

"CUSAT" redirects here. For other uses, see [CUSAT \(disambiguation\)](#).

Cochin University of Science & Technology (CUSAT) is a [government](#) owned [autonomous university](#) in [Kochi](#) ([Cochin](#)), [Kerala](#), [India](#). Founded in 1971, the university consists of three campuses, two in Kochi and one in [Kuttanad](#), [Alappuzha](#), about 66 km inland. The university awards degrees in various fields of [engineering](#) and allied subjects at the undergraduate, postgraduate and doctoral levels. Nearly 2,000 students engage yearly in various areas of undergraduate and postgraduate study in this university.

The institute was poised to become *Indian Institute of Engineering, Science and Technology, Kochi (IIEST Kochi)* ^[1], but the proposal was rejected by the state government in a surprising turn of events. ^[2]

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Cochin University of Science and Technology

കൊച്ചിൻ യൂണിവേഴ്സിറ്റി ഓഫ് സയൻസ് ആൻറ് ടെക്നോളജി



<u>Motto</u>	"May learning illuminate us both, the teacher and the taught"
<u>Established</u>	1971
<u>Type</u>	Government
<u>Chancellor</u>	Shri R. S. Gavai
<u>Vice-Chancellor</u>	Dr. Ramachandran Thekkedath
<u>Undergraduates</u>	2000 (2005)

Postgraduates	500
Location	Kochi , Kerala , India
Campus	Urban
Affiliations	UGC
Website	www.cusat.ac.in

1. Overview

Originally known as *University of Cochin*, the University came into being in 1971 through an Act of the [Legislature of Government of Kerala](#) that was the result of a concerted campaign for [postgraduate](#) education in the State of Kerala. The university was reorganized into *Cochin University of Science and Technology (CUSAT)* in February 1986. The process of reorientation resulted in redefining the objectives as the promotion of undergraduate and postgraduate studies and advanced research in [applied science](#), [technology](#), [industry](#), [commerce](#), [management](#) and [social sciences](#) ^[3].

Admissions are based on an All India Entrance Examination known as Common Admission Test (CAT) conducted by the University which includes different papers for admissions to various undergraduate and postgraduate courses. Various Departmental Admission Tests (DAT) are also conducted for some postgraduate Courses.

2. Mission

The mission of the university is to make distinctive and eloquent contributions to the cause of higher education in science and technology. CUSAT has pledged to strive to offer teaching of the highest quality and to engage in research and scholarship that will contribute to the advancement of knowledge.

The motto of the university is 'Tejasvinavadhithamastu', which conveys, 'May learning illumine us both, the teacher and the taught'. ^[4]

3. Campuses

The university has three separate campuses, two of them in [Kochi](#) and one at [Pulinkunnu](#), [Kuttanad](#), [Alappuzha](#) about 65 km south of Cochin in the state of [Kerala](#).

3. 1. The Main (Thrikkakara) Campus

The main campus is located nearly 1.5 km off the [National Highway 47](#) in South [Kalamassery](#). The 180-acre (0.73 km²) campus consists of the Administrative office, the Central Library, Computer Centre, various departments, labs, workshops, School of Engineering (SOE Campus) and School of Engineering (Siberia Campus), canteens, guest house, hostels and playgrounds.

The Administrative office coordinates all the activities of the various departments and

affiliated colleges under the University. The fully computerized Central Library acts as a central source of information for the academic community of the University. The Computer Center has state-of-the-art facilities and also provides free internet access to the students. This campus hosts the buildings of the various departments. The SOE campus has several divisions of engineering and corresponding labs and workshops. The Siberia campus block consists of classrooms for various engineering courses and a new lab building (NLB) which houses various department centers and labs.

The campus has a Triveni Coffee House and other canteens. There are three men's hostels namely Siberia, Sarovar and Sanathana and two ladies' hostels, Aishwarya and Athulya. A new [B. Tech](#) hostel has been set up for the students from states other than Kerala. The campus also hosts the accommodation of its employees.

3. 2. The City (Lakeside) Campus

The Lakeside Campus, ~12 km away from the Main Campus is set in Cochin city on the estuarine waterfront. This campus consists of School of Ocean Science and Technology, School of Industrial Fisheries, Department of Atmospheric Sciences, Department of Chemical Oceanography, Department of Marine Biology, Microbiology and Biochemistry, Department of Marine Geology and Geophysics and Department of Physical Oceanography. The School of Ocean Science and Technology (previously known as School of Marine Sciences) has a history of over 65 years of academic pursuit in marine sciences. It has a library which is regarded as one of the largest marine science libraries in Asia and a research vessel for coastal water studies^{[[citation needed](#)]}. The School has academic interactions with other universities and research institutes in India and outside. Other than teaching and research the School also addresses various issues of regional importance.

3. 3. The Pulinkunnu Campus

The Pulinkunnu Campus in [Kuttanad](#), Alappuzha District is about 65 km away from the Main Campus. This campus is home to the Cochin University College of Engineering, Kuttanad ([CUCEK](#)) and the Cochin University College of Computer Applications (CUCCA). The Campus is surrounded by villages, temples and churches.

4. Faculties

CUSAT is academically structured into nine faculties: [Science](#), [Technology](#), [Engineering](#), [Environmental Studies](#), [Humanities](#), [Law](#), [Marine Sciences](#), [Medical Sciences](#) and Technology, and [Social Sciences](#).

4. 1. Faculty of Science

4. 1. 1. Department of Applied Chemistry

The Department of Applied Chemistry was established in 1976 with the support of [University Grants Commission](#) to aid in the development of the industrial belt in the Greater Cochin area by providing scientific support and trained personnel to the existing industries. The Department started an [M.Sc](#) programme in Applied chemistry in 1971. An [M.Phil](#) programme in chemistry was started in the year 1986. The Department has also served as a nucleus for starting the Department of Polymer Science and Rubber Technology and the Department of Biotechnology by initiating B.Tech and M.Sc courses in the respective areas.

4. 1. 2. Department of Physics

The department of Physics was established in 1962 and is one of the oldest Departments of the University. The specialized areas such as Electronics, Computer Science and Photonics later branched out to form independent departments. The department has maintained a creditable record of postgraduate teaching and research. In addition to M.Sc and M.Phil courses in Physics, the department is actively doing research in the areas of Theory, Applied Optics, Laser and Spectroscopy, Magnetism, Opto-electronic Devices, Solid State Physics, Thin Film Photo-voltaic and Advanced Materials.

4. 1. 3. Department of Mathematics

The Department of Mathematics conducts Masters Degree programmes in Mathematics and Operations Research and Computer Applications along with M.Phil and Ph.D programmes. The research scholars in the Department are in receipt of fellowship from various [Government of India](#) funding agencies such as [University Grants Commission](#), [Council of Scientific and Industrial Research](#), and the [National Board for Higher Mathematics](#) (NBHM). Current research activities of the Department are in the areas of [Analysis](#), [Algebra](#), [Operator Theory](#), [Functional Analysis](#), [General topology](#), [Fuzzy mathematics](#), [Graph Theory](#), [Combinations](#), [Convexity Theory](#), [Fluid Dynamics](#), Non-linear waves, [Stability](#), [Stochastic Processes](#) in general and [Random Graphs](#), [Operations Research](#) and [History of Mathematics](#).

4. 1. 4. Department of Statistics

The Department of Statistics was formed by converting the Division of Statistics, a constituent of the now defunct School of Mathematical Sciences established in 1994. The Department offers M.Sc. and M.Phil. programme in Statistics and M.Tech in Engineering Statistics (Quality & Reliability Engineering) besides research programmes leading to the Ph.D.degree in the areas of [Bayesian inference](#), Reliability, Modelling, [Distribution Theory](#), [Queueing models](#), [Stochastic processes](#), Inference in time-series models and [Demography](#). The department is affiliated to several foreign and Indian universities and have students working and doing research abroad as well as in institutions in India like IIT's.

4. 2. Faculty of Technology

4. 2. 1. Department of Electronics

The department has well equipped Microwave Electronics instrumentation and [Microprocessor](#) Research laboratories for carrying out research and the doctoral programmes mainly in fields such as [Underwater acoustics](#), Ocean electronics, [Microwave](#) propagation antennas, Microwave [image processing](#), [pattern recognition](#), microprocessor applications in signal processing and display devices. External agencies like the [DST](#), [ISRO](#), [AICTE](#), DOE, [DRDO](#), MOD and the state Government support this Department through various research projects and fellowships.

4. 2. 2. Department of Instrumentation

The department runs a B.Tech, programme in [instrumentation](#) which was started in 1996. This course covers almost all areas of modern instrumentation such as analytical techniques, process control, PC and microprocessor based instrumentation, instrumentation, optoelectronics, vacuum and cryogenics, robotics, etc. This department has taken up consultancy work for several industrial and R&D establishments.

4. 2. 3. Department of Polymer Science & Rubber Technology

The Department of Polymer Science and Rubber Technology was started in 1971 by introducing a 2 year Post B.Sc. B.Tech Programme in Polymer Science and Rubber Technology. This was reorganized into a 3 year programme to fall into the all India pattern in 1977. This programme was then revised into a four-year B.Tech course. The starting of an M.Tech.course in 1985 was a major milestone in the growth of the department. The Department organizes national seminars to bring polymer scientists, technologists and engineers from academic and research institutions and industrial organizations to a common platform and evaluate the status and nature of manpower training and research activities in the country related to polymer science and technology.

4. 2. 4. Department of Ship Technology

This Department is one of the pioneers in the field of [Naval Architecture](#) education in India, established in 1974. A [B.Tech](#) programme in Naval Architecture and Ship Building was started in 1975. In technical collaboration with [University of Rostock, Germany](#) since 1978, it is producing a new and dynamic generation of Naval Architects to meet the requirements of [shipbuilding](#) industry, [Ship Classification Societies](#), [R&D](#) organizations, the [Indian Navy](#) and other related organizations. This Department maintains active collaboration and interaction with [IITs](#), Universities outside India, [Naval Science and Technological Laboratory](#) (NSTL), [Vizag](#) and various [shipyards](#). These organizations extend their facilities and expertise to impart training to the B.Tech students.

The Ministry of Shipping, Govt. of India approved the B.Tech course for the M.O.T. Certificate Examination. The Indian Navy has recognized this department as a centre for the higher education of their [officers](#). The Department has a highly qualified and dedicated

faculty, an excellent library, computer centre, laboratories and workshops. The faculty have over 100 research publications to their credit. The course is also accredited by the [Royal Institution of Naval Architects](#) (RINA), UK as satisfying the [Engineering Council](#) (UK) requirements for the registration at stage 1 of the [Chartered Engineer](#) section. An academic collaboration took birth with [Chosun University, Republic of South Korea](#) in 2003 whereby exchange of students and faculty members take place.

The quality of education imparted and the resulting professional competence of the graduates enabled the Department to achieve a unique record of over 100 percent job placement of its graduates in India and abroad. In the year 2007-08 the job placement of the 29th batch of Naval Architects was as high as 426% with salaries as high as 1.8 million [INR](#) per annum. ^[5].

4. 2. 5. International School of Photonics

Manpower development and establishment of research activities in photonics and related fields are the major objectives of ISP. A three semester M.Tech course in Optoelectronics and Laser Technology and an M.Phil course in Photonics are offered, with an objective to train teachers in the area of photonics. At present the school has collaborative research activities with various institutions in India and abroad, including the Eindhoven University of Technology in the Netherlands. This joint programme is supported under the MHO assistance offered by the Dutch government to ISP.

4. 2. 6. Department of Computer Applications

The Department of Computer Applications offers Master's programme in Computer Applications and research programmes leading to Ph.D., sanctioned to the University jointly by U.G.C, and Dept. of Electronics, Govt, of India. Guest lectures, seminars by experts in IT, workshops and symposia are regularly organized in the department.

4. 2. 7. Department of Computer Science

The department has excellent laboratory facilities with most modern computing environments, at present the lab has LANs with windows NT and GNU/Linux servers with 25 nodes silicon Graphics workstation, and oracle RDBMS server with 15 clients ^[citation needed]. The department has initiated and successfully completed several projects funded by agencies like UGC, AICTE, and DST. The department currently coordinates infrastructure oriented as well as research oriented projects. The department has a library with around 3500 titles and a handful of leading journals in several areas of computing.

4. 3. Faculty of Engineering

4. 3. 1. School of Engineering, Thrikkakara

The School of Engineering (SOE) at Thrikkakara offers Bachelor of Technology courses in

the following engineering branches:

- Civil Engineering
- Mechanical Engineering
- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering
- Information Technology
- Mechanical Engineering
- Safety and Fire Engineering

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4. 3. 2. CUCEK, Pulinkunnu

4. 4. Faculty of Environmental Studies

- School of Environmental Studies

4. 5. Faculty of Humanities

- Department of Culture and Heritage

4. 6. Faculty of Law

4. 6. 1. School of Legal Studies

The School of Legal Studies is located in the main campus. The school was established in 1962 as the Department of Law of Kerala University and subsequently merged with Cochin University in 1971.

4. 7. Faculty of Marine Sciences

The faculty of marine sciences consists of the following

- School of Ocean Science and Technology
- School of Industrial Fisheries
- Department of Atmospheric Sciences
- Department of Chemical Oceanography
- Department of Marine Biology
- Microbiology and Biochemistry
- Department of Marine Geology and Geophysics
- Department of Physical Oceanography

4. 8. Faculty of Medical Sciences and Technology

4. 8. 1. Department of Biotechnology

The Department of Biotechnology was established in 1991. The M.Sc. course in Biotechnology which was initially started in the Department of Applied Chemistry was later transferred to this department with an annual student intake of 10. It also offers a Ph.D. programme. The professional M.Sc. course is designed to train students in frontier areas of biotechnology. The research activities of the Department are presently focused on areas such as Microbiology, Molecular Neurobiology and Cell Biology, Medical Biochemistry, [Genetic Engineering](#) and Plant Biotechnology.

4. 9. Faculty of Social Sciences

4. 9. 1. Department of Applied Economics

The Department of Applied Economics offers Post graduate degree in Applied Economics (M.A Applied Economics) M.Phil and Ph.D. programmes. Situated in a Science and Technology academic environment, the department's research mainly focuses on economics of the technology. Apart from Economics, two areas where the department has attained considerable teaching capability are econometrics and operations research. The Cochin city has an important industrial belt around and a long coastal area suitable for fishing activities. Further, the industrial and fishing activities have contributed much to environmental pollution in the area. Therefore, the department has devoted its research to the technology problems of industry and the fisheries sector and also economics of the environment. Small business economics and flexible specialization is another area of research in the department.

4. 9. 2. School of Management Studies

The School of Management Studies (SMS) is one of the oldest academic units of the University. It actively pursues all the four areas of academic activity, viz., teaching, training, research and consultancy. It offers a 4-semester full-time and a 6-semester part-time M.B.A. programme in addition to a 4-semester full-time Masters' programme in International Business (M.I.B.). All these programmes provide considerable options to specialize in different functional areas. Currently the School offers specialization in the areas of Marketing, Finance, Systems and Operations and Human Resource Management. The School also offers Ph.D. Programmes.

Talentime, a cultural and management fest conducted by SMS is one of the famous events of the state and is attended by various enthusiasts from all over India.

5. Departments

CUSAT has at present 29 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. ^[6] .

5. 1. Centre of Excellence in Lasers and Optoelectronic Sciences (CELOS)

CUSAT established a separate CELOS in July 2002 which conducts manpower training in Photonics and related fields. The activities under CELOS have been proposed by the Department of Physics and Department of Electronics in CUSAT. CELOS also offers a five year integrated M.Sc degree course in Photonics.

6. External links

- [CUSAT Homepage](#)
- [School of Engineering](#)
- [CUCEK Homepage](#)
- [Centre of Excellence in Lasers and Optoelectronic Sciences](#)
- [International School of Photonics](#)
- [Dept. of Computer Applications](#)
- [Dept. of Computer Science](#)
- [Dept. of Electronics](#)
- [Dept. of Instrumentation](#)
- [International School of Photonics](#)
- [Department of Ship Technology](#)
- [Polymer Science and Rubber Technoogy](#)
- [Dept. of Applied Economics](#)
- [School of Management Studies](#)
- [Dept. of Applied Chemistry](#)
- [Dept. of Biotechnology](#)
- [Dept. of Mathematics](#)
- [Dept. of Physics](#)
- [Dept. of Statistics](#)
- [Dept. of Atmospheric Sciences](#)
- [Dept. of Chemical Oceanography](#)
- [Dept. of Physical Oceanography](#)
- [Marine Biology, Microbiology, Biochemistry](#)
- [Marine Geology and Geophysics](#)
- [School of Industrial Fisheries](#)
- [School of Legal Studies](#)
- [Dept. of Culture and Heritage](#)
- [Dept. of Hindi](#)

- [School of Environmental Studies](#)
- [Div. of Civil Engg.](#)
- [Div. of Computer Engg.](#)
- [Div. of Electrical Engg.](#)
- [Div. of Electronic Engg.](#)
- [Div. of Information Tech.](#)
- [Div. of Mech. Engg.](#)
- [Div. of Safety & Fire Engg.](#)

7. References

1. "IEST press release". <http://www.pib.nic.in/archieve/others/2007/May07/2007050113.pdf>.
2. "Kerala says no to technical university". *The Economic times*. 18 June, 2008. http://economictimes.indiatimes.com/News/News_By_Industry/Services/Education/Kerala_says_no_to_technical_university/articleshow/3142715.cms. Retrieved March 21, 2010.
3. "Cusat -overall". <http://cusat.ac.in/cusatoverall.PDF>. Retrieved 2008-06-23.
4. "The University: About CUSAT". <http://www.cusat.nic.in/about-univ.htm>. Retrieved 2009-09-26.
5. "The Hindu Kerala/Kochi News - Record placements for Ship Technology Students". <http://www.hindu.com/2008/07/17/stories/2008071758300300.htm>. Retrieved 2008-10-26.
6. "CUSAT Brochure". <http://soe.cusat.ac.in/placement/brochure.pdf>. Retrieved 2008-10-26.



