

Sree Chitra Thirunal College of Engineering (SCTCE), located in Thiruvananthapuram, Kerala, was established by the Government of Kerala in 1995. It was established in memory of the Great Maharaja of Travancore and is affiliated with the APJ Abdul Kalam Technological University (KTU) of Kerala. The institution is approved by the All India Council for Technical Education (AICTE).

The primary objective of SCTCE is to groom young men and women into technocrats through the process of engineering education, training, and research. It offers a total of 7 undergraduate and postgraduate courses, along with being a research center under APJ Abdul Kalam Technological University. The curriculum aims to provide students with a strong foundation in engineering fundamentals while encouraging analytical thinking, teamwork, entrepreneurship, and ethical values, thereby preparing them for successful careers.

The leadership at SCTCE includes the Chairman, who is The Hon'ble Minister of Transport, Government of Kerala, and the Vice Chairman, who is the Secretary to Government (Transport), Government of Kerala. Additionally, the Principal oversees the day-to-day operations of the college.

SCTCE takes pride in its achievements, including congratulating students of Biotechnology and Biochemical Engineering in the B Tech examination, as well as the recruitment of 24 students by Tata Elxsi. Furthermore, it hosted the 9th IEEE WIECON - ECE in 2023.

The college offers various facilities and services to its students, including projects, labs, research areas, training, and consultancy. It is also accredited by organizations such as the National Board of Accreditation (NBA), the National Institutional Ranking Framework (NIRF), and the Atal Ranking of Institutions on Innovation Achievements (ARIIA).

For contact, SCTCE can be reached at +91-471-2490572 or via email at [principal@sctce.ac.in](mailto:principal@sctce.ac.in). The college is located at Pappanamcode, Thiruvananthapuram, Kerala - 695018. The copyright for the content of the college website is reserved for 2023 and the website is designed by Etuwa Concepts.

**\*\*Contact Information:\*\***

- Phone: +91-471-2490572

- Email: [principal@sctce.ac.in](mailto:principal@sctce.ac.in)

**\*\*Institution Details:\*\***

- Name: Sree Chitra Thirunal College of Engineering (SCTCE)
- Location: Thiruvananthapuram, Kerala
- Establishment Year: 1995
- Affiliation: APJ Abdul Kalam Technological University (KTU) of Kerala
- Approval: AICTE

**\*\*Mission and Vision:\*\***

- Mission: To groom young men and women into technocrats through engineering education, training, and research.
- Vision: To become an engineering and technology institution renowned for producing professionally capable and socially responsible engineers. To create a learning process for students to acquire engineering fundamentals, in an environment that encourages analysis, teamwork, entrepreneurship, and ethical values, thus preparing them for productive careers.

**\*\*Leadership:\*\***

- Chairman: The Hon'ble Minister of Transport, Government of Kerala
- Vice Chairman: Secretary to Government (Transport), Government of Kerala
- Principal: Sree Chitra Thirunal College of Engineering (SCTCE)

**\*\*Achievements:\*\***

- Congratulates students of Biotechnology and Biochemical Engineering in the B Tech examination.
- 24 students of SCTCE recruited by Tata Elxsi.
- Hosted 9th IEEE WIECON - ECE in 2023.

**\*\*Academic Programs:\*\***

- Undergraduate Programs: 6
- Postgraduate Programs: 3
- PhD Programs
- Twinning Programs

**\*\*Accreditations:\*\***

- NBA

- NIRF
- ARIIA

**\*\*Activities:\*\***

- Major Activities
- Statistics

**\*\*Facilities and Services:\*\***

- Projects
- Labs
- Research Areas
- Training
- Consultancy

**\*\*Address:\*\***

Sree Chitra Thirunal College of Engineering  
Pappanamcode, Thiruvananthapuram, Kerala - 695018

Principal of sct is Dr. C. Sathish Kumar. His email is [principal@sctce.ac.in](mailto:principal@sctce.ac.in) and phone no is +91-471-2490572

Dr. C. Sathish Kumar serves as the Principal of Sree Chitra Thirunal College of Engineering (SCTCE). With a vast experience spanning over 32 years in the field of education, he has held prestigious positions such as Principal of Rajiv Gandhi Institute of Technology, Kottayam, and Government Engineering College, Idukki, each for 2 years. Dr. Kumar holds a B.Tech. degree in Electronics & Communication Engineering from TKM College of Engineering, Kollam, an M.Tech. degree from Indian Institute of Technology Bombay, and a Ph.D. from PSG College of Technology, Coimbatore, under Bharathiar University.

Throughout his career, Dr. Kumar has been actively involved in academic leadership roles, serving as the Dean of Faculty of Engineering and Chairman of Board of Studies (PG) at University of Calicut. He has also contributed to the governance of APJ Abdul Kalam Technological University,

Thiruvananthapuram, as a member of the Syndicate and the Board of Governors. Additionally, he has played pivotal roles in academic councils and committees, including being the Convenor of the Syndicate Standing Committee on Examinations at APJ Abdul Kalam Technological University and a Senate Member of Cochin University of Science and Technology.

In the realm of research, Dr. Kumar has made significant contributions, guiding two research scholars to obtain their Ph.D. degrees and publishing over 40 research papers, including notable publications in SCIE and Scopus-indexed journals. He has also secured substantial funding for institutions through sponsored projects and organized national conferences. Furthermore, his expertise is recognized internationally as he serves as a reviewer for SCIE international journals and as a Ph.D. examiner for universities such as Anna University Chennai, Pondicherry University, and University of Kerala.

For contact, Dr. C. Sathish Kumar can be reached at +91-471-2490572 or via email at [principal@sctce.ac.in](mailto:principal@sctce.ac.in). The college is located at Pappanamcode, Thiruvananthapuram, Kerala - 695018. The copyright for the content of the college website is reserved for 2023 and the website is designed by Etuwa Concepts.

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**\*\*Contact Information:\*\***

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- Email: [principal@sctce.ac.in](mailto:principal@sctce.ac.in)

**\*\*Principal:\*\***

- Name: Dr. C. Sathish Kumar
- Experience:
  - Principal of Rajiv Gandhi Institute of Technology, Kottayam, and Government Engineering College, Idukki, each for 2 years.
  - More than 32 years of experience as faculty in Government Engineering Colleges in the state.
- Education:
  - B.Tech. in Electronics & Communication Engineering from TKM College of Engineering, Kollam.
  - M.Tech. from Indian Institute of Technology Bombay.
  - Ph.D. from PSG College of Technology, Coimbatore, under Bharathiar University.
- Academic Roles:

- Dean of Faculty of Engineering and Chairman of Board of Studies (PG) at University of Calicut.
- Member of the Syndicate and the Board of Governors of APJ Abdul Kalam Technological University, Thiruvananthapuram during 2021-23.
- Member of Academic Council and Convenor of Syndicate Standing Committee on Examinations in APJ Abdul Kalam Technological University.
- Senate Member of Cochin University of Science and Technology during 2021-23.
- Research:
  - Guided two research scholars for their Ph.D. degree.
  - More than 40 research publications, including 10 SCIE and 2 Scopus research papers.
  - Acquired around 38 lakhs for institutions through sponsored projects from various agencies.
  - Organized two national conferences.
  - Reviewer of six SCIE international journals.
  - Served as Ph.D. examiner of Anna University Chennai, Pondicherry University, and University of Kerala.

**\*\*Address:\*\***

- Sree Chitra Thirunal College Of Engineering
- Pappanamcode, Thiruvananthapuram, Kerala – 695018

**Dean Academic is Dr. Anoop Kumar S holds a B.Tech degree in Mechanical Engineering from the College of Engineering, Trivandrum, which he completed in 1993. Subsequently, he pursued his MTech degree in Mechanical Engineering with a specialization in Machine Design from the same institution in 1995. Dr. Anoop Kumar S began his academic journey at SCTCE as a Lecturer in Mechanical Engineering on October 18th, 1996. With an extensive teaching experience spanning over 27 years, he has made notable contributions to academia. He has authored eleven publications in journals, including SCIE/SCOPUS/UGC-CARE indexed journals, and has presented fourteen conference papers. Dr. Anoop Kumar**

**S has also served as a reviewer for esteemed publications such as Industrial Lubrication and Tribology, Journal of the American Oil Chemists' Society, and Biomass Conversion and Biorefinery. He has contributed significantly to the academic and administrative landscape, holding various key responsibilities at both college and university levels. These include serving as the Head of the Department of Mechanical Engineering at SCTCE, a member of the Board of Studies for Management Studies at KTU, Convener of the District Examination Squad (Trivandrum Squad 1) at KTU, and participation in committees such as the Syllabus Committee, Timetable Committee, and PG Board at SCTCE. Dr. Anoop Kumar S is actively engaged in professional society activities, holding memberships in prestigious organizations such as the Institution of Engineers, India, the Indian Society for Technical Education (ISTE), the Indian Society of Non-Destructive Testing (ISNT), and the Tribology Society of India (TSI). His major areas of interest include Tribology, Composites, Operations Management, and Human Resources Management.**

Here's the structured information:

**\*\*Name:\*\*** Dr. Anoop Kumar S

**\*\*Education:\*\***

- B.Tech Degree in Mechanical Engineering from College of Engineering, Trivandrum in 1993.
- MTech degree in Mechanical Engineering (Machine Design) from College of Engineering, Trivandrum in 1995.

**\*\*Professional Experience:\*\***

- Joined SCTCE as Lecturer in Mechanical Engineering on October 18th, 1996.
- Teaching experience of 27 years.
- Authored eleven publications in journals, including SCIE/SCOPUS/UGC-CARE indexed journals, and presented fourteen conference papers.
- Reviewed publications in journals like Industrial Lubrication and Tribology, Journal of the American Oil Chemists' Society, Biomass Conversion and Biorefinery, and conference publications.
- Acted as a subject expert in departmental promotion committees of NIIST and VSSC.

**\*\*Recent Responsibilities at College/University Level:\*\***

- Head, Department of Mechanical Engineering, SCTCE (29-03-21 to 28-03-23)
- Member, Board of Studies, Management Studies, KTU
- Convener, District Examination Squad, Trivandrum Squad 1, KTU
- Member, Syllabus committee, Mechanical (Production), KTU
- Convener, Timetable Committee, SCTCE
- Convener, PG Board, SCTCE
- Staff Coordinator, College chapter of Indian Society of Non-Destructive Testing (ISNT)
- Member, Internal Quality Assurance Cell, SCTCE
- Member, High Power Committee for Accreditation, SCTCE, etc.

**\*\*Professional Society Memberships:\*\***

- Fellow and Chartered Engineer – Institution Engineers, India
- Life Member of Indian Society for Technical Education (ISTE)
- Life Member of Indian Society of Non-Destructive Testing (ISNT)
- Life Member of Tribology Society of India (TSI)

**\*\*Areas of Interest:\*\***

- Tribology
- Composites
- Operations Management
- Human Resources Management

Dean post graduate (pg studies) is Here's the structured information:

**\*\*Name:\*\*** Dr. S. H. Anilkumar

**\*\*Education:\*\***

- B.Tech Degree in Mechanical Engineering from College of Engineering, Trivandrum in 1992.
- MTech degree in Mechanical Engineering (Thermal Science) from College of Engineering, Trivandrum in 1995.
- PhD in Mechanical Engineering from National Institute of Technology, Calicut in 2010.

**\*\*Professional Experience:\*\***

- Started as a Lecturer in Mechanical Engineering at The Indian Engineering College, Vadakkangulam, Tamilnadu from October 31st, 1994.
- Lecturer in Mechanical Engineering at College of Engineering [ IHRD ], Chengannur from November 27th, 1995.
- Joined SCTCE as Lecturer in Mechanical Engineering from October 28th, 1996.
- Promoted to Senior Lecturer in Mechanical Engineering from October 28th, 2001.
- Worked on PhD at National Institute of Technology, Calicut from July 23rd, 2004.
- Held the post of the HOD of the Mechanical Engineering Department from November 1st, 2013, to April 28th, 2016.
- In charge of Principal from April 19th, 2017, to June 4th, 2018.
- Presently working as Dean PG Studies.

**\*\*Professional Society Memberships:\*\***

- Fellow of Institution of Engineers and Chartered Engineer – Institution Engineers, India.
- Life Member of ISTE (Indian Society for Technical Education).
- Life Member of Combustion Institute.
- Life Member of Indian Society for Heat and Mass Transfer.
- Affiliate Member of American Society for Mechanical Engineers.

**\*\*Areas of Interest:\*\***



- Convective Heat Transfer in an enclosure utilizing different fluids.
- Waste management in Transport sector.
- Internal Combustion Engines.
- Research Methodology.

Dr. S. H. Anilkumar completed his B.Tech Degree in Mechanical Engineering from the College of Engineering, Trivandrum in 1992, followed by an MTech degree in Mechanical Engineering (Thermal Science) from the same institution in 1995. With a total of 27 years of teaching experience, he embarked on his academic career as a Lecturer in Mechanical Engineering at The Indian Engineering College, Vadakkangulam, Tamilnadu, before joining SCTCE as a Lecturer in Mechanical Engineering in October 1996. Over the years, he has made significant contributions to academia, earning his PhD in Mechanical Engineering from the National Institute of Technology, Calicut in 2010. Dr. Anilkumar has authored four journal publications and presented ten conference papers, including presentations at international conferences held at Imperial College, London, and Heidelberg, Germany in 2008. He is actively engaged in professional society activities, holding memberships in esteemed organizations such as the Institution of Engineers and the Indian Society for Technical Education. Presently, he serves as the Dean of PG Studies at SCTCE. His areas of interest include Convective Heat Transfer in enclosures utilizing different fluids, Waste management in the Transport sector, Internal Combustion Engines, and Research Methodology. Additionally, he has actively participated in various short-term courses at renowned institutions such as IIT Madras, IIT Kanpur, IIT Bhubaneswar, NIT Calicut, and other engineering colleges in India. Dr. Anilkumar has also contributed as a subject expert in the departmental promotion committees of NIIST, VSSC, and SCTIMST.

## Professor and Dean of Student Affairs is Dr. Shyji .

his email is [shyjis@sctce.ac.in](mailto:shyjis@sctce.ac.in) and phone number is 9447310825. Dr. Shyji

completed his B.Tech (1997), M.Tech (2001) and PhD (2019) in Mechanical Engineering from University of Kerala. He joined the college in March 2001 as Lecturer in Mechanical Engineering and is continuing as Associate professor. During his past 22 years of service in the college, he enjoyed the duties of the Convenor-Centre for continuing Education(CCE), Member - Academic Council, Member - TEQIP committee, Head - Innovation Centre for the retrofitting of the Diesel bus to Electric Bus, member - PG Board of Studies(KTU), representative of KTU - PG Board of studies of Mar Baselios College of Engineering etc. He is a life member of ISTE and ISHMT. He has a quite pretty number of technical publications in International Journals and presented topics in International Conferences.

Email ID : shyjis@sctce.ac.in

Phone No : 9447310825

Qualification : Ph.D

Designation : Associate Professor& Dean (Student Affairs)

**Dean Planning and Development is Dr. George M Joseph .Dean planning and development is in charge of formulating the expansion and diversification plan of institutional activities, and the Institute's future vision for infrastructure enhancement. The dean is also responsible for Preparation of all developmental and maintenance proposals,monitoring the progress and utilization of funds.**

**Dr. George M Joseph started his career in this institute in the year 2001 as lecturer in the Department of Electronics and Communication Engineering and currently designated as Associate professor in the same department. He secured Masters in Electronics Design Technology from National institute of technology, Calicut and Ph.D. from University of Kerala in Design of High Performance data converters.**

## College Office

Name	Designation
Sajitha Kumari R	Administrative Officer
Indulekha K. N	Junior Superintendent

Biju V A	Junior Superintendent
N K Pradeep Kumar	Civil Engineer
Asha G. K	Head Accountant
Lekshmi V	Senior Clerk
Asha R.P	Confidential Assistant
Aswathy R.B	LDC
Priyadarshini M. R	Clerical Assistant
Sri.Giju C	Electrician
Sri.Kirannath .G	Plumber
Sambasivan S	Driver (Senior)
Anil P	Driver Grade II (Higher Grade)
Sreekanth V S	Driver Grade II
K. Ayyappan	Office Attendant
Jayavalli	Office Attendant
Princy R S	Office Attendant
Rajeshkumar J S	Driver Cum Office Attendant
Suja A	P T Sweeper
K Retnamma	P T Sweeper
Sarojini B	P T Sweeper
Usha Nandini	P T Sweeper
Sanooja	P T Sweeper
P.Ambika	P T Sweeper

# Government Funds

## Financial Year : 2023-24

Sl.No	Fund	Amount	Sanctioning Authority
1	<u>Plan Fund</u>	9 cr	Govt. of Kerala

## Financial Year : 2022-23

Sl.No	Fund	Amount	Sanctioning Authority
1	<u>Plan Fund</u>	9 cr	Govt. of Kerala
2	<u>AICTE-RPS</u>	19 lakhs	Govt. of India

## Financial Year : 2021-22

Sl.No	Fund	Amount	Sanctioning Authority
1	<u>Plan Fund</u>	9 cr	Govt. of Kerala

## Financial Year : 2020-21

Sl.No	Fund	Amount	Sanctioning Authority
1	<u>Plan Fund</u>	9 cr	Govt. of Kerala

## Financial Year : 2019-20

Sl.No	Fund	Amount	Sanctioning Authority
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1	<u>DST</u>	44.5 lakhs	Govt. of Kerala
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## Board of Governors

**K.B. Ganesh Kumar-**

Chairman

Hon'ble Minister for Transport

Government of Kerala.

**Sri.Biju Prabhakar IAS**

Secretary

Secretary to Government & CMD, KSRTC Transport Department

Government of Kerala

**Sri.Ajayan.C**

Additional Secretary to Government

Higher Education Department

Government of Kerala

**Smt.Anila. L**

Additional Secretary to Government

Finance Department

Government of Kerala

**Dr. Rajasree M S**

Director of Technical Education, Trivandrum

**Director & Regional Officer,**

All India Council for Technical Education

South Western Regional Office

**Sri.Shaji A**

Financial Advisor and Chief Accounts Officer

KSRTC

**Dr.R.Sasikumar**

Board Member - Educationalist

**Dr. C. Sathish Kumar**

Principal

**Sri.S.B.Asokan**

Board Member - Educationalist

**The following bodies/committees will ensure the smooth functioning of the institution.**

SI No.	Name of the Body/Cell	Faculty in Charge
1	<u>Finance Sub Committee</u>	Principal
2	<u>External Purchase Committee</u>	Principal
3	<u>External Works Committee</u>	Principal
4	<u>Internal Quality Assurance Cell</u>	Principal
5	<u>Disciplinary Action Committee</u>	Dr.Anoop Kumar S
6	<u>Students Grievance &amp; Appeals Committee</u>	Principal
7	<u>Students Welfare Committee</u>	Dr.S.H.Anil Kumar
8	<u>Grievance Redressal Committee for Faculty and Staff</u>	Principal
9	<u>Anti-Ragging Committee</u>	Dr.E.Jayakumar
10	<u>Internal Complaint Committee</u>	Rejimol Robinson
11	<u>Gender Justice Forum</u>	Dr.Soniya.B
12	<u>SC/ST Cell</u>	Dr.Kavilal.E.G

13	<u>Innovation &amp; Entrepreneurship Development Cell</u>	Sri. Sabu.V.R
14	<u>Career Guidance &amp; Placement Unit</u>	Dr. Sabu.V.R
15	<u>NSS Unit</u>	Sri.Chitharanjan K Sri.Baji K
16	<u>Building, Civil &amp; Fumiture Maintenance</u>	Dr.George M Joseph
17	<u>Electrical, AC &amp; Plumbing Maintenance</u>	Dr.Boby Philip
18	<u>Transportation</u>	Sri. Rajesh.S.P
19	<u>Library Council</u>	Dr.Abhilash.S.S
20	<u>Research &amp; Consultancy Projects</u>	D .Mohan. G
21	<u>Professional Societies</u>	Smt. Asha S
22	<u>Computer Services &amp; Networking</u>	smt. Rejimol Robinson
23	<u>Collie Union &amp; Studént Activitiesincluding CULT A WAY</u>	Sri. George M Joseph
24	<u>Canteen Committee</u>	Dr.Arun.M
25	<u>Staff Welfare</u>	Sri. Baji.K
26	<u>Hostel Committee</u>	Dr. Arun M
27	<u>College Magazine, Publication &amp; PublicRelation</u>	Dr. Gijoy.S
28	<u>Attendance Monitoring (Staff &amp; Students)</u>	Dr.Subu Surendran
29	<u>AICTE Application &amp; Accreditation</u>	Dr.Subu Surendran
30	<u>House Keeping</u>	Smt. Ani Lawrence
31	<u>Class/Time table Monitoring</u>	Dr.Shyji.S

## **SCTCE Alumni Association (SCEAA)**

SCT College of Engineering, located in Pappanamcode, Thiruvananthapuram, is a prestigious engineering institution in Kerala. Established in 1995 under the Transport Department of the Government of Kerala, the college is affiliated with APJ Abdul Kalam Technological University.

### **About the Alumni Association**

The Sree Chitra Thirunal College of Engineering Alumni Association (SCEAA) was formed in 2005 and is registered under the 12th section of the Travancore–Cochin Literary, Scientific, and Charitable Societies Act of 1955. The association plays a crucial role in the college's development and welfare activities. It aims to foster strong bonds among alumni, providing a platform for networking, collaboration, and mentorship opportunities.

### **Objectives of the Alumni Association:**

1. Sponsorship and Support: The association sponsors and supports activities to enhance education at the college.
2. New Opportunities: It organizes activities that provide new opportunities for SCTCE students.
3. Scholarships and Stipends: The association awards scholarships and stipends for study, research, and apprenticeships through the creation of endowments.
4. Construction and Amenities: It assists in the construction and maintenance of student amenities.

### **Chapters and Committees:**

The association has chapters in various cities across India, including Mumbai, Delhi, Bangalore, Chennai, and Kochi. International chapters are located in Qatar and the UAE. The association has the authority to enroll members, form committees and sub-committees, call for periodical meetings, and establish chapters both in India and abroad.

### **Executive Committee:**

- Dr. C Sathish Kumar - President (Principal, SCTCE)
- Sri. K. S. Gopakumar - Vice President (9447088866)
- Dr. Kavilal E.G. - Secretary (8714247259)



- Smt. Kuttymalu V.K. - Joint Secretary (9544452293)
- Sri Al Muneef - Treasurer (9995566456)

**Members:**

- Dr. Rinu Sathyan (9495392468)
- Sri Anoop M. S. (9496814506)
- Sri Noble Bhasi (9947379176)
- Sri Baiju Bhaskar S. B. (9447377977)
- Sri Kesavan K. (9176760066)
- Sri Anjith R. S. (9495392597)
- Sri Vipin V. S. (8089256325)
- Sri Shyam S. (8943231992)
- Sri Aswin S. (9946662480)
- Sri Faiz Mohammed Haneef (9995301605)
- Dr. Sreejith B. J. (9447101133)

**Special Invitees (Teachers at SCTCE):**

- Sri. Rajesh S. P.
- Smt. Rejimol Robinson R. R.
- Smt. Lekshmy D. Kumar
- Dr. Nisha Jose K.
- Smt. Kavitha K. V.
- Dr. Smitha P. S.
- Sri. Biju Jacob
- Sri. Baji K.
- Smt. Vineetha Lekshmy P. V.
- Dr. Kamal Krishna R.
- Dr. Abhilash S. S.
- Smt. Aparna P. R.

The SCEAA continues to support the college's mission of providing quality education and enhancing the overall development of its students.

## **Library**

The Central Library facilitates the creation of new knowledge through the acquisition, organization, and dissemination of knowledge resources, along with providing value-added services. The library houses more than 32,000 books and 66 national and international journals/magazines. In addition to the conventional library, a digital library exists containing e-books, e-journals, technical reports, project reports, and more.

The SCTCE Library provides access to e-journal packages such as IEL Online (IEE), Elsevier's Science Direct, ASME, Springer, DELNET, and NDL membership. E-resources are accessible through the campus Wi-Fi network to all computers and Wi-Fi-enabled laptops and cell phones in the institute. DELNET can be accessed remotely by authorized users. Approximately 250,000 INR is spent annually on procuring various information sources. The library's Proficiency Corner stocks books for competitive examinations like Civil Services, GATE, NDA, CDS, and CAT.

Library operations are fully automated with the Library Management Software LIBSOFT. Books are arranged on open access shelves for easy search and retrieval and are classified according to the Dewey Decimal Classification (DDC) system.

The Library Council, a nominated body, plays a crucial role in evolving policies and services to improve library operations. The council ensures the smooth functioning of the library, which provides excellent services facilitating information management, self-motivated learning, and the preservation of knowledge for the enlightenment and inspiration of budding engineers.

Important Library Services:

- D Space Digital Repository
- Reprographic Facility
- User Education Programme
- SDI (Selective Dissemination of Information)

- CAS (Current Awareness Services)
- OPAC (Online Public Access Catalogue)
- Digital Library (digitallibrary@sctce.ac.in)
- E-journals/E-books
- Printed Journals/Newspapers
- Previous Question Papers
- Proficiency Corner

#### NDL Club Executives:

- Club Patron: Dr. V Syam Prakash, Principal
- Club President: Dr. Abhilash S.S, Convener, Library Committee
- Club Secretary: Smt. Priyanka S, Librarian Gr.II
- Executive Member: Sri. Runny Bai S, Librarian Gr.III

#### Library Team:

- Smt. Rekha R, Librarian Grade III
- Smt. Priyanka S, Librarian Grade II
- Smt. Renimol S S, Librarian Grade III
- Sri. Runny Bai S, Librarian Grade III
- Sri. Renju Kumar, Office Attendant
- Sri. Vipin Raj P K, Office Attendant

## **Sports**

Our institution provides excellent facilities for the development of sports activities among students. The entire sports program is coordinated by the sports committee, headed by the Principal. The committee's convenor, nominated by the Principal each academic year, is currently Dr. Arun M., Assistant Professor in the Department of Mechanical Engineering. The committee members, also nominated by the Principal, include faculty and other supporting staff.

As per KTU statute, a sports council also functions in the college. The convenor of the sports council is a faculty member in charge of sports activities. The council includes two elected staff members, the college's sports secretary, and two student members.

#### Facilities:

The institution has a basketball court, badminton court, volleyball court, cricket practice nets, and a handball practice facility. Students are also permitted to practice on various turfs located near the institution as needed.

#### Coaches:

A Physical Education Officer, appointed on a contract basis by the PTA, oversees sports activities. Currently, Mr. Sanclin Nelson, specializing in basketball, holds this position. During championship seasons, the handball team is provided with a coach, currently Mr. Athul S S Nair.

#### Achievements 2022-23:

##### Handball:

Our team participated in the KTU A-Zone handball tournament and qualified for the KTU Inter-zone handball tournament. Selection trials were organized in October 2022, and a team of 16 players was selected. Coach Athul S S Nair led the coaching camp, which started on October 22 and was later shifted to VHSS Nemom. Practice included several matches with teams from Trivandrum and assistance from university and Kerala Handball team players. The KTU A-Zone tournament was held on November 14, 2022. Coaching for the Inter-zone started on November 20. The team was led by Mr. Govind K (Captain) and Abhishek H (Vice-Captain). The team won the KTU A-Zone Runner-Up Trophy.

##### Football:

Our football team secured 3rd place in the KTU A-Zone championship and won the TKM intercollegiate tournament 2022-23. The team was led by final year student Mr. Akash P.

##### Basketball:

Our basketball team was the 2nd runner-up in the KTU A-Zone championship and won the intercollegiate tournament conducted by Mohandas College of Engineering. The team was

led by Mr. Nithin Sreekumar, who also represented KTU in the South Zone basketball championship.

Cricket:

Our cricket team was the first runner-up in the KTU A-Zone cricket tournament and qualified for the KTU Inter-zone cricket tournament. The team was led by Mr. Anand.

Kho-Kho:

Our Kho-Kho team secured 3rd position in the KTU A-Zone championship.

Athletic Team:

Twenty-six athletes participated in the KTU Athletic meet held at Chandrasekharan Nair Stadium. Mr. Nithin S of the fourth semester in Automobile Engineering secured a bronze medal in the men's discus throw.

Volleyball Team:

Our women's volleyball team participated in the KTU Inter-zone volleyball championship at TKM College of Engineering, Kollam. The men's team also participated in the KTU Inter-zone championship.

Kabaddi Team:

Our men's Kabaddi team participated in the KTU A-Zone tournament. Adarsh K (M7), Sai Rishikesh (U7), and Pranav V P (U3) were selected to participate in the KTU Inter-zone championship.

Badminton Team:

Our women's badminton team secured 4th position in the KTU A-Zone championship. Adarsh R Nair (T7) and Gayathri U G (B7) were selected to participate in the KTU Inter-zone Championship at Muthoot Institute of Technology and Science.

## **Hostel**

The hostel committee at the college provides hostel facilities to students. Each year, the committee invites quotations from various hostels within 7 km of the campus. The committee then visits these hostels to verify their facilities and cleanliness. A list of approved hostels is published on the college notice board.

#### Suggested List of Boys' Hostels - 2023

##### 1. Akshaya Hostel

- Owner: Smt. Bindhu
- Contact Number: 8129795560
- Address: Near SBI, Pappanamcode & Kuttikadu Lane, Opposite Dental Clinic
- Distance from SCTCE: 200 m
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 30
- Vacancy as of 01.08.2023: 20

##### 2. Achus Hostel

- Owner: Smt. Suha G S
- Contact Number: 8136954246, 9495697518
- Address: Susha Bhavan, Palace Road, Pappanamcode (Opp. KSRTC Central Works)
- Distance from SCTCE: 300 m
- Hostel Fees Including Food: Rs. 6200
- Total Capacity: 16
- Vacancy as of 01.08.2023: 3

##### 3. Sreedeeepam Boys Hostel

- Owner: Sri. Sreeju
- Contact Number: 9446186940, 9446684604
- Address: Kairali Garden, Viswambharan Road, Pappanamcode
- Distance from SCTCE: 450 m

- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 80
- Vacancy as of 01.08.2023: 10

#### 4. Blossom Hostel

- Owner: Smt. P Santhamma
- Contact Number: 8891361798
- Address: Nandanam, Opposite Anathapuri School, Viswambaran Road, Pappanamcode
- Distance from SCTCE: 750 m
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 10
- Vacancy as of 01.08.2023: 10

#### 5. Vipas Hostel

- Owner: Sri. Santhosh Kumar
- Contact Number: 9447244188
- Address: Kairali Garden, Viswambharan Road, Pappanamcode
- Distance from SCTCE: 1 km
- Hostel Fees Including Food: Rs. 5500
- Total Capacity: 25
- Vacancy as of 01.08.2023: 18

#### 6. Atham Boys Hostel

- Owner: Sri. Nagarajan
- Contact Number: 8848726001
- Address: SivaLalitham, TC 52/3245 Viswambaran Road, Pappanamcode
- Distance from SCTCE: 1.1 km
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 12

- Vacancy as of 01.08.2023: 8

## 7. Niaz Hostel

- Owner: Sri. M K Nazar
- Contact Number: 9447321328, 8848096564
- Address: Niyas Building, Karakkamandapam, Nemom P.O
- Distance from SCTCE: 1.6 km
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 65
- Vacancy as of 01.08.2023: 23

## Suggested List of Girls' Hostels - 2023

### 1. Chinnus Hostel

- Owner: Smt. Usha Rajkumar
- Contact Number: 9496260318, 0471-2495513, 9446795513
- Address: Chirakkara Palace Lane, Opp. KSRTC Central Work, Pappanamcode
- Distance from SCTCE: 250 m
- Hostel Fees Including Food: Rs. 6500/6000
- Total Capacity: 55
- Vacancy as of 01.08.2023: 15

### 2. Athukshay Girls Hostel

- Owner: Smt. Bindhu
- Contact Number: 8129795560
- Address: V S Apartment, Chirakkara Lane, Kaimanam
- Distance from SCTCE: 450 m
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 50



- Vacancy as of 01.08.2023: 40

### 3. Deepa Prabha Ladies Hostel

- Owner: Smt. Linsa
- Contact Number: 9633391299, 9995460253
- Address: Deepa Prabha, Opp. Aster Lab, Near Whitedammar, NH Road side, Pappanamcode
- Distance from SCTCE: 500 m
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 25
- Vacancy as of 01.08.2023: 25

### 4. Sai Hostel

- Owner: Smt. Sreeja S S
- Contact Number: 9497853750, 9645370579
- Address: TC 51/1965, Parthipuri, Pappanamcode, Opp. Cavalier India Coaching Centre
- Distance from SCTCE: 550 m
- Hostel Fees Including Food: Rs. 6500/6000
- Total Capacity: 25
- Vacancy as of 01.08.2023: 10

### 5. Sudarsanam Ladies Hostel

- Owner: Smt. Suja Rani
- Contact Number: 9846724455, 6238331992
- Address: Vivek Nagar, NSS Karayogam Road, Kaimanam
- Distance from SCTCE: 800 m
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 50
- Vacancy as of 01.08.2023: 14

#### 6. Reyaash Home Stay

- Owner: Smt. Sharmila S
- Contact Number: 9037666515, 8089402500
- Address: TC 52/539, MRA-B 9, Mangalassery Lane, Opp. Govt. Polytechnic, Kaimanam
- Distance from SCTCE: 1 km
- Hostel Fees Including Food: Rs. 6500
- Total Capacity: 10
- Vacancy as of 01.08.2023: 10

#### 7. Ammus Hostel

- Owner: Smt. Neelambika
- Contact Number: 9020973188
- Address: TC 53/2439(1), Opp. CSIR NIIST, Industrial Estate P.O, Pappanamcode
- Distance from SCTCE: 1.5 km
- Hostel Fees Including Food: Rs. 6000
- Total Capacity: 58
- Vacancy as of 01.08.2023: 54

#### 8. Aashiyana Hostel

- Owner: Smt. Reetha
- Contact Number: 9447229223
- Address: Karakkamandapam Junction, Nemom
- Distance from SCTCE: 1.5 km
- Hostel Fees Including Food: Rs. 6500/6000/5500
- Total Capacity: 52
- Vacancy as of 01.08.2023: 23

#### 9. Aashiyana Hostel Annexure

- Owner: Smt. Hiranmayi

- Contact Number: 8137872437
- Address: Karakkamandapam, Nemom
- Distance from SCTCE: 1.6 km
- Hostel Fees Including Food: Rs. 6500/6000/5500
- Total Capacity: 48
- Vacancy as of 01.08.2023: 26

## **College Bus**

The institution operates one college bus, managed by a committee headed by Dr. Kamal Krishna R, Assistant Professor in the Mechanical Engineering Department. The bus follows the same routes in the morning and evening.

Driver: Mr. Sambasivan

Bus Attender: Mr. Rajesh Kumar J S (9495541260)

Route and Fare Details:

- Killipalam: 8:05 AM, Rs. 15
- Attakulangara: 8:08 AM, Rs. 15
- Attukal Complex: 8:10 AM, Rs. 20
- Vazhappally: 8:15 AM, Rs. 20
- SP Fort: 8:18 AM, Rs. 20
- Kaithamukku: 8:23 AM, Rs. 25
- Vanchiyoor: 8:25 AM, Rs. 25
- Pattoor: 8:28 AM, Rs. 25
- Pallimukku: 8:30 AM, Rs. 25
- Kannammoola: 8:33 AM, Rs. 25
- Kumarapuram: 8:35 AM, Rs. 25
- Medical College: 8:38 AM, Rs. 25

- Ulloor: 8:40 AM, Rs. 25
- Kesavadasapuram: 8:45 AM, Rs. 25
- LIC: 8:50 AM, Rs. 25
- Pattom: 8:55 AM, Rs. 25
- Plamoodu: 8:58 AM, Rs. 25
- Palayam - LMS: 9:00 AM, Rs. 20
- Bakery Junction: 9:03 AM, Rs. 20
- Thampanoor: 9:08 AM, Rs. 15
- College (via Palayam): 9:15 AM

## **Entrepreneurship Development Cell**

SCT College of Engineering has established an Entrepreneurship Development Cell (EDC) on its campus to foster and support student entrepreneurs. The primary objective of the cell is to facilitate the successful growth of entrepreneurial ventures by providing a range of business support resources and services. Additionally, the EDC aims to raise awareness among faculty members about the different aspects of entrepreneurship, thus enabling them to serve as guides and motivators for students interested in pursuing entrepreneurship as a career option.

The EDC plays a pivotal role in shaping student entrepreneurs by collaborating with Technology Business Incubation Centers (TBIs). These TBIs, established by the Department of Science & Technology (DST), offer targeted business assistance to nascent firms during their early stages of development, which significantly enhances their chances of success. Recognizing the importance of fostering entrepreneurship among students, the Government of Kerala has allocated 1% of the budget towards promoting entrepreneurship initiatives. Furthermore, the government has announced that facilities and support will be extended to all educational departments and entrepreneurship clubs. Under government directives, each entrepreneur is entitled to attendance relaxation of up to 20% and grace marks of up to 4% distributed across semesters.

A committee comprising faculty members from various departments oversees and manages all programs and events organized by the EDC.

## **Additional Skill Acquisition Programme (ASAP)**

Our college has signed an MoU with the Additional Skill Acquisition Programme (ASAP) Kerala, a Section-8 Company of the Department of Higher Education, Government of Kerala. ASAP focuses on skilling students and the general community to enhance their employability. Established in 2012, ASAP Kerala transitioned to a company under the Companies Act, 2013, in 2021. The main objective of the centre is skilling, upskilling, and reskilling in corporate and academic domains, offering contemporary courses across various domains to prepare a ready-to-deploy workforce.

Nodal Officer: Dr. Shyji S

Associate Professor in Mechanical Engineering

Mobile: 9447310825

Email: shyjis@sctce.ac.in

Technical Staff:

Suresh LB

Trade Instructor

Mobile: 9562915120

Email: sureshcherukara@yahoo.com

## **Skill Delivery Platform of Kerala (SDPK)**

The "Skill Delivery Platform of Kerala" (SDPK) is a project that links various engineering colleges in Kerala with IT parks through a Tele-presence network. It aims to create a state-of-the-art technology-enabled learning platform for remote delivery of high-quality skills programs. This platform is enabled through a dedicated network backbone, Telepresence solution, and Learning Management System. The project aims to connect 150 Hi-Tech classrooms in engineering colleges across the state to deliver skills training to a large number of students annually.

Nodal Officer: Dr. Shyji S

Associate Professor in Mechanical Engineering

Mobile: 9447310825

Email: shyjis@sctce.ac.in

Technical Staff:

Suresh LB

Trade Instructor

Mobile: 9562915120

Email: sureshcherukara@yahoo.com

The main objectives of SDPK are:

- To provide a state-of-the-art technology-enabled learning platform for remote delivery of high-quality skills programs.
- To deploy the learning platform, connecting various Hi-Tech classrooms of different engineering colleges throughout the state.
- Implementation of an effective e-Learning solution with collaboration features for use in a distributed environment.
- To deliver formal skills delivery programs through Minor degree, various certification programs, expert lectures, etc., to enhance learning opportunities and employability of students.

## **PLACEMENT**

### **Career Guidance & Placement (CGPU)**

The Career Guidance and Placement Unit (CGPU), established in the institute from 1998 onwards, interacts with reputed organizations nationwide and abroad to arrange campus interviews for eligible final year students. It assists students in their career planning and provides information to help them give direction to their aspirations and interests. The CGPU

believes in timely counseling and arranges training sessions to enhance students' competitiveness in the industry. Career counseling programs and interactive sessions by eminent persons from industries are conducted periodically.

**Major Activities and Objectives of CGPU:**

- Induction and Orientation program for first-year students
- Arrangement of branch-specific value-added certificate courses to enhance skills
- Branch-specific Placement guidance and internships
- Programs to improve communication abilities
- Resume building
- Subject aptitude knowledge training
- Soft skills training
- Group discussions
- Programs to improve presentation skills
- Vocational training
- Enhancement of industry-institute relationships through collaborative projects
- Mock tests and interviews
- Company-specific training for recruitment
- Preparation for Competitive exams and higher studies like GATE, CAT, GRE, GMAT, TOEFL, etc.
- Foreign language training
- Enhancement of students' interest in entrepreneurship and business strategies
- Job fairs to support eligible students from other colleges

**Placement Static:**

- Batchsize: 408 (2020), 413 (2021), 401 (2022), 443 (2023)
- Registered: 345 (2020), 350 (2021), 397 (2022), 436 (2023)
- Students Placed: 290 (2020), 241 (2021), 388 (2022), 252 (2023)
- Paid Internships: 0 (2020-2022), 72 (2023)
- Placement Percentage: 84% (2020), 69% (2021), 97% (2022), 58% (2023)

**Placement Training:**

The institution emphasizes placement training to groom students' career goals and enhance their employability. The training cell operates within the CGPU to enhance students' capabilities according to industry standards. The training focuses on technical expertise as well as the development of a holistic personality. Training starts from the induction program for freshers.

**Objectives of the Training Cell:**

- Recognize the core competencies of students
- Train students to meet industry expectations through Career Development Programs
- Enhance communication skills
- Build confidence and develop the right attitude in students
- Aim for 100% employment for all eligible students

**Training Activities:**

- Awareness about career planning and mapping
- Life skills and soft skills training
- Group discussion techniques
- Personality development
- Various training programs in quantitative aptitude, logical reasoning, and verbal reasoning

**Activities of CGPU during 2022 - 2023:**

- About 24 companies visited the campus
- Major recruiters included Tata Elxsi, Infosys, SADA India, IBM, Oracle, etc.
- 248 offers were rolled out for the 2023 batch
- 75 students received stipends during their internship at Tata Elxsi
- Partnerships with Infosys for their Campus-Connect program
- Process of signing MOUs with industries to bridge the gap between institute and industry

**Major Recruiting Companies:**



1. Mu-Sigma
2. Tata Elxsi
3. SADA India
4. TCS (Tata Consultancy Services)
5. Zifo
6. EY Gds (Ernst & Young Global Delivery Services)
7. SOTI
8. H&R Block
9. Cognizant
10. Qburst
11. Experion
12. IBS (IBS Software)
13. Envestnet
14. Federal Bank
15. Quest Global
16. Speridian
17. Acsia Technologies
18. NesT Digital
19. Travancore Analytics
20. Blue Binaries
21. Jobin & Jismi IT Service
22. Intellipaat
23. Wheels Wisdom
24. Data Patterns
25. Axis Bank
26. Multi Solution Management
27. Zoho
28. Byju's
29. Infosys

### Contact Us:

The CGPU invites selected companies for campus recruitment procedures. Excellent facilities are provided for conducting the placement process, and CGPU volunteers assist recruiters for smooth conduct.

Placement Officer: Prof. (Dr.) Sabu V.R. Tel: 9447388555

Co-coordinator: Dr. Sreejith B J. Tel: 9447101133

Contact office: Tel: 91-471-2490572, 2490772

E-mail: [cgpu@sctce.ac.in](mailto:cgpu@sctce.ac.in)

The Career Guidance and Placement Unit (CGPU) at the institution, established since 1998, plays a pivotal role in facilitating opportunities for students' career advancement. It actively engages with esteemed organizations both nationwide and abroad to organize campus interviews for final year students, assisting them in kick-starting their professional journey. By providing comprehensive career planning guidance and valuable information, the CGPU aims to align students' aspirations and interests with suitable career paths. The unit prioritizes timely counseling sessions and conducts training programs to enhance students' competitiveness in the industry. Additionally, it hosts career counseling sessions and interactive sessions with industry experts to provide valuable insights into various career domains.

The CGPU's activities and objectives encompass a wide range of initiatives tailored to meet the diverse needs of students. These include induction and orientation programs for first-year students, arrangement of branch-specific value-added certificate courses, placement guidance, internships, communication skill enhancement programs, resume building workshops, subject aptitude knowledge training, soft skills development, group discussions, presentation skills improvement programs, vocational training, and fostering industry-institute relationships through collaborative projects. Furthermore, the unit organizes mock tests, interviews, and company-specific training sessions to prepare students for recruitment processes, competitive exams, and higher studies.

In terms of placement statistics, the CGPU keeps track of batch sizes, student registrations, placements, and internship opportunities. It maintains a focus on achieving high placement percentages, with the aim of ensuring maximum employment opportunities for all eligible students. Moreover, the institution emphasizes placement training to groom students' career goals and enhance their employability. The training cell within the CGPU conducts

various activities aimed at recognizing students' core competencies, training them to meet industry expectations, enhancing communication skills, building confidence, and instilling the right attitude in students. Training activities encompass career planning, life skills and soft skills training, group discussion techniques, personality development, and specialized training in quantitative and verbal reasoning.

During the period of 2022-2023, the CGPU facilitated interactions with approximately 24 companies, including major recruiters such as Tata Elxsi, Infosys, SADA India, IBM, and Oracle. The campus witnessed 248 offers being rolled out for the 2023 batch, with 75 students receiving stipends during their internships at Tata Elxsi. Partnerships were established with Infosys for their Campus-Connect program, and the process of signing Memorandums of Understanding (MOUs) with industries was initiated to bridge the gap between the institute and industry. The CGPU maintains a proactive approach to engage with recruiters, providing excellent facilities for conducting placement processes and offering support through dedicated volunteers.

For further inquiries or to initiate campus recruitment procedures, interested parties can contact the Placement Officer, Prof. (Dr.) Sabu V.R., or the Co-coordinator, Dr. Sreejith B J., via the provided contact details. The CGPU ensures seamless coordination and assistance for recruiters, fostering a conducive environment for successful placement endeavors.

Certainly! Here are the contact details for the Career Guidance and Placement Unit (CGPU):

Placement Officer: Prof. (Dr.) Sabu V.R.

Phone: 9447388555

Co-coordinator: Dr. Sreejith B J.

Phone: 9447101133

Contact Office:

Phone: 91-471-2490572, 2490772

Email: [cgpu@sctce.ac.in](mailto:cgpu@sctce.ac.in)

These contacts can be used to reach out for inquiries regarding campus recruitment procedures or any related assistance needed for placement activities.

### **SCTCE Admissions (KEAM Code: SCT)**

#### **Undergraduate Programs:**

SCT College of Engineering offers the following B.Tech degree programs affiliated with APJ Abdul Kalam Technological University, Kerala:

- \* BB: Biotechnology & Biochemical Engineering (60 seats)
- \* CS: Computer Science & Engineering (60 seats)
- \* CL: Computer Science & Engineering (Artificial Intelligence & Machine Learning) (60 seats)
- \* EC: Electronics & Communication Engineering (120 seats)
- \* ME: Mechanical Engineering (120 seats)
- \* MA: Mechanical Engineering (Automobile) (60 seats)

#### **Tuition Fee Waiver Scheme:**

An additional 10% of students in each program are selected from the KEAM rank list under the Tuition Fee Waiver scheme for women, economically disadvantaged, and physically challenged meritorious students.

## SCTCE Fee Structure for 2023-24 Admission (INR)

### **MERIT (lower fee):**

- Tuition Fees: ₹40,520.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹2,910.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹68,650.00

### **MERIT (full fee):**

- Tuition Fees: ₹75,260.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹2,910.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹103,390.00

### **NRI:**

- Tuition Fees: ₹121,560.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹3,060.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹149,840.00

**TFW:**

- Tuition Fees: ₹0.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹2,910.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹28,130.00

**SC/ST:**

- Tuition Fees: ₹0.00
- Admission Fees: ₹0.00
- KTU Fee: ₹0.00
- Caution Deposit: ₹0.00
- Special Fee: ₹2,910.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹13,400.00

Refundable Deposit (for all NRI): ₹125,000.00

**KEAM Admission – Merit Quota (Lower Fee)**

Admission to 50% of the seats (merit quota-lower fee) in the B.Tech degree programs at Sree Chitra Thirunal College of Engineering (SCT) is based on performance in the Kerala Engineering Architecture Medical (KEAM) examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala.

How to apply for Merit quota (Lower Fee):

The admission procedure at SCT is conducted by CEE through a centralized online counseling process. To be considered for such allotments, candidates should select the "Government (G)" category in the online counseling portal (<https://cee.kerala.gov.in>). There is no need to apply directly to the college for this quota.

Reservation of seats:

Seats in various categories such as SC/ST/OBC/EWS/PWD will be reserved as per the norms of the Government of Kerala.

For more information on KEAM, please visit  
[<https://cee.kerala.gov.in>](<https://cee.kerala.gov.in>).

Seats in Merit quota (lower fee):

- BB-G: Biotechnology & Biochemical Engineering - 30
- CS-G: Computer Science & Engineering - 30
- CL-G: Computer Science & Engineering (Artificial Intelligence & Machine Learning) - 30
- EC-G: Electronics & Communication Engineering - 60
- ME-G: Mechanical Engineering - 60
- MA-G: Mechanical Engineering (Automobile) - 30

### **Eligibility Criteria:**

Applicants should have completed 17 years of age as on 31st December of the year of admission.

Only Indian citizens are eligible for admission. Refer Section 6 of KEAM Prospectus for further details.

Candidates should have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with Physics and Mathematics as compulsory subjects and Chemistry/ Computer Science/ Biotechnology/ Biology as one of the optional subjects with atleast 45% marks (40% for SC/ST/ SEBC or PwD candidates) put together in the above subjects.

Candidates should have qualified the KEAM examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala with a valid score and rank.

Stipulations specified in the KEAM Prospectus will be adhered to, in case of a contest.

#### Fee Structure:

##### First Year (Academic year: 2023-24)

- Tuition Fees: 40,520.00
- Admission Fees: 240.00
- KTU Fee: 6,580.00
- Caution Deposit: 5,000.00
- Special Fee: 2,910.00
- SWAF: 3,850.00
- Institutional Development Fund: 5,000.00
- PTA: 4,500.00
- Society: 50.00

##### Second Year (Academic year: 2024-25)

- Tuition Fees: 42,550.00
- KTU Fee: 5,830.00 [for ME, MA, BT], 5,510.00 [for EC, CS, CL]
- Special Fee: 3,060.00
- SWAF: 750.00
- PTA: 700.00

##### Third Year (Academic year: 2025-26)



- Tuition Fees: 44,680.00
- KTU Fee: 5,830.00 [for ME, MA, BT], 5,510.00 [for EC, CS, CL]
- Special Fee: 3,220.00
- SWAF: 750.00
- PTA: 700.00

Fourth Year (Academic year: 2026-27)

- Tuition Fees: 46,920.00
- KTU Fee: 5,715.00
- Special Fee: 3,390.00
- SWAF: 750.00
- PTA: 700.00

Total:

- For ME, MA, BT: 55,180.00 (Second Year), 55,180.00 (Third Year), 57,475.00 (Fourth Year)
- For EC, CS, CL: 54,860.00 (Second Year), 54,860.00 (Third Year), 57,475.00 (Fourth Year)

Merit Quota (Lower Fee)

KEAM Admission – Merit Quota (Lower Fee)

Admission to 50% seats (merit quota-lower fee) of B. Tech degree programs of Sree Chitra Thirunal College of Engineering (SCT) is based on the performance in the Kerala Engineering Architecture Medical (KEAM) examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala.

How to apply for Merit quota (Lower Fee):

The admission procedure of SCT is conducted by CEE through a centralized online counseling process. To be considered for such allotments, the candidate SHOULD give the option in the online counseling portal (<https://cee.kerala.gov.in>) under the "Government (G)" category. There is NO need to apply directly to the college for this quota.

Reservation of seats to various categories, such as SC/ST/OBC/EWS/PWD, will be followed as per Govt. of Kerala norms.

For information on KEAM, please visit [<https://cee.kerala.gov.in>](<https://cee.kerala.gov.in>).

Seats in Merit quota (lower fee):

- BB-G: Biotechnology & Biochemical Engineering (Intake: 30)
- CS-G: Computer Science & Engineering (Intake: 30)
- CL-G: Computer Science & Engineering (Artificial Intelligence & Machine Learning) (Intake: 30)
- EC-G: Electronics & Communication Engineering (Intake: 60)
- ME-G: Mechanical Engineering (Intake: 60)
- MA-G: Mechanical Engineering (Automobile) (Intake: 30)

Eligibility Criteria:

- Applicants should have completed 17 years of age as of 31st December of the year of admission.
- Only Indian citizens are eligible for admission. Refer Section 6 of KEAM Prospectus for further details.
- Candidates should have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with Physics and Mathematics as compulsory subjects and Chemistry/Computer Science/Biotechnology/Biology as one of the optional subjects with at least 45% marks (40% for SC/ST/SEBC or PwD candidates) put together in the above subjects.
- Candidates should have qualified the KEAM examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala with a valid score and rank.

Fee structure:

- First Year (Academic year: 2023-24):

- TUITION FEES: 40,520.00
- ADMISSION FEES: 240.00
- KTU FEE: 6,580.00 (ME, MA, BT) / 5,510.00 (EC, CS, CL)
- CAUTION DEPOSIT: 5,000.00
- SPECIAL FEE: 2,910.00
- SWAF: 3,850.00
- INSTITUTIONAL DEV FUND: 5,000.00
- PTA: 4,500.00
- SOCIETY: 50.00
- TOTAL: 68,650.00

- Second Year (Academic year: 2024-25):

- TUITION FEES: 42,550.00
- KTU FEE: 5,830.00 (ME, MA, BT) / 5,715.00 (EC, CS, CL)
- SPECIAL FEE: 3,060.00
- SWAF: 750.00
- PTA: 700.00
- TOTAL: 52,890.00

- Third Year (Academic year: 2025-26):

- TUITION FEES: 44,680.00
- KTU FEE: 5,830.00 (ME, MA, BT) / 5,715.00 (EC, CS, CL)
- SPECIAL FEE: 3,220.00
- SWAF: 750.00
- PTA: 700.00
- TOTAL: 55,180.00 (ME, MA, BT) / 54,860.00 (EC, CS, CL)

- Fourth Year (Academic year: 2026-27):

- TUITION FEES: 46,920.00

- KTU FEE: 5,715.00

- SPECIAL FEE: 3,390.00

- SWAF: 750.00

- PTA: 700.00

- TOTAL: 57,475.00

Merit Quota (Full Fee)

KEAM Admission – Merit Quota (Full fee)

Admission to 35% seats (merit quota- full fee) of B. Tech degree programmes of Sree Chitra Thirunal College of Engineering (SCT) is based on the performance in the Kerala Engineering Architecture Medical (KEAM) examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala.

How to apply:

The admission procedure of the merit quota (full fee) is conducted by CEE through a centralized online counseling process. There is NO need to apply directly to the college for this quota.

To be considered for such allotments, the candidate SHOULD give the option in the online counseling portal, under the “Merit quota(Full fee)” category. The fee structure for merit quota (full fee) seats will be different from that of the merit quota (lower fee) seats.

For information on KEAM, please visit [<https://cee.kerala.gov.in>](<https://cee.kerala.gov.in>).

Seats in Merit Quota (Full fee):

- BB-MG: Biotechnology & Biochemical Engineering (Intake: 21)

- CS-MG: Computer Science & Engineering (Intake: 21)

- CL-MG: Computer Science & Engineering (Artificial Intelligence & Machine Learning)  
(Intake: 21)

- EC-MG: Electronics & Communication Engineering (Intake: 42)

- ME-MG: Mechanical Engineering (Intake: 42)
- MA-MG: Mechanical Engineering (Automobile) (Intake: 21)

#### Eligibility Criteria:

- Applicants should have completed 17 years of age as on 31st December of the year of admission.
- Only Indian citizens are eligible for admission. Refer Section 6 of KEAM Prospectus for further details.
- Candidates should have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with Physics and Mathematics as compulsory subjects and Chemistry/Computer Science/Biotechnology/Biology as one of the optional subjects with at least 45% marks (40% for SC/ST/SEBC or PwD candidates) put together in the above subjects.
- Candidates should have qualified the KEAM examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala with a valid score and rank.

#### Fee structure:

- First Year (Academic year: 2023-24):
  - TUITION FEES: 75,260.00
  - ADMISSION FEES: 240.00
  - KTU FEE: 6,580.00 (ME, MA, BT) / 5,830.00 (EC, CS, CL)
  - CAUTION DEPOSIT: 5,000.00
  - SPECIAL FEE: 2,910.00
  - SWAF: 3,850.00
  - INSTITUTIONAL DEV FUND: 5,000.00
  - PTA: 4,500.00
  - SOCIETY: 50.00
  - TOTAL: 1,03,390.00 (ME, MA, BT) / 93,490.00 (EC, CS, CL)
- Second Year (Academic year: 2024-25):
  - TUITION FEES: 79,030.00
  - KTU FEE: 5,830.00

- SPECIAL FEE: 3,060.00

- SWAF: 750.00

- PTA: 700.00

- TOTAL: 89,370.00

- Third Year (Academic year: 2025-26):

- TUITION FEES: 82,990.00

- KTU FEE: 5,830.00

- SPECIAL FEE: 3,220.00

- SWAF: 750.00

- PTA: 700.00

- TOTAL: 93,490.00 (ME, MA, BT) / 93,170.00 (EC, CS, CL)

- Fourth Year (Academic year: 2026-27):

- TUITION FEES: 87,140.00

- KTU FEE: 5,715.00

- SPECIAL FEE: 3,390.00

- SWAF: 750.00

- PTA: 700.00

- TOTAL: 97,695.00

#### KSRTC/SCT Quota Admission

Admission to 10% of seats is reserved for children of employees of Kerala State Road Transport Corporation (KSRTC)/SCT. The allotment is based on the performance in the Kerala Engineering Architecture Medical (KEAM) examination conducted by the Commissioner for Entrance Examinations, Government of Kerala.

How to apply:

A separate application is invited for this seat by the Principal, SCT, from among the eligible candidates. The candidate should submit the online application ([\[www.sctce.ac.in\]](http://www.sctce.ac.in)(<http://www.sctce.ac.in>)) and pay the application fee online within the stipulated time. The hardcopy of the application along with copies of the supporting documents are to be submitted to the Managing Director, Kerala State Road Transport Corporation, who will forward it to the Principal, SCT. Admission is carried out based on the rank list prepared by the Principal, SCT, based on the merit of the applicants in the KEAM examination.

When to apply:

The application will be invited after the publication of the KEAM rank list. The notice regarding the application will be published in the newspapers and on the college website.

For information on KEAM, please visit [<https://cee.kerala.gov.in>](<https://cee.kerala.gov.in>).

Seats in KSRTC/SCT quota:

- BB: Biotechnology & Biochemical Engineering (Intake: 6)
- CS: Computer Science & Engineering (Intake: 6)
- CL: Computer Science & Engineering (Artificial Intelligence & Machine Learning) (Intake: 6)
- EC: Electronics & Communication Engineering (Intake: 12)
- ME: Mechanical Engineering (Intake: 12)
- MA: Mechanical Engineering (Automobile) (Intake: 6)

Eligibility Criteria:

- The applicant should be the child of a KSRTC/SCT employee.
- Applicants should have completed 17 years of age as of 31st December of the year of admission.
- Only Indian citizens are eligible for admission. Refer Section 6 of KEAM Prospectus for further details.
- Candidates should have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with Physics and Mathematics as compulsory subjects and Chemistry/Computer Science/Biotechnology/Biology as one of the optional subjects with at least 45% marks (40% for SC/ST/SEBC or PwD candidates) put together in the above subjects.

- Candidates should have qualified the KEAM examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala with a valid score and rank.

Fee structure:

- First Year (Academic year: 2023-24):

- TUITION FEES: 75,260.00

- ADMISSION FEES: 240.00

- KTU FEE: 6,580.00 (ME, MA, BT) / 5,510.00 (EC, CS, CL)

- CAUTION DEPOSIT: 5,000.00

- SPECIAL FEE: 2,910.00

- SWAF: 3,850.00

- INSTITUTIONAL DEV FUND: 5,000.00

- PTA: 4,500.00

- SOCIETY: 50.00

- TOTAL: 1,03,390.00 (ME, MA, BT) / 93,490.00 (EC, CS, CL)

- Second Year (Academic year: 2024-25):

- TUITION FEES: 79,030.00

- KTU FEE: 5,830.00

- SPECIAL FEE: 3,060.00

- SWAF: 750.00

- PTA: 700.00

- TOTAL: 89,370.00

- Third Year (Academic year: 2025-26):

- TUITION FEES: 82,990.00

- KTU FEE: 5,830.00

- SPECIAL FEE: 3,220.00

- SWAF: 750.00

- PTA: 700.00



- TOTAL: 93,490.00 (ME, MA, BT) / 93,170.00 (EC, CS, CL)

- Fourth Year (Academic year: 2026-27):

- TUITION FEES: 87,140.00

- KTU FEE: 5,715.00

- SPECIAL FEE: 3,390.00

- SWAF: 750.00

- PTA: 700.00

- TOTAL: 97,695.00

#### NRI Quota Admission

Admission to 5% of seats is available for the child/ward/dependant of Non-Resident Indians (NRIs) under the NRI admission scheme. It is done based on the performance of the applicants in their qualifying examination (Plus two).

#### How to apply:

The Principal, SCT, invites applications from among the eligible candidates, prepares the rank list, publishes it in the public domain, and admits students based on the rank list. The applicant should apply online and pay the application fees online within the stipulated time.

#### Original documents to be produced:

1. Certificate to prove age
2. Mark list of qualifying examination (Plus two)
3. Pass Certificate (if obtained)
4. Declaration from the sponsor (NRI) in original
5. Documents to prove NRI status: (Copy of passport containing visa details OR Employment certificate attested by Embassy OR Certificate of NRI Bank Account of the sponsor attested by Embassy)

6. Transfer Certificate
7. Conduct Certificate
8. Fitness Certificate from a Government Medical Officer not below the rank of Asst. Surgeon (format available in Annexure 2 of NRI prospectus)
9. Two copies of 10th, plus two mark list, Transfer Certificate, NRI declaration, and NRI proof

When to apply:

Usually, applications for admission under the NRI quota are invited immediately after the publication of the plus two results of the state/central boards.

Seats in NRI quota:

- BB: Biotechnology & Biochemical Engineering (Intake: 3)
- CS: Computer Science & Engineering (Intake: 3)
- CL: Computer Science & Engineering (Artificial Intelligence & Machine Learning) (Intake: 3)
- EC: Electronics & Communication Engineering (Intake: 6)
- ME: Mechanical Engineering (Intake: 6)
- MA: Mechanical Engineering (Automobile) (Intake: 3)

Eligibility Criteria:

- Applicants should have completed 17 years of age as of the 31st December of the year of admission.
- Only Indian citizens/Persons of Indian Origin (PIO)/Overseas Citizen of India (OCI) are eligible for admission.
- The candidate should be a child/ward/dependent of an NRI and should enclose a declaration, in the prescribed form from the NRI along with the application.
- Candidates should have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with Physics and Mathematics as compulsory subjects and Chemistry/Computer Science/Biotechnology/Biology as one of the optional subjects with at least 45% marks (40% for SC/ST/SEBC or PwD candidates) put together in the above subjects.

## Fee structure:

### First Year (Academic year: 2023-24)

- TUITION FEES: 121,560.00
- REFUNDABLE DEPOSIT (Interest-Free): 125,000.00
- ADMISSION FEES: 240.00
- KTU FEE:
  - 6,580.00 (ME, MA, BB)
  - 5,510.00 (EC, CS, CL)
- CAUTION DEPOSIT: 5,000.00
- SPECIAL FEE: 3,060.00
- SWAF: 3,850.00
- INSTITUTIONAL DEV FUND: 5,000.00
- PTA: 4,500.00
- SOCIETY: 50.00
- TOTAL: 2,74,840.00 (for ME, MA, BB)
- TOTAL: 2,74,520.00 (for EC, CS, CL)

### Second Year (Academic year: 2024-25)

- TUITION FEES: 127,640.00
- KTU FEE: 5,830.00
- SPECIAL FEE: 3,220.00
- SWAF: 750.00
- PTA: 700.00
- TOTAL: 1,38,140.00

### Third Year (Academic year: 2025-26)

- TUITION FEES: 13,4030.00

- KTU FEE:
- 5,830.00 (ME, MA, BB)
- 5,715.00 (EC, CS, CL)
- SPECIAL FEE: 3,390.00
- SWAF: 750.00
- PTA: 700.00
- TOTAL: 1,44,700.00 (for ME, MA, BB)
- TOTAL: 1,44,380.00 (for EC, CS, CL)

Fourth Year (Academic year: 2026-27)

- TUITION FEES: 140,740.00
- KTU FEE: 5,715.00
- SPECIAL FEE: 3,560.00
- SWAF: 750.00
- PTA: 700.00
- TOTAL: 1,51,465.00

Lateral Entry Admission to Second Year

An additional 10% of the annual intake in each program is reserved for Diploma holders. The allotment of seats is centrally done by the Commissioner for Entrance Examinations, Govt. of Kerala based on a rank list published after the Lateral Entry Test-LET (<https://cee.kerala.gov.in>), according to the options registered online by the candidates.

Seats in Lateral Entry Scheme:

- BB: Biotechnology & Biochemical Engineering (Intake: 6)
- CS: Computer Science & Engineering (Intake: 6)
- CL: Computer Science & Engineering (Artificial Intelligence & Machine Learning) (Intake: 6)
- EC: Electronics & Communication Engineering (Intake: 12)

- ME: Mechanical Engineering (Intake: 12)
- MA: Mechanical Engineering (Automobile) (Intake: 6)
- MP: Mechanical Engineering (Production) (Intake: 6)

Eligibility Criteria:

- Applicants should have completed 18 years of age as of the 31st December 2021.
- Only Indian citizens are eligible for admission. However, admission of non-Keralites is restricted to management quota seats only.
- Candidates should have passed a three-year Diploma Examination in Engineering/Technology or Examinations recognized as equivalent thereto from the State Board of Technical Education/Universities or Institutions under Govt. Of India, undergoing studies at AICTE approved institutions, with at least 45% marks in aggregate (40% in the case of SC/ST/SEBC or PwD candidates).
- Candidates should have qualified the LET examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala with a valid score and rank.

Fee structure:

- MERIT:
  - TUITION FEES: 40,520.00
  - ADMISSION FEES: 240.00
  - KTU FEE: 7,630.00
  - CAUTION DEPOSIT: 5,000.00
  - SPECIAL FEE: 2,910.00
  - SWAF: 3,850.00
  - INSTITUTIONAL DEV FUND: 5,000.00
  - PTA: 4,500.00
  - SOCIETY: 50.00
  - TOTAL: 69,700.00

- MANAGEMENT:

- TUITION FEES: 75,260.00

- ADMISSION FEES: 240.00

- KTU FEE: 7,630.00

- CAUTION DEPOSIT: 5,000.00

- SPECIAL FEE: 2,910.00

- SWAF: 3,850.00

- INSTITUTIONAL DEV FUND: 5,000.00

- PTA: 4,500.00

- SOCIETY: 50.00

- TOTAL: 1,04,440.00

## **Undergraduate Courses (B.Tech):**

BB - Bio Technology and Biochemical Engg. [BB]

CL - Computer Science & Engg. (Artificial Intelligence & Machine Learning) [CL]

CS - Computer Science & Engineering [CS]

EC - Electronics & Communication Engineering [EC]

MA - Mechanical Engg. (Automobile) [MA]

ME - Mechanical Engineering [ME]

## **Reservations(Categories):**

- **SM:** State Merit (Open category)
- **EW:** Economically Weaker Section (Not a common category in Kerala admissions)
- **EZ:** Ezhava
- **MU:** Muslim
- **BH:** Other Backward Hindu
- **LA:** Latin Catholic and Anglo Indian
- **DV:** Dheevara and related communities
- **VK:** Viswakarma and related communities
- **BX:** Other Backward Christian
- **KU:** Kudumbi
- **KN:** Kusavan and related communities
- **SC:** Scheduled Castes
- **ST:** Scheduled Tribes
- **MG:** Maybe a typo, or a less common category. It's not possible to say for sure without more context.
- **OE:** Other Eligible Communities (meaning unclear)
- **FW:** Forward castes (Not a reservation category, but could be used for informational purposes)

SCTCE Admissions (KEAM Code: SCT)

Undergraduate Programs:

SCT College of Engineering offers the following B.Tech degree programs affiliated with APJ Abdul Kalam Technological University, Kerala:

- BB: Biotechnology & Biochemical Engineering (60 seats)

- CS: Computer Science & Engineering (60 seats)
- CL: Computer Science & Engineering (Artificial Intelligence & Machine Learning) (60 seats)
- EC: Electronics & Communication Engineering (120 seats)
- ME: Mechanical Engineering (120 seats)
- MA: Mechanical Engineering (Automobile) (60 seats)

Tuition Fee Waiver Scheme:

An additional 10% of students in each program are selected from the KEAM rank list under the Tuition Fee Waiver scheme for women, economically disadvantaged, and physically challenged meritorious students.

SCTCE Fee Structure for 2023-24 Admission (INR)

MERIT (lower fee):

- Tuition Fees: ₹40,520.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹2,910.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹68,650.00

MERIT (full fee):

- Tuition Fees: ₹75,260.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹2,910.00



- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹103,390.00

NRI:

- Tuition Fees: ₹121,560.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹3,060.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹149,840.00

TFW:

- Tuition Fees: ₹0.00
- Admission Fees: ₹240.00
- KTU Fee: ₹6,580.00
- Caution Deposit: ₹5,000.00
- Special Fee: ₹2,910.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹28,130.00

SC/ST:

- Tuition Fees: ₹0.00
- Admission Fees: ₹0.00
- KTU Fee: ₹0.00
- Caution Deposit: ₹0.00
- Special Fee: ₹2,910.00
- SWAF: ₹3,850.00
- Institutional Development Fund: ₹5,000.00
- PTA: ₹4,500.00
- Society: ₹50.00
- Total: ₹13,400.00

Refundable Deposit (for all NRI): ₹125,000.00

KEAM Admission – Merit Quota (Lower Fee)

Admission to 50% of the seats (merit quota-lower fee) in the B.Tech degree programs at Sree Chitra Thirunal College of Engineering (SCT) is based on performance in the Kerala Engineering Architecture Medical (KEAM) examination, conducted by the Commissioner for Entrance Examinations (CEE), Government of Kerala.

How to apply for Merit quota (Lower Fee):

The admission procedure at SCT is conducted by CEE through a centralized online counseling process. To be considered for such allotments, candidates should select the "Government (G)" category in the online counseling portal. There is no need to apply directly to the college for this quota.

Reservation of seats:

Seats in various categories such as SC/ST/OBC/EWS/PWD will be reserved as per the norms of the Government of Kerala.

For more information on KEAM, please visit the CEE Kerala website.

Seats in Merit quota (lower fee):

- BB-G: Biotechnology & Biochemical Engineering - 30
- CS-G: Computer Science & Engineering - 30
- CL-G: Computer Science & Engineering (Artificial Intelligence & Machine Learning) - 30
- EC-G: Electronics & Communication Engineering - 60
- ME-G: Mechanical Engineering - 60
- MA-G: Mechanical Engineering (Automobile) - 30

El

igibility Criteria:

Candidates should have passed the Higher Secondary Examination, Kerala or examinations recognized as equivalent thereto, with 45% marks in Mathematics, Physics, and Chemistry put together or equivalent grade. Candidates belonging to Socially and Educationally Backward Classes with a total annual family income not exceeding Rs. 6 lakhs will be given a relaxation of 5% marks in the qualifying examination.

Candidates should also have appeared for the Engineering Entrance Examination conducted by the Commissioner for Entrance Examinations, Government of Kerala.

For details regarding the admission procedure, please refer to the Information Brochure issued by the CEE Kerala.

Admission to Management Quota:

Admission to the remaining 50% of the seats (Management quota) in the B.Tech degree programs at SCT College of Engineering is carried out by the management as per the guidelines of the Government of Kerala. For admission to the management quota seats, candidates should apply directly to the college.

Fee Structure:

The fee structure for the Management quota seats will be decided by the Management from time to time.

For more details, please contact:

The Principal,  
SCT College of Engineering,  
Sreekariyam P.O.,  
Thiruvananthapuram - 695 017.  
Email: [principal@sctce.ac.in](mailto:principal@sctce.ac.in)  
Phone: 0471 2598100  
Website: [www.sctce.ac.in](http://www.sctce.ac.in)

If the rank falls between certain ranges and the category matches a specific criteria, then the courses that a student can get admission to are as follows:

For Bio Technology and Biochemical Engineering (BB):

- If the rank is between 14391 and 26848 and the category is State Merit (SM), the student can get admission to BB.
- If the rank is between 26849 and 24462 and the category is Economically Weaker Section (EW), the student can get admission to BB.
- If the rank is between 24463 and 21182 and the category is Ezhava (EZ), the student can get admission to BB.
- If the rank is between 21183 and 20421 and the category is Muslim (MU), the student can get admission to BB.
- If the rank is between 20422 and 19072 and the category is Other Backward Hindu (BH), the student can get admission to BB.
- If the rank is between 19073 and 20932 and the category is Latin Catholic and Anglo Indian (LA), the student can get admission to BB.
- If the rank is between 20933 and 43038 and the category is Dheevara and related communities (DV), the student can get admission to BB.
- If the rank is between 43039 and beyond and the category is Viswakarma and related communities (VK), the student can get admission to BB.

For Computer Science & Engineering (Artificial Intelligence & Machine Learning) (CL):

- If the rank is between 7630 and 11606 and the category is State Merit (SM), the student can get admission to CL.
- If the rank is between 11607 and 8996 and the category is Economically Weaker Section (EW), the student can get admission to CL.
- If the rank is between 8997 and 10767 and the category is Ezhava (EZ), the student can get admission to CL.
- If the rank is between 10768 and 23651 and the category is Muslim (MU), the student can get admission to CL.
- If the rank is between 23652 and beyond and the category is Viswakarma and related communities (VK), the student can get admission to CL.

Here are the structures for each program based on the provided data:

1. **\*\*Bio Technology and Biochemical Engineering (BB):\*\***

- State Merit (SM): Rank between 14391 and 26848
- Economically Weaker Section (EW): Rank between 26849 and 24462
- Ezhava (EZ): Rank between 24463 and 21182
- Muslim (MU): Rank between 21183 and 20421
- Other Backward Hindu (BH): Rank between 20422 and 19072
- Latin Catholic and Anglo Indian (LA): Rank between 19073 and 20932
- Dheevara and related communities (DV): Rank between 20933 and 43038
- Viswakarma and related communities (VK): Rank 43039 and beyond

2. **\*\*Computer Science & Engineering (Artificial Intelligence & Machine Learning) (CL):\*\***

- State Merit (SM): Rank between 7630 and 11606
- Economically Weaker Section (EW): Rank between 11607 and 8996
- Ezhava (EZ): Rank between 8997 and 10767
- Muslim (MU): Rank between 10768 and 23651
- Viswakarma and related communities (VK): Rank 23652 and beyond

3. **\*\*Computer Science & Engineering (CS):\*\***

- State Merit (SM): Rank between 3821 and 6354

- Economically Weaker Section (EW): Rank between 6355 and 4802
- Ezhava (EZ): Rank between 4803 and 4663
- Muslim (MU): Rank between 4664 and 4358
- Latin Catholic and Anglo Indian (LA): Rank between 4359 and 6138
- Dheevera and related communities (DV): Rank between 15311 and 5514
- Viswakarma and related communities (VK): Rank between 5515 and 13135
- Scheduled Castes (SC): Rank between 13136 and 7632
- Forward castes (FW): Rank 7633 and beyond

4. **\*\*Electronics & Communication Engineering (EC):\*\***

- State Merit (SM): Rank between 11060 and 22059
- Economically Weaker Section (EW): Rank between 22060 and 14022
- Ezhava (EZ): Rank between 14023 and 15770
- Muslim (MU): Rank between 15771 and 13865
- Other Backward Hindu (BH): Rank between 13866 and 20710
- Latin Catholic and Anglo Indian (LA): Rank between 20711 and 27350
- Dheevera and related communities (DV): Rank between 27351 and 18284
- Viswakarma and related communities (VK): Rank between 18285 and 14480
- Scheduled Castes (SC): Rank between 14481 and 19476

5. **\*\*Mechanical Engineering (Automobile) (MA):\*\***

- State Merit (SM): Rank 52678

6. **\*\*Mechanical Engineering (ME):\*\***

- State Merit (SM): Rank between 27167 and 51989
- Economically Weaker Section (EW): Rank between 51990 and 39160
- Ezhava (EZ): Rank between 39161 and 35798
- Muslim (MU): Rank between 35799 and 35495
- Other Backward Hindu (BH): Rank between 35496 and 28620
- Latin Catholic and Anglo Indian (LA): Rank between 28621 and 56477
- Dheevera and related communities (DV): Rank between 56478 and 44665

- Viswakarma and related communities (VK): Rank between 44666 and 53931
- Scheduled Castes (SC): Rank between 53932 and 47989
- Forward castes (FW): Rank 47990 and beyond

## **LAST RANK DETAILS 2022**

**The last rank details for admissions to SCT College of Engineering in 2022 across various categories and programs are as follows:**

**For the Bio Technology and Biochemical Engineering program (BB), the State Merit (SM) category's last rank was 14,391, followed by Economically Weaker Section (EW) at 26,848, Ezhava (EZ) at 24,462, Muslim (MU) at 21,182, Other Backward Hindu (BH) at 20,421, Latin Catholic and Anglo Indian (LA) at 19,072, Dheevera and related communities (DV) at 20,932, and Viswakarma and related communities (VK) at 43,038. No specific last ranks were provided for the categories BX, KU, KN, SC, ST, MG, OE, and FW.**

**Similarly, for the Computer Science & Engineering program specializing in Artificial Intelligence & Machine Learning (CL), the last ranks were 7,630 for SM, 11,606 for EW, 8,996 for EZ, 10,767 for MU, 23,652 for VK, 8,711 for BX, 9,409 for KU, 14,443 for KN, and 14,236 for SC. No data was provided for BH, LA, DV, MG, OE, and FW categories.**

**In the Computer Science & Engineering program (CS), last ranks included 3,821 for SM, 6,354 for EW, 4,802 for EZ, 4,663 for MU, 6,138 for LA, 15,311 for DV, 5,514 for VK, 13,135 for SC, and 7,632 for FW. No data was provided for categories BH, BX, KU, KN, ST, MG, and OE.**

**For Electronics & Communication Engineering (EC), the last ranks were 11,060 for SM, 22,059 for EW, 14,022 for EZ, 15,770 for MU,**

13,865 for BH, 20,710 for LA, 27,350 for DV, 18,284 for VK, and 14,480 for SC. No data was provided for BX, KU, KN, ST, MG, OE, and FW categories.

In the Mechanical Engineering (Automobile) program (MA), only SM data was provided, with the last rank at 52,678.

Lastly, in the Mechanical Engineering program (ME), last ranks were 27,167 for SM, 51,989 for EW, 39,160 for EZ, 35,798 for MU, 35,495 for BH, 28,620 for LA, 56,477 for DV, 44,665 for VK, 53,931 for SC, and 47,989 for FW. No data was provided for BX, KU, KN, ST, MG, and OE categories.

## LAST RANK DETAILS 2021

	SM	EW	EZ	MU	BH	LA	DV	VK	BX	KU	KN	SC	ST	MG	OE	FW
B	143	268	244	211	204	190	209	430	-	-	-	582	-	587	466	668
B	91	48	62	82	21	72	32	38	-	-	-	16	-	13	12	2
C	763	116	899	107	-	-	236	871	940	144	142	520	369	132	-	-
L	0	06	6	67	-	-	52	1	9	43	36	99	76	96	-	-
C	382	635	480	466	435	613	153	551	-	-	-	131	-	763	-	192
S	1	4	2	3	8	8	11	4	-	-	-	35	-	2	-	7
E	110	220	140	157	138	207	273	182	144	-	-	580	-	194	-	722
C	60	59	22	70	65	10	50	84	80	-	-	78	-	76	-	5
M	526	-	560	-	555	-	-	-	-	-	-	591	-	-	-	-
A	78	-	74	-	65	-	-	-	-	-	-	80	-	-	-	-
M	271	519	391	357	354	286	564	446	-	-	-	574	-	539	479	122
E	67	89	60	98	95	20	77	65	-	-	-	28	-	31	89	78



B T	925 9	224 05	144 96	123 94	109 66	151 90	-	965 5	-	-	-	453 50	-	364 36	-	517 1
C L	544 3	142 01	708 0	807 2	789 1	651 2	134 68	824 3	-	-	-	209 53	-	209 53	-	954 1
C S	298 2	681 9	392 4	471 6	453 6	591 5	639 2	780 2	-	194 38	913 9	312 92	-	591 6	-	206 4
E C	810 4	197 14	123 90	126 48	115 87	225 03	-	125 10	902 4	-	380 80	465 96	-	213 87	-	213 87
M A	367 86	-	426 24	399 81	433 95	-	-	458 72	-	-	-	460 63	-	465 36	-	201 82
M E	170 93	417 89	286 56	253 53	256 87	413 45	347 24	402 23	217 71	-	-	468 80		471 42	-	101 83

## LAST RANK DETAILS 2020

	SM	EW	EZ	MU	BH	LA	DV	VK	BX	KU	K N	SC	S T	MG	OE	F W
B T	106 43	200 08	171 87	123 94	111 88	204 41	-	-	252 90	337 84	-	459 75	-	364 36	-	51 71
C L	499 5	756 1	752 3	866 0	763 0	109 49	323 93	501 7	-	-	-	497 41	-	119 92	-	-
C S	385 2	523 2	499 7	490 2	466 2	889 4	189 28	475 7	-	-	-	378 51	-	523 2	-	-
E C	921 3	197 31	116 83	151 15	105 12	132 57	-	296 13	-	-	-	524 53	-	241 14	380 13	-
M A	237 40	-	255 04	350 16	-	-	-	272 71	-	-	-	530 82	-	502 47	-	-
M E	146 30	-	197 12	174 78	170 57	210 85	306 64	164 87	-	-	-	521 47	-	497 65	500 93	-

## Clubs or communities of SCT

### NSS-SCTCE

National Service Scheme which is under the ministry of Youth Affairs & Sports is functioning in the campus with a volunteer strength of more than 200. Our NSS unit is now one among the most active NSS unit under NSS Technical Cell, Govt. of Kerala. The NSS Unit of this college was registered in 2009 (Reg. No: 225). Henceforth NSS have expanded both quantitatively and qualitatively over the years by undertaking various projects and programs in association with different Government departments and agencies. Now SCT College of Engineering has two NSS units (Unit no: 225 & 527). The major community activities undertaken by the unit includes; 'KATHIR' (paddy field cultivation serving to water holding, green boosting, and serving to the purpose of livelihood), 'NEYES' (skill development & entrepreneurship training), 'AMRUTAKERALAM' (campus cleaning and tree plantation), initiating Red Ribbon Club (serving to blood donation under KSACS), 'BHOOMIKORU KOOTTU' (Canal Cleaning, Pond Cleaning), 'HOME FOR HOMELESS' (for providing shelter to poor community), 'PUNARJJANI' (repairing & cleaning the old hospital equipments and furniture), Waste Management, Organ Donation Awareness Camp, Alcohol and Substance Abuse Awareness and Prevention Campaign, Swachh Mission activities etc. Our unit received Best Unit, Best Programme Officer & Best Volunteer awards from Directorate of Technical Education, Govt. of Kerala and State Level Best volunteer award from Govt. of Kerala. During the last academic year, we also received National Young Leaders Program Award from Ministry of Youth Affairs and Sports. We also received award from Dept. of Land Records & Revenue, Govt. of Kerala for the 'Best Journal' during the survey 'Map My Home'. Volunteers of SCTCE also bagged several prizes and cash awards in various State level programs. For the past few years NSS- SCTCE is continuously receiving appreciation awards from NSS Technical Cell, Govt. of Kerala. The social activities of NSS SCTCE got attraction, appreciation and support from various Govt. Departments, agencies, institutions, Govt. Officials Medias, public, celebrities, Social activists, politicians, Ministers, People's representatives etc. volunteer. Volunteer of NSS-SCTCE also participated in the International Youth Exchange Program held at China in June 2017. The unit conducts 7 day Residential Camp, State Camp, District Camp etc. in every academic year to unite NSS volunteers across the state with exchange of ideas and views. The volunteers of NSS unit are involving in many social service activities like blood & organ donation camps, awareness programs, tree planting, Swachh Mission Programs, Agriculture etc. The ultimate aim of all activities done by the unit is personality development through community service. Students who have an open mind to help the poor & society become a part of our family. While the studies in SCT builds better intellectuals, NSS SCTCE builds strong but kind personalities with love and caring attitudes. Volunteers who are successfully completing their volunteer ship are eligible for 60 Activity Points from APJKTU & Certificate from Govt. of Kerala. NSS unit SCTCE has lived up its motto 'Not me But you' by making a new standard in the field of social work for the welfare of our society. Administrative Structure of NSS Therefore, the organisation and management of NSS unit are of vital significance. In SCTCE, now two units are functioning with a volunteer strength of 200.

**ADMINISTRATIVE STRUCTURE AT INSTITUTION LEVEL** The unit at college level is the grass-root unit in NSS. The organisation keeps contact with the community, administration, student youth and teaching faculty through this unit only.

**ENROLLMENT OF NSS VOLUNTEERS** The NSS volunteers will be enrolled from the first and second year degree-class students. Preference were given to the students who have worked as NSS volunteers at +2 level also. During the first year, the selected students should undergo a training period of one year and the actual enrolment to the unit will happen only in his/her second year. The enrolment is done purely on attendance and activity basis during the first year. Enrolment is for a period of 2 year. Two among the volunteers (one girl and one boy) will be selected as the volunteer secretary of unit for coordinating activities.

**PROGRAMME OFFICERS** One

Programme Officer will be incharge of one unit only. Only those belonging to the teaching faculty will be considered for appointment as Programme Officer. Programme Officer will be responsible for the organisation of NSS unit, implementation of NSS programme under the supervision and direction of Principal of the college or head of the institution. Year of Registration = 2009 Adopted Villages = Nemom and Pappanamcode

ACADEMIC YEAR 2014-15 • Directorate Level special appreciation Award • Special appreciation from SreeChitra Medical Institute • Programme Officer was selected as the Facilitation Manager for LalBahadur Stadium, Kollam in the 35th National Games held in Kerala. • “VITUS II”-State Level camp on ‘Alcohol and Other Substance Abuse and Prevention’ in the • Organised 25 Swachh Mission programmes. • “VITUS III”- Immortals of Trivandrum- organ donation awareness program • stem cell donation awareness camp • Organised 2 Blood donation camps Total No: of Activities = 50

ACADEMIC YEAR 2015-16 • Inter District Level Workshop on ‘Gender Equality’. • Programme Officer was selected as the contingent leader for the 40 NSS volunteers from Kerala to represent the National Youth Festival held at Naya Raipur, Chhattisgarh. • Special appreciation award from Directorate of NSS Technical Cell “GENSIS-2016” • Organised 12 Swachh Mission programmes • Organised 2 Blood donation camps • Ozone Day Celebration funded by KSCSTE. • OnamMela @ Pappanamcode • “Punarjjani @ Medical College. • Handed over a Home to two parentless kids @ Nemom • Medical Camp @ Punnamoodu • Pond cleaning @ Pappanamcode • 3 Volunteers attended National Youth Festival @ Chhattisgarh • vStarted “Lakshya”- a team giving awareness about Higher Studies to School kids • Organised the program ‘Waste to Green’, the result was Pappanamcode ward was declared as clean ward by Trivandrum Corporation. • Helped the Department of Land records and revenue to complete their project ‘Map My Home’ • Directorate Level Best unit Award. • Directorate Level Best Programme Officer Award • Directorate Level Best Volunteer Award • organized a free medical camp for public • Best Journal Award from Dept. of Land Records & Revenue • State Level Best Volunteer Award • Started New Unit for NSS (Unit No: 527) Total No: of Activities = 96

ACADEMIC YEAR 2015-16 • Special appreciation award from Directorate of NSS Technical Cell “PUNARJJANI-2016” • National Level Award – NYLP-2016 • Directorate Level Best Volunteer Award • Volunteer of NSS SCTCE was selected to the International Youth Exchange Program held @ China • “Kathir-2016”- Cultivated 1.5 acres of Paddy Field • Nature Camp @ Peppara • Nature Camp @ Neyyar • Organised two blood donation Camps • Free Medical Camp @ Kattakkada • Punarjjani @ Medical College, Trivandrum • Punarjjani @ General Hospital, Trivandrum • “VITUS-IV”-State Level Camp on Smart Energy Program • Free Eye Testing Camp @ Nemom Total No: of Activities = 169

**CULT A WAY** -Cult a Way is the annual technical and cultural festival of SCT. It was started in 2011 but took off rapidly and became one of the major college fests in Kerala. It is a four- or five-day event held annually and almost all colleges in the state participate in this event. The events includes technical workshops, cultural events like dance programs, treasure hunt, quizzes, fashion shows etc. Cult A Way. The proshows organized as part of Cult a Way attracts students as well as others in large numbers. The proshows mark the culmination of the 4 day festival which is a heartthrob among the younger generations of the state.

One of the Best fest in Kerala Clubs **MUSIC CLUB** SCT's very own music club \*Malhaar\* is one of the vibrant and dynamic clubs where passion for music is celebrated. There is a diverse range of activities that cater to various musical interests which ensures there's something for everyone to enjoy. Whether you want to showcase your talent or simply surround yourself with the magic of melody, \*Malhaar\* is the place to be . **CLUB IN CHARGE : Dr. JISU ELSA JACOB L & D CLUB** The Literary and Debate Club of SCTCE functions with the aim to sharpen communication and critical thinking skills through lively discussions and structured arguments. **CLUB IN CHARGE : SAJITH SETHU** **DANCE CLUB** The vibrant dance club at SCT College is a hub of energy and creativity, where

passionate dancers come together to create mesmerizing performances. With a history of remarkable achievements, our club has clinched numerous prestigious accolades and prizes, showcasing our dedication and exceptional talent CLUB IN CHARGE : Dr ROHINI

FILM CLUB The SCT College Film Club is the perfect platform to connect with like-minded individuals and enhance your cinematic experience. Film enthusiasts who come together to explore, appreciate, and discuss the art of cinema. CLUB IN CHARGE : BAJI K PHOTOGRAPHY CLUB

The Photography Club is a community of enthusiastic photographers who come together to learn, share, and explore the art of photography. Whether you're a beginner or an experienced photographer, our club offers a platform to enhance your skills, exchange creative ideas, and capture captivating moments through the lens. CLUB IN CHARGE : BAJI K

FASHION CLUB The Fashion Club is a vibrant hub for fashion enthusiasts to celebrate personal style, trends, and creativity. From runway-inspired looks to DIY projects, we're all about embracing fashion as a form of self-expression. CLUB IN CHARGE : Dr. ROHINI

CYCLING CLUB The Cycling Club is a community of avid cyclists united by a passion for two-wheeled adventures. Whether you're a casual rider or a seasoned cyclist, our club offers camaraderie and opportunities to explore scenic routes, improve your cycling skills, and promote a healthy lifestyle CLUB IN CHARGE : Dr. ARUN M

ENCON CLUB Energy Conservation Club is club consists of students interested in energy conservation and related areas. The club consists of students from all departments. Main aim of the club is to organize expert talks, workshops and seminars in order to give awareness about the student and public about the importance of energy conservation. Till date several quiz programs were also organized by this club. All activities and programs are coordinated by a faculty in the same department which also consists of a student committee from all semesters.

LITERARY CLUB A literary club is a group of students interested in literature. The club wants to promote one genre of literature or a specific writer. Typically students in this club promote research about their chosen author or genre, publish newsletters, and hold meetings where research findings can be presented and discussed. Some members in this group take it as a chance to discuss their favourite writer with other hobbyists.

IEEE IEEE is a Student Branch of Professional society IEEE. It is a professional society managed by experts. The student chapter of IEEE consists of students and teachers of the department who have taken membership in IEEE. Several events such as expert talks, workshops and seminars were organized by IEEE student chapter for getting exposure to rapid technological developments in the areas of Electronics, Computer Science, Image Processing, Communication, and Information Technology. The members can access e-journals through IEEE web site and has been subscribed to

the library. All activities and programs are coordinated by a faculty in the same department which also consists of a student committee from all semesters.

Computer Society of India CSI student Chapter, Computer Society of India (CSI) is a professional society managed by experts. The student chapter of CSI consists of students and teachers of the department who have taken membership in CSI. Several events such as expert talks, workshops and seminars were organized by CSI student chapter for getting exposure to rapid technological developments in the areas of Computer Science, Image Processing, Communication, Machine Learning and Information Technology. The members can access e-journals through CSI web site and "CSI Communications" has been subscribed to the library. All activities and programs are coordinated by a faculty in the same department which also consists of a student committee from all semesters.

American Society of Mechanical Engineers Chapter American Society of Mechanical Engineers Chapter – G 13E6AE, ASME is a professional association that, "promotes the art, science, and practice of multidisciplinary engineering and allied sciences around the globe" via "continuing education, training and professional development, codes and standards, research, conferences and publications, government relations, and other forms of outreach." ASME is thus an engineering society, a standards organization, a research and development organization, a lobbying organization, a provider of training and education, and a nonprofit organization. Founded as an engineering society focused on mechanical engineering in North America, ASME is today multidisciplinary and global Society of Automobile Engineers Society of Automobile Engineers is a Professional society for Mechanical Engineering Students. The committee consists of students and teachers of the Mechanical department. Several events such as expert talks, workshops and seminars were organized by SAE students for getting exposure to rapid technological developments in the areas of Mechanical Engineering and associated fields. All activities and programs are coordinated by a faculty in the same department which also consists of a student committee from all semesters.

LANSCAPE LANSCAPE is a technology cum cultural association of young innovative students and faculty of Computer Science and Engineering Department of SCTCE. The LANSCAPE members include department faculty members, post graduate students, under graduate students and alumni. It plays an influential role and promotes technical innovations, projects, research as well as national level cultural activities. The mission of LANSCAPE is "to foster and conduct workshops and seminars to rejuvenate the research oriented thinking in the cutting edge field of computer science". LANSCAPE organizes seminars, workshops and provide sponsorship or technical support to the same. LANSCAPE seeks to encourage regional and international communication and collaboration, promotes professional interaction and life long learning. Landscape formed a Code Club which encourages students to pursue group projects relevant to departmental as well as institutional requirements. It also recognizes the outstanding contribution of students and alumni of the department. Live projects under Code Club are Department Website development, Staff Punching System development, Library Management Software development etc. A FOSS Cell is also formed under landscape to promote Free and Open source Softwares among student which is in collaboration with ICFOSS, technopark.

CEST CEST is an association of the faculty and students of the Electronics and Communication Department started in late 90s under the guidance of Dr. Shanthi K.J. with many objectives that gain insights into latest technological developments to the students. With the support and guidance of the faculty, it has been providing the students a platform to sharpen their organizational skills and technical expertise. But later it became inactive for few years. Later in 2014 Prof. (Dr.) Sheeja M.K. the former head of the department took the initiative and reconstituted CEST. On 29th August 2014 reconstituted CEST was inaugurated by Dr. Shaji Senadhipan, former principal of the college. All activities and programs are coordinated by a faculty in the same department which also consists of a student committee from all semesters. The objectives of the council are:-

- To provide students with necessary supportive co-curricular training to enhance their curricular performance.
- To update students with recent trends in industry.
- To make the students learn new skills and upgrade existing ones.
- To focus on setting the perfect platform for students to groom and nurture the qualities of teamwork, leadership, mutual understanding and co-existence and to provide exposure to public and executive communication.
- To bridge the distance between the textbook syllabi taught and the practical application in industry.
- To provide insight into core research areas of Electronics and Communication Engineering.

Staff-in-charge: Smt. Bindu V. Indian Institute of Chemical Engineers

Indian Institute of Chemical Engineers (IChE), Student Chapter, SCTCE, TVM-18. The IChE student chapter in SCTCE started in May 2017 in the department of Biotechnology and Bio-Chemical Engineering and is functioning under the Trivandrum region of the association. The number of students registered is 101. The Trivandrum region association organizes conferences, seminars and symposiums on various topics related to the field of Chemical Engineering, Biotechnology & biochemical engineering and project management. All activities and programs are coordinated by a faculty in the same department which also consists of a student committee from all semesters.

Cybots Cybots, the robotics club of SCTCE, formed by students interested in the field of robotics and latest advancements in the robotics industry. It was introduced to provide a knowledge dissemination platform for the students. It also guides their journey into the realm of technology that shapes and nurtures the creative thirst and sculpts the potential of Young Minds. Founded by the students of 2015-19 Electronics and Communication Engineering batch, it comprises of students from all years and works under the Department of Electronics and Communication Engineering. Being one of the youngest clubs of SCTCE, it was formed keeping in mind the competitive nature of today's industry and the need of practical knowledge within students of Engineering. It aims to guide and mentor, students who are interested in the field of robotics, encourage their participation in robotic competitions at inter and intra-college level. Also, the club conducts numerous workshops and competitions in light of the same, on both peer to peer and professional level. The club's main aims are as follows:-

- To provide various opportunities in robotics and help its members to gather both theoretical and practical experiences by helping them to open up new possible dimensions in the field.
- To extend maximum support to the participants of robotics-related competitions and provide technical support to those who are interested in developing their ideas.
- To guide enthusiastic freshers and foster their interest in various aspects related to robotics
- To undertake a project each year, which is to be completed by the members under the supervision of the experienced students and faculties of the College which in turn gives them the knowledge and experience of the project development.
- To foster the skills of teamwork and leadership qualities among individual members.

Faculty In-charge: Ms. Aparna P R

**Meckartans** It is a group of automobile enthusiastic students. They design analyse and fabricate gokarts with a different specification and participate in National Level Events. They also conduct workshops and seminars on automotive engineering in schools and colleges. All activities and programs are coordinated by a faculty in the same department which also consists of a student committee from all semesters.

**AMAS** Artificial intelligence and machine learning, the branch which comes under the department of computer science was introduced into our prestigious institution in the year 2020. Artificial Intelligence and Machine Learning Association of Student, AMAS was formed in the year 2022. Our dedicated faculties are Dr Subu Surendran and Dr. Sonia B. They are devoted in enhancing the capabilities and potential of the students by creating opportunities and with guidance. Bhagath SS was selected as the secretary of AMAS. At first, the first program organised by the AMAS was conducted in association with Advent. It was a workshop on introduction and demonstration of MediaPipe, a machine learning framework by Google. Introduction to hugging face library is the other event under AMAS in association with advent. These programs came out to be a great success which was a head start to our association. From there on, there was no turning back; our students excelled in every possible academic and co-curricular activities. Furthermore, AMAS contributed immensely to the technical and cultural events conducted under our institution's techno cultural fest 'Cult A Way'. Within a short span of time since its formation, AMAS came a long way in the path of success and looking forward to achieve more and more in the journey ahead of us. AMAS activity 1. "Aiverse - introduction to media pipe" by abhijith udayakumar -104 participants on 22/05/2022 2. "Introduction to hugging face library" by Rohith Francis -14 Participants on 31/05/2023 Central Computing Facility

The Central Computing Facility (CCF) acts as the nodal centre for all networking related issues of the college. A fibre optic network connects the various departments with the CCF. It is an approved facilitation centre by Govt. of Kerala for providing online registration facilities for candidates in the CEE. The college computing facilities are also used for the conduct of various online tests by external agencies like RRB, VSSC, Postal Department etc. CCF has 49 Dell Optiplex 5050MT desktop computers with Intel Core i5-7700 Processor, 1TB SATA HDD and 8 GB RAM. The machines are dual boot supporting both Windows and Linux OS. Dell Power Edge T4b30 server with Windows 2012 R2 as domain controller is installed in CCF. Also, Five HP Blade server are used for campus automation. The CCF is open from 9.30 to 7.00 pm and caters to the needs of students from all branches. Library The Central Library is to facilitate creation of new knowledge through acquisition, organisation and dissemination of knowledge resources and providing value added services. The Central library has more than 32,000 books and 66 national and international journals/magazines. Apart from the Conventional Library, there exists a Digital library which contains sufficient digital documents such as E-books, E-journals, Technical Reports, and Project Reports etc. The SCTCE Library provides access to E-journal packages viz. IEL online (IEE), Elsevier's Science Direct, ASME, Springer, DELNET and NDL membership. E-resources can be accessed through the Campus Wi-Fi network to all computers and Wi-Fi enabled laptops and cell phones in the institute. DELNET can be accessed remotely by authorised users. An amount of around 250000/- is spent each year on procurement of various kinds of information sources. Books to prepare for Competitive examinations like Civil Services, GATE, NDA,

CDS, CAT etc. are stocked in the Proficiency corner of the Library. Library operations are fully automated with the Library Management Software LIBSOFT. Books are being arranged on open access shelves for easy search and retrieval purposes and classified according to DDC (Dewey Decimal Classification) system. Library Council is a nominated body required for the evolution of policies and services for improving the library services. Library Council plays very important role in the smooth functioning of the library. Excellent services are provided in the library that facilitates information management which culminates self-motivated learning and preservation of Information Bulletin 2021 -2022 Sree Chitra Thirunal College of Engineering 70 knowledge for the enlightenment and inspiration of budding engineers. LIBRARY COUNCIL The important Library services: • D Space Digital Repository • Repographic Facility • User Education Programme • SDI- Selective Dissemination of Information • CAS – Current Awareness Services • OPAC – Online Public Access Catalogue • Digital Library- [digitalibrary@sctce.ac.in](mailto:digitalibrary@sctce.ac.in) • E- journals/ E-books • Printed journals/ News papers • Previous Question Papers • Proficiency Corner NDL Club Executives: Club Patron : Dr.V Syam Prakash, Principal Club President:Dr.Abhilash S.S, Convener, LibraryCommittee Club Secretary Smt.Priyanka S, Librarian Gr.II Executive Member – Sri.Runny Bai S, Librarian Gr.III

## DEPARTMENTS OF SCT

### Computer Science & Engineering

HOD OF CS DEPARTMENT IS MRS. REJIMOL ROBINSON R R

About Department The B.Tech and M.Tech programmes in computer science and engineering were started in 1995 and 2010, respectively, and the department promotes value-based, quality education in the developing fields of computer science and information technology. The B.Tech course in computer science and engineering is accredited by the National Board of Accreditation (NBA). In the year 2020, the B.Tech programme in Computer Science & Engineering (Artificial Intelligence and Machine Learning) began. Under the auspices of APJ Abdul Kalam Technological University, Kerala (KTU), our department is a recognised research centre. The department comprises seven laboratories with cutting-edge technology and a department library with books for study and other materials. To keep up with the fast evolving technological landscape, the department is regularly updating its lab infrastructure. Our graduates have represented the department with pride by holding prominent positions in businesses and public and private organisations. The department's main goals include the development of students through challenging coursework, engaging research, and the teaching of skills that meet industry standards. Students have the option of gaining access to IEEE, Springer, and Science Direct's online journals. Students are encouraged to take part in intercollegiate technical and cultural competitions. In the national level project competition held by CSI-Inapp in 2019 and 2020, our students took first place. Additionally, a number of projects have been praised. The Department places a high priority on the planning of workshops, seminars, industrial visits, and internship programmes to encourage students to think outside the box and be more in tune with current business trends. Tata Elxsi is offering internships to 20 Department final-year students in exchange for a respectable salary. In addition to offering opportunities for students to advance their technical abilities, the Department also hosts very active chapters of professional organisations like IEEE and CSI. Students regularly contact with alumni to receive support and gain exposure to the industry and other disciplines. The two active student organisations in our



department are Lanscape and AMAS, and they regularly hold technical workshops and expert speeches. Vision: To be a premier centre for education and research in the field of Computer Science and Engineering.

Mission: To impart sound knowledge on Computing and Engineering principles to design and develop feasible solutions. To instill in students an aptitude for research and entrepreneurship. To inculcate in students an attitude of lifelong learning and problem solving. To mould students into excellent professionals and good social beings

Program Educational Objectives (PEOs) PEO1 : Design software systems, tools and applications to solve socially relevant and technically challenging problems. PEO2 : Work effectively as individuals and as team members and assume leadership roles, with good ethics and communication skills. PEO3 : Engage in lifelong learning, career enhancement and/or pursue higher education and research. Program Outcomes (PSO's) PSO1: Foundation of Computer System Understand the principles and working of computer systems. Students can assess the hardware and software aspects of computer systems PSO2: Enterprise Architectural Skills Analyze, design and develop software solutions of varying complexities in the areas related to system software, multimedia, web and mobile applications, data analytics, machine learning and networking. PSO3: Successful Career and Entrepreneurship Employ modern computer languages, environments, and platforms to create innovative career paths in higher studies and entrepreneurship.

Organizational Structure The Department is headed by the Head of Department (HOD) and each Program by the Program Coordinator (PC). The Department Advisory Board (DAB) acts as the apex advisory body and gives guidelines for the efficient functioning of the Department. Each Stream Committee coordinates the academic activities of the faculty under them. The DAB members, PAC members and responsibilities of each stream committee in the structure are depicted infrastructure Table Department Faculty DR.SONIYA B Professor soniya@sctce.ac.in 9447002200

DR.SUBUSURENDRAN Professor subusurendran@sctce.ac.in 9447817044 REJIMOL ROBINSON R R Associate Professor rejibz@sctce.ac.in 7306290655 DR.CHITHARANJAN KARAT Asst. Professor chitharanjan@sctce.ac.in 9447703131 KAVITHA K V Asst. Professor kavitha@sctce.ac.in 9447965262 REJIMOAN R Asst. Professor rejimoan@sctce.ac.in 9446459948 PREEJA V Asst. Professor preeja@sctce.ac.in 9495939323 SYAMA R Asst. Professor syamasivakumar@gmail.com 9846445444 BINU RAJAN M R Asst. Professor binurajan@sctce.ac.in 7907564188 SOJASALIM Asst. Professor soja@sctce.ac.in 9846157832 KUTTY MALU V K Asst. Professor kuttymaluvk@sctce.ac.in 9544452293 JEENA JOHN Asst. Professor t iginjeena@gmail.com 6238416670 HARIPRIYA B S Asst. Professor smilinghp@gmail.com 9497264985 DHANYA P Asst. Professor dhanyapadmaja@gmail.com 9400492529 SREEPRIYA L Asst. Professor sreepriyaminnoose@gmail.com 9446072304 MERRIN J Asst. Professor merrin.j@gmail.com 9446485963 DR.MANOJ B C Asst. Professor manoj9444@gmail.com 8714463063 SHREE DIVYA R Asst. Professor sreedivya965@gmail.com 7356384656 LINTA ANN KORUTHU Asst. Professor lintacet@gmail.com 7907549713 ANJU P NAIR Asst. Professor anjunairp@gmail.com 7994265166 SARANYA B S Asst. Professor saranyavishnudutt57@gmail.com 8111820591 SUREKHA I S Asst. Professor surekhaibiju@gmail.com 9495043722 ANU KRISHNAN B Asst. Professor anuleo111@gmail.com 7293119499 SOUMYA M Asst. Professor soumyam2000@gmail.com 9846493992 Technical Staff HARIKUMAR.S Instructor Gr.II harikumarst@gmail.com 9495066958 SAJI G Instructor Gr.II sysadmin@sctce.ac.in 9447457004 SEN K V Trade Instructor sen@sctce.ac.in 9495829606 MEENA S R Trade Instructor meena@sctce.ac.in 9496253171 JAYAN J Trade Instructor jayansct@gmail.com 9447591042

Facilities Laboratories The Department has seven full-fledged Computer Labs. All machines are connected to the Internet via leased line with a bandwidth of 70 Mbps. Deep learning Lab The Lab is

equipped with 30 HP-285 Pro G8 Microtower PC (AMD Rayzen 5-5600 processor with 8GB DDR4 RAM, 512 GB SSD). The lab is utilized for conducting laboratory experiments in the area of machine learning and deep learning for the students. Deep learning has become an increasingly important part of Artificial intelligence and with the accelerated penetration of use witnessed in business and research.

**Artificial Intelligence and Machine Learning (AI & ML) Lab** The AI & ML lab is equipped with 35 numbers of desktop machines with Intel I5 Processor. The machines are dual boot, supporting both Windows and Linux Operating System. The lab is utilized for conducting Machine Learning Lab, Mini project and Final year projects of B.Tech AI & ML programme.

**Programming Lab** This lab is equipped with Intel i3 machines with 8 GB RAM & 256 SSD. The machines are dual boot supporting both Windows and Linux Operating System. The lab is utilized for conducting Python Programming, C Programming, Free and Open Source Software and Data Structures Laboratory courses.

**Database Lab** The lab is equipped with 36 machines of latest configuration connected to the server. The recent developments include installation of software to handle language lab along with audio headsets. All the machines are internally networked. This lab is specialized for handling courses on Database and Network programming

**Advanced Systems Lab** This laboratory focuses on training students in hands-on development in computer systems with emphasis on system near software. The lab is equipped with state of the art servers, desktops (Intel Core i3 processors 4GB DDR3 RAM and 1 TB HDD) and various software like Python, OpenGL, JAVA etc. to train the students in programming and development. This lab provides the infrastructure for conducting the regular laboratory courses in Compiler Design, System Software, Computer Graphics, etc. and project works for the B.Tech programme. The students learn to design various system softwares, solve various real world problems using object oriented concepts, design and implement graph algorithms, demonstrate their working with graphical simulation and design and execute programs for computer graphics animation.

**Hardware Lab** This lab has been set up to familiarize the students in electronic circuits, digital electronics, microprocessor, microcontroller and interfacing courses. The electronics ircuits lab explores the design and construction of analog electronics circuits. Digital electronics introduces the principles and applications of digital systems. The lab introduces experiments like the operation of basic logic gates and design of combinational and sequential circuits. The lab has 8086 microprocessor kits, 8051 microcontroller kits and various interfacing cards to expertise the students in assembly language programming and interfacing. The lab is also equipped with 15 computers to do 8086 programming using MASM.

**PG Software Lab** The Lab is equipped with 25 HP-8200 Elite Micro Tower (Core i7) with 2GB RAM) computers and one HPE ProLiant ML 3G (Xeon Processor with 32 GB RAM) server. The lab is utilized for conducting laboratory experiments, Mini project and Thesis work for M.Tech students.

**Research Lab** The purpose of research lab is to provide a conducive environment for various research activities, such as programming, multimedia editing, data analysis, and general computer usage.our research lab empowers research scholars to conduct innovative experiments, simulations, and analyses

1. **Hardware Specifications:** Device Description Processor Intel core I7 9700k Motherboard Z390 M RAM 16 GB DDR4 Cooler Master Master Liquid ML 240 L SSD ITB SSD WD Display 24 inch DELL LED Monitor Mouse Dell USB Keyboard Dell USB DVD External DVD RW Virtual reality system OCULUS RIFT S GRAPHICS CARD
2. **Software Specifications:** Operating System:The work station supports 64 bit OS, is installed with Windows 10 Pro. Office Suite:A productivity suite, such as Microsoft Office or Google Workspace is installed in computer. Programming Software:Installed with commonly used programming environments, such as Python,Java, C/C++, and IDEs (Integrated Development Environments) like Visual Studio Code or Eclipse,Ethereum. Internet Browsers:Installed with multiple browsers like Google Chrome, Mozilla Firefox, and Microsoft Edge to facilitate compatibility testing and development.
3. **Networking and Infrastructure:** Network Connectivity:Ensure reliable and high-speed internet connectivity through wired and wireless connections.

**Artificial Intelligence Innovation Lab** The AAIL (Artificial Intelligence

and Innovation Lab) is a platform within the Department of Computer Science and Engineering, dedicated to fostering innovation and research in the field of Artificial Intelligence (AI). This lab is equipped with state-of-the-art technology high-performance computing (HPC) facility. This GPU-based clustering solution comprises one master node and five compute nodes, offering exceptional processing power of 175 TFLOPS (TeraFLOPS). Thirty-five 10th generation Intel® Core™ i3 Processordesktop PCs are also available in the lab. Department Library The Department Library occupies a unique place in academic and research activities of the Department. The Library was started in 2007 with around 90 volumes; now it has around 710 volumes. The Library maintains an excellent collection of books, seminar reports and Project reports and other documents /materials. The library has a well-equipped facility for reading. Seminar Hall The department has an exclusive seminar hall with audio visual support. Student level and external seminars are hosted at the venue.

**Mechanical Engineering About Department** Mechanical Engineering is one of the oldest engineering disciplines and among the most diverse in terms of the variety of applications. Mechanical Engineers apply the principles of mechanics and energy to the design of machines and devices, operation and their maintenance. Under department of Mechanical Engineering, Division of Automobile Engineering and Division of Electrical Engineering are functioning. The department is offering B. Tech in Mechanical Engineering, B.Tech in Mechanical (Automobile) Engineering, M. Tech in Mechanical Engineering (Machine Design). All class rooms, labs and other facilities as stipulated by the AICTE/University is available at the department. Vision of the Department: The department aspires to be a symbiotic learning space in Mechanical engineering in equilibrium with the development of mankind Mission of the Department: The department is committed to nurture students in Mechanical Engineering by imparting knowledge and facilitating intellectual stimulus to analyze and innovate through fruitful interactions and synergistic activities, upholding ethical values

**PEOs- B. Tech MECHANICAL ENGINEERING**

- Apply the knowledge of Mechanical Engineering to solve problems of society and pursue higher education and research
- Function effectively as a team member or leader in the conception, design and implementation of mechanical systems and processes through interdisciplinary approach.
- Maintain sensitivity to societal and professional needs and adopt ethical action for sustainable development.

**PEOs- B. Tech MECHANICAL (AUTOMOBILE) ENGINEERING**

- Apply the knowledge of Mechanical and Automobile Engineering to innovate, design, manufacture and evaluate vehicles
- Be able to use latest design, analysis and evaluation tools and protocols and offer solutions to make automobiles that are safe and environment friendly.
- Understand and appreciate the interdisciplinary nature of Automobile Engineering and be able to function as a leader / team member of multifaceted groups
- Maintain sensitivity to safety, sustainability and professional ethics

**PEOs- B. Tech MECHANICAL (PRODUCTION) ENGINEERING**

- Apply the knowledge of mechanical engineering to solve problems of society and pursue higher education and research
- Function effectively as a team member or individual in the conception, design and implementation of Mechanical and Manufacturing systems / processes.
- Maintain sensitivity to societal and professional needs and adopt ethical action.

**DAB OF MECHANICAL AND AUTOMOBILE PROGRAMMES**

**Members**

**No Role Automobile Mechanical Academician from leading institution**

**1 Chairman** Dr.A.Ramesh, Professor, IIT Chennai. Prof. P. V. Aravindbr Professor, Energy and Sustainability Research Institute, University of Groningen, Netherlands

**HOD/Division head**

**1 Member** Dr.Prakash U Dr. Anoop Kumar S. Industry representative

**1 Member** Sr.Shajahan, MD, KAL Dr. Venugopal Shankar, Vice President, Tech Innovation, Mahindra & Mahindra Ltd. Expert from Research organisation

**1 Member** Binoj.K, Director (Complete vehicle), UD Trucks, (Izusu group)

**Dr. S B Tiwari, Scientist D, VSSC, Thiruvananthapuram**

**Alumni representatives**

**2 One from industry and other from academia/research**

**Dr. SHJO THOMAS, Faculty, NIT, Calicut**

**Sri.Pramojsankar IES, Addl Transport commissioner, Govt of Kerala**

**Sri. Karthik A S Marie Curie Early Stage Researcher Universidad de Sevilla, Spain**

**Sri. Praveen N. COO, Nytt AB, Sweden**

**University representative**

**1 Preferably Professor**

from KTU / CET / GEC Dr. Baiju B, Former Registrar, APJ Abdul Kalam Technological University Professor, Government Engineering College, Thrissur Dr. Baiju B, Former Registrar, APJ Abdul Kalam Technological University Professor, Government Engineering College, Thrissur Faculty member (Prog. coordinator) 1 Convener Prof. Sabu.V.R Dr. Mohan G. Representative (faculty) 1 Member Dr.K.B. Radhakrishnan, Dr. Bobby Philip, Assoc. Professor (EE), SCTCE from other department HOD, BC&BT Department Student representative 1 Member U6- ANAND A S, PTA representative 2 Member Abhinav SS, Student, Sixth Semester Mech. Engg. Smt. Shobhana Kumari B.Tech 1. Mechanical Engineering 2. Mechanical (Automobile) Engineering 3. Mechanical (Production) Engineering M.Tech 1. Mechanical Engineering (Machine Design) Smt. P. Laila

The scheme and syllabi as prescribed by the University of Kerala and more recently by the Kerala Technological University (KTU) of Kerala is followed for all courses. Student Performance The department maintains consistently high pass percentage in university examinations and bagged several top ranks throughout its existence. Mechanical, Automobile and Production engineering students of this college are active in various curricular and extra-curricular activities conducted on a national level and bagged several accolades. Institute- Industry Interaction The department is very keen on establishing linkages with industries and research institutes through student projects, expert talks, training programmes etc. The department took lead to come up with formal tie-ups through MOUs with few of these establishments. The tie-up TATA-ELXI for preparing students in the final year for job-readiness is among the one of this kind during the recent past. In addition to the above the faculty members took active interest to take part in different bodies/ committees established by the government and other agencies.

**Electronics and Communication Engineering About the Department** The Department of Electronics and Communication Engineering was started during the inception of the institute, in the year 1995. The department grew into a full-fledged one, with two B.Tech batches, in the year 2001. The annual intake for the undergraduate programme is currently 120 students. The Department offers minor in Artificial Intelligence, Mechatronics etc to facilitate the students to get a B.Tech Degree in Electronics and Communication Engineering with minor in the specified course. The department also offers Honours degree in Electronics and Communication Engineering. A Postgraduate programme (M.Tech) in Signal Processing, with an annual intake of 18 students, was started in the year 2011. The department has been an approved research centre under APJ Abdul Kalam Technological University (KTU) since 2016 and high-quality research work in areas such as holographic storage system, optical communication, optical fiber sensors, nanomaterials and devices, machine learning, secure communication and data processing, wireless communication and biomedical signal processing is carried out in the department. "Nanoelectronics and Materials Research Lab" was set up utilizing the Plan fund of Rs. 1 Crore, allotted by the Govt. of Kerala, in the financial year 2021–22 and "Innovation Centre for IoT and Wireless Communication," for the same amount in the financial year 2022-23. Govt. of Kerala has also allotted Plan fund of Rs. 1 Crore each to set up an "Innovation Centre for Biomedical Research" and "Robotics and Machine Learning Lab" in the financial year 2023 – 24. The focus of the department is to produce graduates and post-graduates with strong fundamentals in the electronics and communication domain with knowledge of the latest technologies in use in the industry, so that they can meet the upcoming challenges in the field. The undergraduate programme provides a strong foundation in the fundamentals of engineering and science. A variety of electives, Minor and Honour courses give the student an insight about the latest advancements in the field. With a firm grounding in the basics, the students are well prepared for both post-graduate studies and the high-tech corporate environment. The ECE department has some of the finest faculty members in the state who are highly qualified, experienced and dedicated, with a strong commitment to the advancement of knowledge among the students. The faculty has expertise in various fields of Electronics & Communication, like Signal Processing, Image Processing, Applied Electronics, Communication Systems, VLSI & Embedded

Systems, Optoelectronics, Microwave Engineering, Network Security, Nanoelectronics, MEMS, Machine Learning, to name a few. The department organizes several national and international conferences, seminars, workshops, faculty development programmes and community development programmes for the benefit of students, faculty and society. The B.Tech programme in ECE has accreditation till 2025. The department was certified by the International Organization for Standardization under ISO 9001:2000 and has been selected for the first phase of World Bank aid under TEQIP. The department has consistently produced toppers in the university examinations and the majority of final year students are recruited by leading organizations every year. A large number of our alumni are pursuing higher studies in premier institutions like IISc, IITs, NITs and IIMs in India and in reputed Universities abroad. The department takes initiatives to impart entrepreneurial skills to students and to update them about the recent technological advancements and the recent work going on in different fields of research. In order to achieve this goal, students are encouraged to interact with the industry by doing final year projects, training, internships etc., in collaboration with the industry. The department arranges expert talks on various topics by eminent industry professionals to create an awareness of the modern technology in use in the industry and the current advancements in research. The department has MoUs with various companies to strengthen the relationship and give better exposure of the industrial environment to the students.

**Vision of the Department:** To be a centre of quality education and research in the field of Electronics and Communication Engineering, to mould socially responsible engineering professionals.

**Mission of the Department:** To provide quality education ensuring systematic teaching learning process. To provide quality education ensuring systematic teaching learning process. To impart value-based education to prepare students to become socially committed engineering professionals.

**PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

PEO1: Pursue higher education and research, motivated in lifelong learning.(Knowledge)

PEO2: Engage in design, development and testing of systems in the field of electronics and communication engineering.(Professional competence)

PEO3: Work as competent engineers in a team involving core/ interdisciplinary projects.(Interpersonal skill)

PEO4: Use engineering skills to adapt technology for the betterment of the society.(Entrepreneurship)

**PROGRAM SPECIFIC OUTCOMES (PSOs)**

PSO1: Ability to acquire and update the principles and techniques in Electronics and Communication Engineering for the analysis of engineering problems.

PSO2: Ability to design and implement engineering solutions in Electronics and Communication Engineering with acquired technical knowledge with an insight of social, economic, environmental and ethical aspects.

PSO3: Ability to communicate effectively and develop interpersonal skills in multidisciplinary areas, committed to professional ethics in diverse areas of engineering.

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**Facilities** The state-of-the-art laboratories in the department help pave the way for the students towards research and development, besides giving them the necessary practical knowledge that they need to successfully complete the curriculum. The labs are equipped with instruments like Digital Storage Oscilloscopes, Standalone Logic Analyzer, Optical Spectrum Analyzer, MSO, Prototype PCB machine, Microprocessor/Microcontroller/DSP Assembly based kits etc. The software labs consist of high end PCs in addition to software like ORCAD, PSPICE, Comsim, Multisim, XILINX, MATLAB, LABVIEW, to name a few. Audio visual presentations are done in classrooms and labs for effective teaching. High speed leased line internet connectivity with Wi-fi and Optical fiber backbone is available.

**I. Laboratories**

- 1) **Electronics Workshop** This lab is fully equipped to give sufficient exposure to students on the fundamental concepts of electronics. This lab enables the student to acquire practical skills on electronic circuit wiring and gives the student a basic awareness of safety measures. This subject also imparts fundamental knowledge of electronic components and familiarizes the students with setting up circuits by soldering and testing them.
- 2) **Electronic Circuits Lab** The experiments conducted in this lab explore the design, construction, and debugging of analog electronic circuits and analog integrated circuits. The lab is well equipped with function generators and measuring instruments like cathode ray oscilloscopes, digital multi meters etc. The students get hands-on experience of designing, implementation and testing of a wide range of analog electronic circuits and analog integrated circuits. Apart from hardware experiments, simulation of the circuits in these areas are also carried out in this lab under the supervision of highly experienced laboratory staff and faculty.
- 3) **Digital Electronics Lab** This lab aims at introducing the basic concepts of digital electronics, principles and applications of digital devices and systems. The experiments conducted in this lab explore the design, construction, and debugging of analog electronic circuits and analog integrated circuits. Apart from hardware experiments, simulation of the circuits in these areas is also carried out in this lab under the supervision of highly experienced laboratory staff and faculty.
- 4) **Communication Engineering Lab** The lab gives exposure to designing, construction and debugging of circuits based on communication systems. The lab is well equipped with instruments like Digital Storage Oscilloscopes (DSO), dual power supplies and Power electronics trainer kits. Experiments on basic to advanced communication systems and power electronics are conducted in the lab under the supervision of highly experienced laboratory staff and faculty.
- 5) **Embedded Systems Lab** This lab is well equipped with the most modern equipment and the latest software. The objective of this lab is to help students to hone their skills in both hardware and software in implementing their project work. The lab has a VLSI development environment based on Altera, Spartan, Cool Runner and FPGA kits. The students learn FPGA programming and simulation through XILINX ISE Software. The lab also has 8051 based Microcontroller kits, PIC Microcontrollers and Microcontroller based development boards. The lab provides complete understanding of the development of embedded applications by training the students in programming and interfacing the various DSP Processors like TMS 320c 6713, 320c 243 using the latest version of Code Composer Studio. Students also learn to operate various high end test instruments, like Spectrum Analyser, Logic Analyser and Arbitrary Function Generator, Frequency Counter etc.
- 6) **Microwave Engineering & Optical Communication Lab** This lab provides practical knowledge of different techniques used for generation, transmission and reception of electromagnetic waves at Giga Hertz frequencies. The lab has fiber optic trainer kits which is used to give an overview of the fundamentals of fiber optics communication and study of analog and digital

links. 7) Project Lab - Texas Instruments Innovation Centre The Project Laboratory has a key role in promoting practical learning experience, a place where students can develop creative proposals, team ethics, execute their final projects and can ignite their research/entrepreneurship skills. The department has a well-equipped industry-supported innovation center cum laboratory with state-of-the-art equipment and software to help the students carry out their projects in diverse areas like advanced microcontrollers, Internet of Things (IoT), robotics and analog/digital signal processing. It also aims at helping students to become entrepreneurs and also to promote research activities in emerging areas. 8) Scientific Computing Facility The Scientific Computing Lab is the focal point of the department that is used for conducting regular technical training sessions, classes, seminars as well as short term courses on a variety of topics related to Computing and Information Technology. It is well equipped with the latest computers installed with various open source software, communication software and circuit design simulation software which are very essential for B.Tech students in understanding, designing, analyzing the systems and also virtual prototyping the systems. This lab provides a vital role in the promotion of practical learning experience and enhancement of research/ entrepreneurship proficiencies. This lab is also be used for conducting various online examinations. II. Departmental Library The department library is well equipped with a total of 1488 books of which 186 are PG related books, 700 are sponsored by TEQIP, and the rest are sponsored by PTA. In addition, various technical papers presented during seminars conducted by the students in the department, mini project and final year main project documentations are made available to the students for reference. Curriculum based video and web courses prepared by eminent professors from IITs and IISc Bangalore are purchased from NPTEL (National Programme on Technology Enhanced Learning) and CDs are available in the department library. III. Seminar Hall The department has an exclusive well-furnished and air conditioned seminar hall sponsored by alumni. The state of the art audio visual projection system aids in hosting effective lectures/ seminars on various emerging areas in order to update the knowledge of the faculty and students. Activities 1. Council of Electronics Studies (CEST) CEST is an association of the faculty and students of the Electronics and Communication Department started in late 90s under the guidance of Dr. Shanthi K.J. with many objectives that gain insights into latest technological developments to the students. With the support and guidance of the faculty, it has been providing the students a platform to sharpen their organizational skills and technical expertise. But later it became inactive for few years. Later in 2014 Prof. (Dr.) Sheeja M.K. the former head of the department took the initiative and reconstituted CEST. On 29th August 2014 reconstituted CEST was inaugurated by Dr. Shaji Senadhipan, former principal of the college. The objectives of the council are:- To provide students with necessary supportive co-curricular training to enhance their curricular performance. To update students with recent trends in industry. To make the students learn new skills and upgrade existing ones. To focus on setting the perfect platform for students to groom and nurture the qualities of teamwork, leadership, mutual understanding and co-existence and to provide exposure to public and executive communication. To bridge the distance between the textbook syllabi taught and the practical application in industry. To provide insight into core research areas of Electronics and Communication Engineering. Staff-in-charge: Smt. Bindu V. 2. IEEE Student Branch IEEE is the world's largest technical professional organization for the advancement of technology. IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity. IEEE and its members inspire a global community to innovate for a better tomorrow through highly cited publications, conferences, technology standards, and professional and educational activities. This Institution has a very active Student Branch which aims at providing technological advancements to its students and training them to be leaders of tomorrow. The members of IEEE Student Branch SCT are actively involved in organising various technical workshops. The IEEE students chapter started off in SCT in 2009 and been very vibrant and expanding since then. The chapter grew day by day and now it has a total

strength of nearly 70 student members. The student members get an opportunity to keep up to date with the technology and enjoy all the benefits offered to its members. The student chapter focuses on bringing the organizational and professional skill among its members through various activities. The student chapter organized many workshops, expert talks and various competitions for both members and non members. The weekly held seminars helps the members gradually build the confidence in public speech. The creativity and technical quest of the student members were given colours through the student branch Newsletter: epulse. The student chapter encourages students to participate in all the technical activities and help them become more responsible and remain committed to the cause. The chapter helps students learn subjects outside the curriculum by arranging short term training programmes. The student chapter also has a Women in Engineering (WIE) affinity group which encourages participation of women in engineering by funding various activities. IEEE SB Counsellor: Smt. Deepa A K 3. Cybots Cybots, the robotics club of SCTCE, formed by students interested in the field of robotics and latest advancements in the robotics industry. It was introduced to provide a knowledge dissemination platform for the students. It also guides their journey into the realm of technology that shapes and nurtures the creative thirst and sculpts the potential of Young Minds. Founded by the students of 2015-19 Electronics and Communication Engineering batch, it comprises of students from all years and works under the Department of Electronics and Communication Engineering. Being one of the youngest clubs of SCTCE, it was formed keeping in mind the competitive nature of today's industry and the need of practical knowledge within students of Engineering. It aims to guide and mentor, students who are interested in the field of robotics, encourage their participation in robotic competitions at inter and intracollege level. Also, the club conducts numerous workshops and competitions in pgh of the same, on both peer to peer and professional level. The objectives of the club are: To provide various opportunities in robotics and help its members to gather both theoretical and practical experiences by helping them to open up new possible dimensions in the field. To extend maximum support to the participants of robotics-related competitions and provide technical support to those who are interested in developing their ideas. To guide enthusiastic freshers and foster their interest in various aspects related to robotics To undertake a project each year, this is to be completed by the members under the supervision of the experienced students and faculties of the College which in turn gives them the knowledge and experience of the project development. To foster the skills of teamwork and leadership quapties among individual members. Staff-in-charge: Smt. Aparna P R

**Research Facilities**

1. Holography Lab An advanced Holographic research lab and dark room set up is assembled with different equipment for the development of photosensitive material and holography. Holography records and reads more than million bits of data with a single flash of light. This enables hologram-based data storage system to store more information in a smaller space and can offer faster data storage and retrieval. High storage densities and fast transfer rates, combined with durable, reliable media means that holography is poised to become a compelling choice for next generation storage. In addition, the flexibility of the technology allows a wide variety of holographic storage products to be developed, ranging from handheld devices for consumers to large storage products for enterprises. The objectives of the research facility are listed below:
  1. Design and Develop a holographic storage system
  2. To find a suitable recording medium for storing holographic data.
  3. To develop a new procedure to store holographic data
 This facility helps in getting knowledge and meets the industry demand courses, and also helps in developing the theoretical knowledge for better understanding and analyzes complex engineering problems. A project entitled "Design and Development of a Holographic Data Storage System" was completed and awarded A grade under the investigation of Dr. Sheeja M K and Nelwin Raj N R with an amount of 10 lakhs grant under TDAP scheme, funded by KSCSTE and technical support from CDIT.
2. Nanoelectronics and Materials Research Lab Administrative sanction for an amount of Rs.1 Crore under Plan Fund 2021-22 has been



accorded by the Govt. of Kerala for setting up Nanoelectronics and Materials Research Lab. The proposed Research Lab focuses on the research, training and development in the areas of Nanoelectronics, Nanomaterials and Optoelectronics. This Research Lab presents unique opportunity to boost the quality of engineering education, deepen understanding, and provide the necessary practical skills to young minds through cost effective outreach and distance learning activities. Although the major focus of this research facility is in the research/training of in-house researchers and students, the facilities can also be made available to researchers and students from other institutions, laboratories and industry. The proposed lab facility can also be utilized for R&D activities and for doing consultancy works. This lab will help students to pursue interdisciplinary research across several disciplines with a focus on nanoscale systems. This lab can accommodate research topics such as nanoelectronics circuit design, MEMS/NEMS, nanomaterials and devices, nano-biotechnology, solar cells, energy storage devices, Fiber Bragg Gratings (FBG) and Long Period Gratings (LPG). The design and testing of nanoelectronics circuits, synthesis of new materials, fabrication and characterization of nano-scale devices are the main research works can be carried out in the proposed Nanoelectronics and Materials Research Lab 3.

**Innovation Centre for IoT & Wireless Communication**

Govt. of Kerala has sanctioned an amount of Rs. 1 Crore under Plan Fund 2022-23 for the establishment of Innovation Centre for IoT & Wireless Communication. The vision of this Innovation Centre is to carry out innovative, collaborative and interdisciplinary research in IoT, blockchain and wireless communication, thereby bridging the gap between academia and industry. The main objective of this research lab is to expose students and research scholars to industry disruptive cutting-edge technology; provide access to a prototyping lab that brings cutting-edge concepts to reality. This research lab provides a platform for students, faculty and research scholars to convert academic research into useful products to society in diverse application areas such as smart home, smart city, connected automobiles, supply chain, healthcare and agriculture. The innovation centre mainly focus on research areas such as design and development of IoT proof of concepts and prototypes using various IoT development boards such as CDAC IoT research lab kits, Raspberry Pi boards, Arduino boards and Mikroelectronika boards; design new communication protocols and technologies using NetSim Software; develop rapid prototyping for communications systems using LabVIEW Software; experimental study of cognitive radio and radio frequency (RF) power measurements, and experiments on spectrum sensing techniques, simulation studies and implementation of multiple input multiple output (MIMO) wireless communication using software defined radio (SDR) transceivers such as RTL SDR, LimeSDR, HackRFOne, and universal software radio peripheral (USRP) and its accessories. In addition to research activities, this lab focuses on supporting students, research scholars and faculty from other institutions by providing access to the Innovation Centre and through various training and internship programs.

**Biotechnology and Biochemical Engineering**

About Department The department of Biotechnology and Biochemical Engineering occupies a unique niche at SCTCE, thanks to a highly qualified and committed faculty team with rich experience and profound expertise in Biosciences, Bioengineering, Chemical engineering and allied disciplines. Right from its inception in 2002, the department has been consistently working towards accomplishing its vision of emerging as a centre of quality education, training, research and entrepreneurship in Biotechnology and Biochemical Engineering. Apart from the usual number of university toppers and GATE qualified students, the astonishingly huge number of our alumni who are placed in reputed companies all over India and those who have proceeded for pursuing higher studies in reputed universities abroad over the last couple of decades is a straight forward testimony to our department's commitment towards imparting quality education and training to our students. The department has entered into MoUs (since 2021) with reputed companies like HLL Life Care Ltd. Thiruvananthapuram, Green Method Engineering Pvt. Ltd. Kochi and Ram Biologicals, Kozhikode, which has helped our students in pursuing internships and industry-oriented projects during the

course of their graduate program. On the research front, our department was supported by the AICTE through MODROB scheme (Government of India), during 2020-2022 which has enabled the modernization of our lab facilities. The department is also pursuing four infrastructure development projects funded by the Government of Kerala under Annual plan 2022-2023 and 2023-2024 (together worth 2.98 crores) which are currently at various stages of completion. It is hoped that by the year 2025, the department will establish itself as a hub of quality research and training in the areas of Biofuel Technology and Environmental Biotechnology, with the aid of state of the art laboratory infrastructure which is being developed at an accelerated pace. Since 2020, the department has successfully completed 5 student projects under KSCSTE and 6 projects under KTU-CERD (together worth rupees 3.5 lakhs). Additionally, three student projects worth rupees 1.5 lakhs are still under progress. The department is gearing up to establish collaboration with some start-up companies in Kerala, for taking up consultancy projects in the area of fermentation technology. Our students have abundant opportunities to hone their technical knowledge and skills through events like workshops, seminars, invited lectures and conferences which are organized on regular basis under the aegis of the student chapter of the Indian Institute of Chemical Engineers (IIChE) and the Biotechnology students' association, EVOGEN. Our students have excelled in various extra-curricular activities through active participation in NSS activities as well as various arts and sports events conducted at the college level and university level. Our students and faculty members are making remarkable contributions on the academic front by participating and presenting papers at various national and international conferences, and by publishing their research outcomes in high-impact international journals. Our faculty members are also striving to enhance the reach of the department in the public domain by organizing training programs and workshops for the public. With a dedicated academic block which is proposed to be constructed with financial support from the Government of Kerala, under Annual Plan 2023-2024, I can say beyond any doubt that the department of Biotechnology and Biochemical Engineering is all set to move ahead swifter, higher and stronger, in the years to come.

**Vision of the Department:** To emerge as a centre of quality education, training, research and entrepreneurship in Biotechnology and Biochemical Engineering. **Mission of the Department:**

- To impart sound knowledge of basic concepts in Biotechnology and Biochemical Engineering which will help our students to emerge as competent professionals.
- To inculcate passion and motivation for pursuing higher studies in premier institutions at national and international levels, and to develop a flare for lifelong learning.
- To equip students with the right set of skills required to identify, analyze and solve problems relevant to the field of Biotechnology and Biochemical engineering.

**Programme Educational Objectives:**

- Our graduates will excel in Biotechnology and allied industries as good process engineers capable of handling various production related activities including quality control.
- Our graduates will serve as competent professionals with strong ethical values and communication skills.
- Our graduates will pursue extended studies and research in reputed institutions at the national and international level.

**Programme specific outcomes**

- Acquire sound basic knowledge of biotechnology and biochemical engineering concepts to help emerge as good process engineers in industries.
- Acquire expertise in various bioprocess strategies aimed at promoting sustainable design and development.
- Acquire the capabilities required to function successfully as a member or leader for managing various bioprocess-related projects, with a clear understanding of the need for contemporary technological changes.

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 Assistant ajayakumarr@sctce.ac.in 9495348512 Facilities I. Labs 1) Chemical Engineering Workshop  
 This lab is intended to impart basic knowledge in chemical engineering through simple experiments  
 and demonstration. Students will have thorough understanding of the basic concepts that they learn  
 in the theory course "Introduction to Chemical engineering". 2) Microbiology Lab Study of  
 procedures for isolation characterization and cultivation of biological agents called microorganisms  
 for various applications like fermentation; practical studies on cell growth processes, in vitro and in  
 vivo studies on cellular functions, characterization of cell receptors, plant and animal cell/tissue  
 culture processes. Major equipments: Kjeldahl's apparatus, Horizontal and vertical autoclaves,  
 Laminar air flow chambers, BOD incubators, Turbid meters, Hot air ovens and Monocular & Binocular  
 light microscopes. 3) Fluid Flow and Particle Technology Lab This lab provides the platform for the  
 practical studies on principles of momentum transfer (fluid and particle mechanics), studies on flow  
 measurements, particle size determination, solid/liquid separation techniques, determination of  
 fluid viscosity, particle surface area, porosity etc. 4) Bio Chemistry Lab In this lab qualitative and  
 quantitative analysis of bio molecules, assay procedures for enzymes, extraction and purification of  
 simple and complex biological molecules are carried out. Major equipments are Cooling centrifuge,  
 Bench top centrifuge, Filter photo colorimeters, UV Visible Spectrophotometers, Magnetic stirrers. 5)  
 Instrumental Methods of Analysis Lab In this lab study of quantitative methods for analysis of  
 composition of solid mixtures, pure liquids, liquid solutions etc. are done. The lab also provides a  
 practical insight to various techniques like flame photometry, densitometry, conductivity and pH  
 measurements, UV visible spectrophotometer, chromatographic separations (Gel filtration, HPLC, Ion  
 exchange chromatography) etc. Major equipments used here are Flame photometer, Densitometer,  
 Conductivity meter, pH meter, Electrophoresis unit, Refractometer, Polarimeter 6) Biochemical  
 Engineering Lab This lab helps in the studies on structure and functions of the genetic material  
 (DNA), methods for separating ion and analysis of nucleic acids and proteins (electrophoresis, gel  
 documentation etc.), DNA sequence analysis (PCR based methods), protocols for genetic engineering  
 applications (restriction digestion, ligation, bacterial transformation etc.). Major equipments:  
 Horizontal and vertical gel electrophoresis units, Gel documentation system, Thermal cycler (PCR  
 machine), UV Trans illuminator, TLC unit 7) Software Lab This lab is used for studying various  
 software's like C++, MATLAB, Simulink, CHEMCAD etc. which are essential for biochemical/chemical  
 process design, modelling, control and simulation 8) Heat and Mass Transfer Lab This lab is proposed  
 for the study of operation of various heat and mass transfer equipments like evaporators, heat  
 exchangers, dryers, distillation columns, extraction units, etc. Major equipments used here are  
 Evaporators, Heat exchangers, Emissivity apparatus, Conductivity apparatus, Steam distillation unit,  
 Natural draft tray dryer, Simple distillation unit, Wetted wall column. 9) Downstream Processing Lab  
 This lab aids in the study of techniques for recovery, isolation, purification and polishing of bio  
 products like organic acids, amino acids, antibiotics, vitamins, steroids, alcohols etc. produced by  
 fermentation processes. Major equipments are Vacuum filtration, Ultrafiltration, Water purification  
 system, Demineralizer, Laminar air flow chamber, Shaking incubator, Sonicator, Refrigerated  
 centrifuge, TLC unit, BOD incubator, Crystallizer, Fluidized bed dryer, Bead mill, Vacuum oven. 10)  
 Reaction Engineering and Process Control Lab This lab facilitates the studies on factors influencing  
 rates of chemical reactions, dynamic studies on various processes and equipments, analysis of  
 control systems for process applications. Major equipments are Pneumatic control valve,  
 Temperature control trainer, Thermocouple calibration rig, Liquid level systems, Plug flow reactors,  
 Batch reactors, Cascade CSTRs 11) Environmental Engineering Lab The Kerala State Pollution Control  
 Board approved Environmental lab of Biotechnology and Biochemical department as a licensed

centre for testing of water and waste water for industrial and domestic purposes during the year 2019. Major equipments in this lab are PH meter, Spectrophotometer, Flame photometer, BOD incubator, Polarimeter, Autoclave, Laminar hood, Electronic weighing balance, Centrifuge, Viscometer, Sonicator.

12) Bioprocess Engineering lab Scope of this lab is to impart practical awareness on various aspects of microbial growth and enzyme kinetics by performing bench scale experiments under controlled environmental conditions. Major equipment here are Bench scale bioreactor (3 L), Orbital shaker, BOD incubator, Laminar air flow chamber.

13) Analytical Techniques in Biotechnology Lab This lab focuses on major analytical and separation techniques in the Biotechnology lab. The analytical technique includes quantification using spectrophotometry, colorimetry, refractometry, etc. The separation techniques include various chromatography techniques and electrophoresis techniques. Major equipment includes Single and Double Beam UV VIS spectrophotometer, Column chromatography, Refractometer, polarimeter, etc.

14) Reaction Engineering and Process Control Lab This lab provides practical hands-on training on the operation of key equipment in Reaction Engineering and Process Control. The basic principles of Reaction Engineering and Process Control are applied to find the kinetics of chemical/biological reactions and responses of process control systems by performing experiments. The major types of equipment available in the laboratory are Isothermal Batch Reactor, Isothermal Semi-batch Reactor, Isothermal Tubular Reactor, Continuous Stirred Tank Reactor, Cascade CSTR, Straight tube Plug Flow Reactor, RTD Studies in PFR, RTD Studies in CSTR, Single Tank Liquid Level System, Two Tank Interacting System, Two Tank Non- Interacting System, U-tube manometer, Response studies in thermometer, Liquid Level Control Trainer, Temperature Control Trainer, Pressure Control Trainer, etc. The experimental facilities that are available in the Reaction Engineering and Process Control Lab help the students to compare the different types of reactors and hence would help supplement the knowledge they have gained through theory courses. These experiments are used for addressing the content beyond the syllabus. Experimental modeling using Data acquisition systems is also available in the lab. Using these systems, students can experimentally model the system, design the controller and validate the performance of the designed controller.

15) Software and Bioinformatics Lab Bioinformatics Lab employs computational methods to elucidate intertwined relationships between proteins, gene sequences, structure, function, interactions, genome, and pathways. The ultimate goal of bioinformatic research is to obtain a new, comprehensive understanding of how structures and functions are coded in molecular sequences and how the functions of molecules are orchestrated in a cell. Facility for conducting response analysis using simulation software is available in the software lab. MATLAB and SIMULINK software are available in the lab. This lab is designed to promote the understanding of the basic ideas and principles in process control with the aid of control valves and controllers used in industries.

II. Department Library The department library has 226 titles and 356 volumes. The students are given access to old project reports, seminar reports and industrial project reports.

Electrical Engineering Division About Department Nowadays, basic understanding of electrical engineering is essential for an engineer who needs to work in any industry. As electrification and automation is taking place in different industries, possession of knowledge in electrical engineering domain is essential for students in other disciplines to pursue their careers.

Institute-Industry Interaction Electrical Engineering Division is involved in a Bus retrofitting program of the state run KSRTC and works closely with Center for Innovation for Electric and Hybrid vehicles established in the college by the Govt of Kerala. Energy Management Center-Kerala has joined hands with Electrical Engineering department to conduct programs under IEEE. Electrical Engineering Division has many interactions with organizations like KSRTC, state consumer disputes' redressal forum etc.

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9526061465 Technical Staff RAJASINGH A Trade Instructor Sen. Gr prajapathinilayam@gmail.com  
 9447009887 Facilities I. Laboratories 1) Electrical Engineering Workshop This workshop provides knowledge and practical skill in electrical wiring and soldering. It also creates a basic awareness of safety measures. It has a capacity to accommodate 36 students at a time. 2) Electrical Machines lab The objective of this lab is to provide in depth knowledge of practical aspects of both AC and DC machines. This lab is also equipped with the state of the art measurement systems like digital tachometers, clamp-on meters etc. II. Department Library The department library serves as the documentation centre in the department which makes available the old student project reports and seminar reports for student reference. The technical documents related to the events organized by the department are also preserved. In addition to the above the library purchases books and periodicals annually for faculty reference. III. Research In connection with the strengthening of research activities in different technology frontiers, the centre for computational research in clean energy technologies is started functioning at the computational mechanics lab. The centre is envisioned as an interdisciplinary centre for computational research in energy related areas. The centre has its modest beginning in 2013 with three peer reviewed publications of international stature till date. Government had given administrative sanction for the proposal – 'Project on Establishment of Hydrogen Generator and Dispensing unit to study the performance, operational issues and safety to cater to the e-mobility sector' at the estimated amount of Rs 9.66 crore (Rupees Nine crore and Sixty six lakh only) Sree Chitra Thirunal College of Engineering is joining hands with the premier research/academic institutions in India which include NFTDC, IISc, IIT Madras and IIT Bhubaneswar as part of the multi institutional centres on materials for energy conservation and storage platform (MECSP) of Department of Science and Technology (DST), Govt. of India. Materials for Energy Conservation and Storage (MECSP), a theme based initiative to support research and development for entire spectrum of energy conservation and storage technologies from early stage research to technology breakthroughs in materials, systems and scalable technologies to maximise resource use efficiency. Under this scheme, it is proposed to conduct translational R&D (TRL 3 to TRL 7) in Materials to Hydrogen Based Devices in the area of solid Oxide Fuel Cells (SOFC), Hydrogen Storage and Metal Hydride Based Sorption Cooling. The consortium is lead by NFTDC, Hyderabad. DST-NFTDC Centre is one among the four such centres selected for funding by DST. The centre was officially launched at a function on 22nd Feb. 2019 in New Delhi. Dr. Balasubrasubramanian, Director, NFTDC is the principal investigator of the project along with other eminent scientists from other consortia centres as Co-PIs. Dr. G. Mohan, Dept. of Mechanical Engineering represent SCTCE as the Co-PI for the activities of the centre. As per the proposal, Sree Chitra Thirunal College of Engineering shall work on the design and simulation of hydrogen storage and cooling devices. DST shall provide required financial assistance for state of the art computing facilities in the campus.

**ACTIVITIES CONDUCTED**

- Dr Bobby Philip organised KTU sponsored STTP on E Mobility during 26 June to 1 July 2019
- Dr Bobby Philip and Smt. Reshmi Krishnan S., organised a one day workshop on "E-mobility for smart cities" organised by IEEE Kerala section, IEEE PES Kerala Chapter & Vakam Moulavi Foundation Trust in association with Dept of EE & Dept of ME, SCTCE on 27 April 2019
- Reshmi Krishnan S Organised "Community service program on conservation of electricity and safe protection on handling of electrical equipments" on 22 Dec 2018

**INTERNATIONAL CONFERENCES**

- Dr Bobby Philip volunteered as conference convener for IEEE RAICS 2021 and IEEE PES Asia Pacific Power and Energy Engineering Conference 2021 held at Trivandrum
- Dr Bobby Philip is a member of advisory committee for IEEE PES Asia-Pacific Power and Energy Engineering Conference 2022, Melbourne, Australia. (<https://ieee-appeec.org/>)

**INTERNATIONAL VISIT** Dr Bobby Philip, has visited State Key Laboratory of Internet of Things for Smart City of University of Macau, Macau, Peoples Republic of China- Macau Special Administrative Region.

**COLLEGE ELECTRICAL INSTALLATION**  
 Planning development and maintenance of college electrical installation is being done by Electrical

Engineering Division in courtesy. AWARDS Dr Bobby Philip, has been awarded the “Outstanding Chapter Volunteer (Kerala Chapter) Award 2020” by IEEE PES Head Quarters, USA. Applied Science About Department Ever since the beginning of this college, the department has been silently laying the foundation stone for tomorrow's engineers with highly qualified and skilled faculty in Mathematics, Physics and Chemistry. The department moulds budding engineers and assists them in transferring scientific knowledge to the physical environment. The department is involved in UG and PG courses. It offers excellent quality education in the area of Applied Sciences to the future technocrats of all streams and lays a strong foundation in the basic principles on which engineering is built up. The department also strives to instill the scientific temper and the spirit of enquiry in students. It encourages the students to understand and therefore apply the physical laws to the development of their fields of study

Department Faculty

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Facilities

Engineering Chemistry Lab Well-equipped chemistry and physics labs are functioning under the Department of basic Science. Undergraduate students can use the Engineering Chemistry Lab to learn about engineering chemistry's theoretical concepts in their first year course work. pH metre, conductivity metre, potentiometer, colorimeter, and analytical balance are the main equipment in the Engineering Chemistry Lab. The lab is well-equipped to provide chemistry education in a well-designed, spacious, and well-ventilated laboratory with a capacity to accommodate 32 students in a single session. It gives students a hands-on approach to the different methodologies utilised in engineering applications. During lab sessions, students are taught practical awareness and are trained quantitatively and qualitatively to improve their comprehension and problem-solving abilities.

Engineering Physics Lab The aim of Engineering Physics Lab course is to make students gain practical knowledge and to correlate with the theoretical studies. They understand the applications of principles in Physics to various practical situations. The experiments are based on the observation of optical phenomena of diffraction, thin film interference, generation of mechanical standing waves, analysis of signals, and study of voltage-strain, current- voltage relations in strain gauge and solar cell. The students get a hands-on experience of the instruments like travelling microscope, CRO, solar cell trainer set, Laser diffraction setup, spectrometer, ultrasonic diffractometer. They are trained to handle the equipments with care and to gain good observation skill of Physical phenomena and data collection necessary in the studies.

Computer science with artificial intelligence and machine learning or AI ML or CL

In the year 2020, the B.Tech programme in Computer Science & Engineering (Artificial Intelligence and Machine Learning) began. Under the auspices of APJ Abdul Kalam Technological University, Kerala (KTU), our department is a recognised research centre.

**Labs of CL -Deep learning Lab** The Lab is equipped with 30 HP-285 Pro G8 Microtower PC (AMD Rayzen 5-5600 processor with 8GB DDR4 RAM, 512 GB SSD). The lab is utilized for conducting laboratory experiments in the area of machine learning and deep learning for the students. Deep learning has become an increasingly important part of Artificial intelligence and with the accelerated penetration of use witnessed in business and research AND **Artificial Intelligence and Machine Learning (AI & ML) Lab** The AI & ML lab is equipped with 35 numbers of desktop machines with Intel I5 Processor. The machines are dual boot, supporting both Windows and Linux Operating System. The lab is utilized for conducting Machine Learning Lab, Mini project and Final year projects of B.Tech AI & ML programme.