 | 500 | 32650 |
| 50 | M.Tech.(Electronics) | 12000 | 2450 | 1000 | 500 | 500 | 16450 |
| 51 | M.Tech.(Engineering Statistics) **(no admissions in 2013)** | 12000 | 1600 | 1000 | 500 | 500 | 15600 |
| 52 | M.Tech.(Engineering Statistics) for sponsored candidates **(no admissions in 2013)** | 20000 | 1750 | 1000 | 500 | 500 | 23750 |
| 53 | M.Tech.(Industrial Catalysis) | 12000 | 1600 | 1000 | 500 | 500 | 15600 |
| 54 | M.Tech. (Software Engg.) | 12000 | 2200 | 1000 | 500 | 500 | 16200 |
| 55 | M.Tech.(Ocean Technology) | 12000 | 1750 | 1000 | 1000 | | 15750 |
| 56 | M.Tech.(Ocean Technology) for sponsored candidates | 20000 | 2750 | 1000 | 1000 | | 24750 |
| 57 | M.Tech.(Marine Biotechnology) applicable to each semesters | 12000 | 2415 | 1000 | 500 | 500 | 16415 |
| 58 | M.Tech. (Full-Time) in Mechanical Engineering (Thermal Engineering) | 45,000 | 5,600 | 1000 | 500 | 500 | 52,600 |
| 59 | M.Tech. (Full-Time) in Civil Engineering (Geotechnical Engineering) | 45,000 | 5,600 | 1000 | 500 | 500 | 52,600 |
| 60 | M.Tech (Part-Time) in Civil, Chemical, Mechancial Engineering | 15,000 | 5100 | 1500 | 275 | 275 | 22,150 |
| 61 | M.Tech (Part-Time) in Electrical engineering with specialization in Power Electronics | 28,000 | 4850 | 1500 | 275 | 275 | 34,900 |
| 62 | P.G. Certificate (French, German, Japanese, Russian) | Not offered | | | | | |
| 63 | P.G. Diploma (PT) in Translation and Functional Hindi | 3500 | 200 | - | 200 | | 3900 |
| 64 | Integrated Diploma in French/German/Japanese/Russian/ Italian | 2000 | 1650 | - | - | 200 | 3850 |

| Sl. No. | Name of Programme | Rates of Fees | | PTA | Caution Deposit | | Total |
|---|---|---|---|---|---|---|---|
| | | Tuition fees | Other fees | | Lab/Computer | Library | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 65 | P.G. Diploma in Communicative English (PT) | 5000 | 1650 | - | - | 200 | 6850 |
| 66 | M.A.(Translation-German/Russian) | 2000 | 600 | - | - | 500 | 3100 |
| 67 | Certificate (PT) in French, German, Japanese, Russian | 1000 | 1200 | - | - | 100 | 2300 |
| 68 | Ph.D (Hindi Department) | 2000 | 2000 | | 1000 | | 5000 |
| 69 | Ph.D (Industrial Fisheries Department) | 2000 | 2900 | | 2000 | | 6900 |

(1)DDF EXTRA

Notes:

1. 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 | 150/- | Admission fee (Free Seat) | 10000/- |
| Medical Inspection fee** | 50/- | Admission fee (Payment Seat) | 15000/- |
| Quasi University Fee | 150/- | Uniform (at the time of admission) | 12500/- |
| Recognition Fee* | 150/- | Mess Caution Deposit -do- | 5000/- |
| Sports fee | 100/- | Orientation fee -do- | 5000/- |
| Students Aid Fund | 100/- | Uniform (per year) | 3800/- |
| University Union Fee | 100/- | Hostel activities (per semester) | 12000/- |
| | | Books (per year) | 5000/- |
| | | Laundry (per semester) | 1500/- |
| | | Medical Inspection fee | 200/- |

* (For students who have passed their qualifying examination from outside Kerala)
** (Only for full-time students)

2. P.T.A fee of Rs.1500/-(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.

3. 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.

4. **FEE FOR FOREIGN NATIONALS :(Course fee including normal examination fee)**

| COURSES | REGULAR STUDENTS | ICCR SCHOLARS |
|---|---|---|
| For Undergraduate courses | US $ 3000 per annum | US $ 1500 per annum |
| For Postgraduate Programmes (M.Sc, M.A, M.B.A. & M.C.A.) | US $ 2500 per annum | US $ 1250 per annum |
| For Ph.D Programmes | US $ 5000 per annum | US $ 2500 per annum |
| M.Phil/M.Tech/LL.M | US $ 3000 per annum | US $ 1500 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 |

5. 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 payment and free seats.
6. 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.

7. 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 counseling / 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 payment seats under B.Tech Engineering programmes.

The application fee applicable for various categories are: Rs.950/- for General category candidates and Rs.425/- for SC/ST category. Rs.5,950/- 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.

## REFUND RULES

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

When a student cancels his admission before the commencement of classes, another student from the waiting list will be given admission and the student who cancelled admission will be refunded the entire fee remitted after deducting a processing fee of not more than Rs.1000/-

When a student cancels his admission after the commencement of classes full amount of tuition fee remitted by him will be refunded to him, irrespective of the fact that he attends or does not attend the classes, if the subsequent vacancy is filled by another candidate.

Refund without interest will be made only in the next financial year.

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

## DISCLAIMER AND LEGAL JURISDICTION

The University reserves the right to change any of the above dates. It also reserves the right to amend, alter or interpret any of the Rules / Regulations relating to Programmes of Study, Eligibility and Admission criteria, Fee Structure, Reservation and other relevant matters. All disputes relating to CAT shall be subject to the jurisdiction of courts in Cochin only. Appearance in the CAT or figuring in the Rank list does not ipso facto confer any right for admission to a particular course unless found suitable as per the eligibility criteria as amended from time to time.

This Prospectus doesn't purport to be a document containing the rules and regulations of the University. The information contained herein is general in nature and is intended only to serve as a guideline for prospective students. Rules and regulations of the University are issued as University orders from time to time.

# SUBJECT WISE ELIIBILITY CRITERIA FOR POST GRADUATE PRORAMMES

## CAT for P.G. Programmes : Selection of test subjects.

PG Programmes at a Glance ( Subject-wise Eligibility)

| Eligibility for PG programmes / Test Subject for CAT | B.B.A. LLB (Hons) /B.Com.,LL.B.(Hons.) | LLM | 3 Year LL.B. (Regular) (evening) | MA Hindi | MBA (FT& PT) | MBA (IB) & (TT) | M.A. Applied Economics | MCA | M.Sc Appl. Chemistry. | M.Sc Bio-Technology | M.Sc Electronic Science. | M.Sc Environmental Technology. Stream 1 | M.Sc Environmental Technology. Stream 2 | M.Sc Hydro-Chemistry | M.Sc Indstrial Fisheries | M.Sc Mathematics | M.Sc Marine Biology | M.Sc Marine Geology | M.Sc Meteorology | M.Sc Ocea-nography | M.Sc Statistics | M.Sc Physics | M.Sc Marine Geophysics | M.Sc Instrumentation | M.F. Sc. in Seafood Safety and Trade | M.Sc. Biopolymer Science | MIP Ph.D. & LL.M Ph.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aptitude for LLB 201 | ✔ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hindi 301 | | | | ✔ | | | | | | | | | | | | | | | | | | | | | | | |
| Aptitude for MCA 501 | | | | | | | | ✔ | | | | | | | | | | | | | | | | | | | |
| CMAT of AICTE | | | | | ✔ | ✔ | | | | | | | | | | | | | | | | | | | | | |
| Biotechnology 601 | | | | | | | | | | ✔ | | | | | | | ✔ | | | | | | | | | ✔ | |
| Botany 602 | | | | | | | | | | ✔ | | | ✔ | | ✔ | | ✔ | | | | | | | | | ✔ | |
| Chemical Engg. 603 | | | | | | | | | | ✔ | | ✔ | | | | | | | | | | | | | | | |
| Chemistry 604 | | | | | | | | | ✔ | ✔ | | ✔ | | ✔ | | | | ✔ | | | | | | | | ✔ | |
| Electronic Science 606 | | | | | | | | | | | ✔ | | | | | | | | | | | | | ✔ | | | |
| Engg. Sciences 607 | | | | | | | | | | | | ✔ | | | | | | | | | | | | | | | |
| Fisheries 608 | | | | | | | | | | | | | | | ✔ | | ✔ | | | | | | | | ✔ | | |
| Geology 609 | | | | | | | | | | | | | | | | | | ✔ | | | | | ✔ | | | | |
| Law 610 | | ✔ | | | | | | | | | | | | | | | | | | | | | | | | | |
| Life Sciences 611 | | | | | | | | | | ✔ | | | ✔ | | | | ✔ | | | | | | | | | ✔ | |
| Mathematics 612 | | | | | | | | | | | | | | | | ✔ | | ✔ | ✔ | ✔ | ✔ | | ✔ | | | | |
| Physics 613 | | | | | | | | | | | ✔ | | | | | | | ✔ | ✔ | ✔ | | ✔ | ✔ | ✔ | | ✔ | |
| Statistics 614 | | | | | | | | | | | | | | | | | | | | | ✔ | | | | | | |
| Zoology 615 | | | | | | | | | | ✔ | | | ✔ | | ✔ | | ✔ | | | | | | | | ✔ | ✔ | |
| Economics 616 | | | | | | | ✔ | | | | | | | | | | | | | | | | | | | | |
| Instrumentation 617 | | | | | | | | | | | | | | | | | | | | | | | | ✔ | | | |
| Food Science 618 | | | | | | | | | | | | | | | | | | | | | | | | | ✔ | | |
| Aptitude Test for 3 Year LL.B(evening) 619 | | | ✔ | | | | | | | | | | | | | | | | | | | | | | | | |
| Aptitude Test for MIP,PhD&LLM,PhD 620 | | | | | | | | | | | | | | | | | | | | | | | | | | | ✔ |

| Subject of Tests | Test Code | Courses you can Enrol |
|---|---|---|
| Test for First Degree Programmes in Engineering and Technology | 101 | All B.Tec Programmes and M.Sc Photonics |
| Test for Lateral Entry Programmes in Engineering and Technology | 102 | Lateral Entry to the third Semester of B.Tech Courses except Marine Engg. & Naval Architecture and Ship Building |
| Aptitude Test for B.B.A.,LL.B (Hons.) / B.Com LL.B. (Hons.) | 201 | • B.B.A., LL.B. (Hons.) &<br>• B.Com.,LL.B. (Hons.) |
| Test for Hindi | 301 | M.A. Hindi |
| C MAT Test Conducted by AICTE + GD / Interview of CUSAT | 401 | • MBA (Full Time)<br>• MBA (Part Time)<br>• MBA (International Business)<br>• MBA (Travel & Tourism) |
| Aptitude Test for MCA | 501 | M.C.A. |
| Biotechnology | 601 | • M.Sc Biotechnology<br>• M.Sc Marine Biology<br>• M.Sc Biopolymer Science |
| Botany | 602 | • M.Sc Biotechnology<br>• M.Sc Marine Biology<br>• M.Sc Environmental Tech.- Stream 2. Environmental Biotechnology<br>• M.Sc Industrial Fisheries<br>• M.Sc Biopolymer Science |
| Chemical Engineering | 603 | • M.Sc Environmental Tech.- Stream 1. Environmental Engineering<br>• M.Sc Biotechnology |
| Chemistry | 604 | • M.Sc Biotechnology<br>• M.Sc Applied Chemistry<br>• M.Sc Environmental Tech.- Stream 1. Environmental Engineering<br>• M.Sc Hydrochemistry<br>• M.Sc Marine Geology<br>• M.Sc Biopolymer Science |
| Electronic Science | 606 | • M.Sc Electronic Science<br>• M.Sc Instrumentation |

| Subject of Tests | Test Code | Courses you can Enrol |
|---|---|---|
| Engineering Sciences | 607 | M.Sc Environmental Tech.- Stream 1. Environmental Engineering |
| Fisheries | 608 | ◆ M.Sc Industrial Fisheries<br>◆ MF.Sc. Sea Food Safety & Trade<br>◆ M.Sc Marine Biology |
| Geology | 609 | ◆ M.Sc Marine Geology<br>◆ M.Sc Marine Geophysics |
| Law (for LL. M) | 610 | LL.M |
| Life Sciences | 611 | ◆ M.Sc Biotechnology<br>◆ M.Sc Environmental Tech.- Stream 2. Environmental Biotechnology<br>◆ M.Sc Marine Biology<br>◆ M.Sc Biopolymer Science |
| Mathematics | 612 | ◆ M.Sc Mathematics<br>◆ M.Sc Marine Geology<br>◆ M.Sc Marine Geophysics<br>◆ M.Sc Statistics<br>◆ M.Sc Meteorology<br>◆ M.Sc Oceanography |
| Physics | 613 | ◆ M.Sc. Physics<br>◆ M.Sc Electronic Science<br>◆ M.Sc Instrumentation<br>◆ M.Sc Marine Geology<br>◆ M.Sc Marine Geophysics<br>◆ M.Sc Meteorology<br>◆ M.Sc Oceanography<br>◆ M.Sc Biopolymer Science |
| Statistics | 614 | M.Sc Statistics |
| Zoology | 615 | ◆ M.Sc Biotechnology<br>◆ M.Sc Environmental Tech.- Stream 2. Environmental Biotechnology<br>◆ M.Sc Industrial Fisheries<br>◆ M.Sc Biopolymer Science<br>◆ M.Sc Marine Biology<br>◆ MF.Sc. Sea Food Safety & Trade |
| Economics | 616 | M.A. Applied Economics |

| Subject of Tests | Test Code | Courses you can Enrol |
|---|---|---|
| Instrumentation | 617 | M.Sc Instrumentation |
| Food Science | 618 | M.F.Sc. Sea Food Safety & Trade |
| Aptitude Test for 3 Year LLB | 619 | 3 Year LLB (Regular) (Evening) |
| Aptitude Test for MIP Ph.D. & LL.M Ph.D | 620 | ◆ Master of Intellectual Property MIP.Ph.D.<br>◆ LL.M (IPR) Ph.D Degree |

| Courses you can Enrol | Test to Appear | Test Code |
|---|---|---|
| All B.Tech Programmes and M.Sc Photonics | Test for First Degree Programmes in Engineering and Technology | 101 |
| Lateral Entry to the third Semester of B.Tech Courses except Marine Engg. & Naval Architecture and Ship Building | Test for Lateral Entry Programmes in Engineering and Technology | 102 |
| B.Com LL.B. (Hons.) | Aptitude Test for B.B.A.,LL.B.(Hons.) / B.Com LL.B. (Hons.) | 201 |
| B.B.A LL.B. (Hons.) | | |
| M.A. Hindi | Test for Hindi | 301 |
| MBA (Full Time) | C-MAT Test Conducted by AICTE + GD / Interview of CUSAT | 401 |
| MBA (Part Time) | | |
| MBA (International Business) | | |
| MBA (Travel & Tourism) | | |
| M.C.A. | Aptitude Test for MCA | 501 |
| M.Sc Biotechnology | Biotechnology | 601 |
| | Botany | 602 |
| | Chemical Engineering | 603 |
| | Chemistry | 604 |
| | Life Sciences | 611 |
| | Zoology | 615 |
| LL.M | Law (for LL.M) | 610 |

| Courses you can Enrol | Test to Appear | Test Code |
|---|---|---|
| 3 Year LLB (Regular) (Evening) | Aptitude Test for 3 Year LLB | 619 |
| M.A. Applied Economics | Economics | 616 |
| M.Sc Applied Chemistry | Chemistry | 604 |
| M.Sc Electronic Science | Electronic Science | 606 |
| | Physics | 613 |
| M.Sc Environmental Tech.- Stream 1. Environmental Engineering | Chemical Engineering | 603 |
| | Chemistry | 604 |
| | Engineering Sciences | 607 |
| M.Sc Environmental Tech.- Stream 2. Environmental Biotechnology | Botany | 602 |
| | Life Sciences | 611 |
| | Zoology | 615 |
| M.Sc Hydrochemistry | Chemistry | 604 |
| M.Sc Industrial Fisheries | Botany | 602 |
| | Fisheries | 608 |
| | Zoology | 615 |
| M.Sc Mathematics | Mathematics | 612 |
| M.Sc Marine Biology | Biotechnology | 601 |
| | Botany | 602 |
| | Fisheries | 608 |
| | Life Sciences | 611 |
| | Zoology | 615 |
| M.Sc Marine Geology | Chemistry | 604 |
| | Geology | 609 |
| | Mathematics | 612 |
| | Physics | 613 |
| M.Sc Meteorology | Mathematics | 612 |
| | Physics | 613 |
| M.Sc Oceanography | Mathematics | 612 |
| | Physics | 613 |
| M.Sc Statistics | Mathematics | 612 |
| | Statistics | 614 |

| Courses you can Enrol | Test to Appear | Test Code |
|---|---|---|
| M.Sc. Physics | Physics | 613 |
| M.Sc Marine Geophysics | Geology | 609 |
| | Mathematics | 612 |
| | Physics | 613 |
| M.Sc Instrumentation | Electronic Science | 606 |
| | Physics | 613 |
| | Instrumentation | 617 |
| M.F.Sc. Sea Food Safety & Trade | Fisheries | 608 |
| | Food Science | 618 |
| | Zoology | 615 |
| M.Sc Biopolymer Science | Biotechnology | 601 |
| | Botany | 602 |
| | Chemistry | 604 |
| | Life Sciences | 611 |
| | Physics | 613 |
| | Zoology | 615 |
| Master of Intellectual Property (MIP),Ph.D. | Aptitude Test for MIP Ph.D. & LL.M Ph.D | 620 |
| LL.M (IPR) Ph.D Degree | | |
| For Post Graduate programmes you may appear for any one of the test subjects shown against "Courses you can Enrol" | | |

# CAT 2013 - CONTACT DETAILS

## INTERNATIONAL RELATIONS AND ACADEMIC ADMISSIONS (IRAA)

| | | |
|---|---|---|
| DIRECTOR | Dr.DAVID PETER S | Tel :91-484-2577688<br>:91-484-2862289<br>Fax :91-484-2577688 |
| ASSISTANT REGISTRAR | SRI. UBAID RAHIMAN | Tel :91-484-2862290<br>:91-484-2577159 |
| ENQUIRY : 91-484-2862256 / 57 | | |

# IMPORTANT DATES AND TIME TABLE OF CAT 2013

CAT/DAT/LET 2013 SCHEDULE

| | | |
|---|---|---|
| 1 | Date of Notification for CAT, LET and DAT | 10.01.2013 |
| 2 | Commencement of Online registration for CAT, LET and PG programmes including M.Tech and MBA programmes (C- MAT score required for MBA) | 20.01.2013 TO 11.02.2013 |
| 3 | Sale and receipt of DAT Applications from Departments for admissions to M.Phil , PhD. & Diploma Programmes | 14.01.2013 TO 11.02.2013 |
| 4 | Online submission of CMAT score for M.B.A candidates / GATE score for M.Tech candidates | 15.03.2013 TO 30.03.2013 |
| 5 | Online registration for International students | 20.01.2013 TO 30.03.2013 |
| 6 | Downloading the Admit Card from the website www.cusat.nic.in (For B.Tech. & PG programmes) | 24.04.2013 TO 12.05.2013 |
| 7 | Downloading the Admit Card from the website www.cusat.nic.in (For Lateral Entry to B.Tech.) | 08.05.2013 TO 19.05.2013 |

| TIME TABLE FOR CAT 2013 | | | |
|---|---|---|---|
| | 11.05.2013 | TESTCODE | SATURDAY |
| | 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 p.m. - 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) |
| | 12.05.2013 | | SUNDAY |
| | 09.30 a.m. - 12.30 p.m. | 101 | Test in Mathematics, Physics and Chemistry for 1st Degree Programmes in Engineering and Technology |
| 6 | 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 |
| | 19.05.2013 | | SUNDAY |
| | 10.00 a.m. to 1.00 p.m. | 102 | Test for Lateral Entry to B .Tech Programmes |
| 7 | Centre of Examination | | **As indicated in the downloaded Admit Card** |
| 8 | Counselling | | Dates will be announced later on the University website www.cusat.ac.in |

## CAT / LET 2013 RESULTS

- The results of the CAT / LET 2013 will be published in the above websites on 28.05.2013 and will also be available with the Director, Public Relations & Publications, *CUSAT.*
- The results of Departmental Admission Tests will be published by the Department / School concerned.

## COUNSELLING 2013

The counseling and admission to various academic programmes is held as follows:-

- All Post-Graduate programmes: - The Schedule for counselling will be published in the website. No individual call letter / communication will be sent by post.
- First Degree Programmes: - The schedule for counselling will be published in the website. No individual call letter / communication will be sent by post.
- The schedule for Group Discussion and / or Interview related to programmes such as Management Courses, M.Sc. Industrial Fisheries, B.B.A.LL.B (Hons.)/ B.Com.,LL.B.(Hons.), L.L.M. etc. will be published in the website. No individual call letter / communication will be sent by post.
- For PhD, M.Phil., M.Tech., M.A. (Translation German/Russian), Diploma / Certificate programmes please contact departments concerned for details.

## TEST CENTRES

***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, Hyderabad, Bangalore, Jamshedpur, Allahabad, Lucknow, Ranchi, Varanasi, Kota and all the District Head Quarters of Kerala.*

***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 head quarters of Kerala.*

***For Lateral Entry Test and 3 Year LL.B (regular)(evening):*** *The CAT will be conducted only at the Ernakulam Centre.*

**The Candidates opting Dubai Centre will have to write test in Kochin centre if sufficient number of candidates have not been opted for Dubai 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.*

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