Sree Chitra Thirunal College of Engineering (SCTCE), Thiruvananthapuram was established by the Govt. of Kerala in the year 1995 in memoriam of the Great Maharaja of Travancore and is affiliated to the APJ Abdul Kalam Technological University(KTU) of Kerala with AICTE approval. The Institution has the broad objective of grooming young men and women into technocrats through the process of engineering education, training and research. SCTCE offers 7 undergraduate and postgraduate courses. SCTCE is also a research centre under APJ Abdul Kalam Technological university

Vision: To become an engineering and Technology institution which is renowned for producing professionally capable and socially responsible engineers.

Mission: To create a learning process for students to acquire engineering fundamentals, in an environment that encourages analysis, team work, entrepreneurship and ethical values, thus preparing them for productive careers

Facilities: CCF, LIBRARY, SPORTS, IEDC, CLUBS, ASAP

#### **Placement**

## Career Guidance & Placement (CGPU)

The Career Guidance and Placement Unit (CGPU) / Placement Cell was established in the institute 1998 onwards. The CGPU interact with reputed organizations all over the country and abroad for arranging campus interviews for all the eligible final year students. The Career Guidance & Placement Unit is intended primarily to assist students in their career planning and provides information that helps the students to give a direction to their aspirations and interests. The CGPU believes in timely counseling and arrange training sessions that enhances the students to compete with the best challenges in Industry. Career counseling programs are undertaken periodically by the placement coordinator to guide the students. Interactive sessions by the eminent persons from industries in respective fields are conducted regularly.

#### **Major Activities and Objectives of CGPU**

Induction and Orientation program for the first year students

Arrange branch specific value added certificate courses to enhance their skill.

Branch specific Placement guidance and internships.

Programmes to improve Communication abilities.

Resume building.

Subject aptitude knowledge training.

Soft skills training.

Group discussions

Programmes to improve Presentation skills.

Vocational training.

To improve the industry – institute relationships through collaborative projects.

Mock test and Interviews.

Company specific training for recruitment.

Preparations to Competitive exams and higher studies like GATE, CAT, GRE, GMAT, TOEFL, etc.

Foreign language training

To enhance the student's interest towards the entrepreneurship and business strategies.

We also conduct job fairs to help and support other college eligible students.

Dr. Shyji completed his B.Tech (1997), M.Tech (2001) and PhD (2019) in Mechanical Engineering from University of Kerala. He joied 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

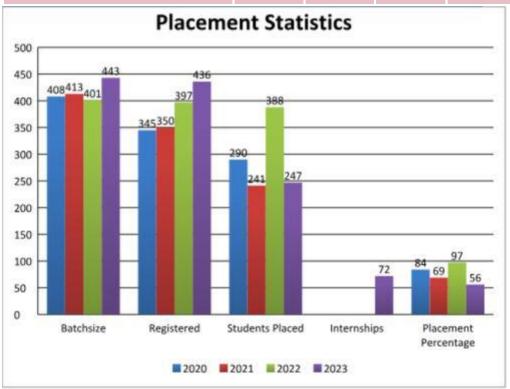
Designation: Associate Professor Dean (Student Affairs)

#### **Placement Cell**

The Career Guidance and Placement Unit (CGPU) / Placement Cell was established in the institute from 1998 onwards. The CGPU is intended primarily to assist students in their career planning and provides information that helps the students to give a direction to their aspirations and interests. The CGPU interact with reputed organizations all over the country and abroad for arranging campus recruitment for all the eligible final year students. The CGPU believes in timely counseling and arrange training sessions that enhances the students to compete with the best challenges in Industry. Career counseling programs are undertaken periodically by the placement coordinator to guide the students. Interactive sessions by the eminent persons from industries in respective fields and alumni are conducted regularly.

#### **Placement Static**

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



## **Placement Training**

At present, the competition for employment is increasing every day and placement has become a challenging task. Training students and equipping them with life skills has become an important responsibility of the institution. Along with technical expertise, the development of a holistic personality is also necessary. To meet these requirements, a fully-fledged training cell is operating in our college CGPU to enhance the capabilities of engineering graduates on par with the industry standards.

The Placement training plays a major role in grooming and shaping the career goals of students by enhancing their employability skills and achieving good placement in various prestigious

organizations. It is the dream of every engineering student to get placed in a top organization visiting their campus for recruitment in their core domain. Keeping this key aspect into consideration, it is realized that training is important for budding engineers. The Placement training starts right from the induction programme of the freshers.

#### **Objectives of the Training Cell:**

The prime objectives are:

To recognize the core competencies of the students.

To train the students to meet the expectations of the industry through our Career Development Programmes.

To enhance their communication skills.

To build confidence in students and develop the right attitude in them.

To look for 100% employment for all eligible students.

#### **Training Activities:**

Create awareness about "career planning" and "career mapping" among the students.

Equip the student with life skills and soft skills.

Train the students on group discussion techniques

Train the students on "Personality development".

Organize Various Training Programmes to train the students in the areas of Quantitative Aptitude, Logical Reasoning, and Verbal reasoning through reputed external training partners and in-house trainers.

#### **Placement Activities**

## **Major Activities and Objectives of CGPU**

Induction and Orientation program for the first year students

Arrange branch-specific value-added certificate courses to enhance their skill.

Branch-specific Placement guidance and internships.

Programmes to improve Communication abilities.

Resume building.

Subject aptitude knowledge training.

Soft skills training.

Group discussions

Programmes to improve Presentation skills.

Vocational training.

To improve the industry–institute relationships through collaborative projects.

Mock test and Interviews.

Company-specific training for recruitment.

Preparations to Competitive examsand higher studies like GATE, CAT, GRE, GMAT, TOEFL, etc.

Foreign language training

To enhance the student's interest towards the entrepreneurship and business strategies.

We also conduct job fairs to help and support other college eligible students.g

# Activities of CGPU during 2022 - 2023

About 24 companies visited the campus during 2022-2023. Companies like Tata Elxsi, Infosys, SADA India, IBM, Oracle, Wipro, Tata Consultancy Services, Cognizant, EY, UST Global, Byju's, Zifo Technologies etcetc were the major recruiters for the 2023 batch students where 248 offers were rolled out. About 75 students received a stipend of Rs.15,000/- during their seventh and eighth semester while doing their internship at Tata Elxsi during their Activate program. We have partnered with Infosys to roll out their Campus-Connect programme. We are also in the 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
- 5. Zifo
- 6. EY Gds
- 7. SOTI
- 8. H&R Block
- 9. Cognizant
- 10. Qburst
- 11. Experion
- 12. IBS
- 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, with the placement procedure containing the Job Announcement Form. On receiving a reply, the unit forwards details of eligible candidates to the companies. A mutually convenient date is fixed for the campus recruitment. Excellent facilities like seminar halls, interview cubicles, etc are provided for conducting the placement procedure. The CGPU volunteers shall assist the recruiters for the smooth conduct of campus recruitment.

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: <a href="mailto:cgpu@sctce.ac.in">cgpu@sctce.ac.in</a>

# **ADMISSION**

**KEAM Code: SCT** 

**Under Graduate** 

Programmes

SCT has five academic departments and they offer the following full-time B.Tech Degree programmes under APJ Abdul Kalam Technological University, Kerala, in six disciplines with a total annual intake of around 500 students:

Course code	Course	Department	Intake
ВВ	Biotechnology & Biochemical Engineering	Biotechnology & Biochemical Engineering	60*
cs	Computer Science & Engineering	Computer Science & Engineering	60*
CL	Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Computer Science & Engineering	60*
EC	Electronics & Communication Engineering	Electronics & Communication Engineering	120*
ME	Mechanical Engineering	Mechanical Engineering	120*
MA	Mechanical Engineering (Automobile)	Mechanical Engineering	60*

<sup>\*</sup> Tuition Fee Waiver Scheme:In each programme, an additional 10% of students are allotted from the KEAM rank list by the Commissioner for Entrance Examinations, Govt. of Kerala, under the Tuition Fee Waiver scheme for women/ economically backward/ physically handicapped meritorious student.

Documents to be produced at the time of Admission

(Arrange the documents in the following order)

1. Admit Card

- 2. Data Sheet
- 3. Age proving Certificate (10th /Birth Certificate only)
- 4. Plus Two Mark list
- 5. Plus Two Pass certificate (if obtained)
- 6. Transfer Certificate
- 7. Conduct Certificate
- 8. Fitness Certificate from a Govt. Medical officer not below the rank of Asst. Surgeon (With Hospital seal)
- 9. Certificate to prove reservation (if applicable)
- 10. Two copies of Rank certificate, Allotment Memo, Date of Birth certificate and Plus two certificates & Transfer Certificate

#### Fee structure for 2023-24 Admission:

DETAILS	MERIT (lower fee)	MERIT (full fee)	NRI	TFW	SC/ST
REFUNDABLE DEPOSIT			125000.00		
TUITION FEES	40,520.00	75,260.00	121560.00	0.00	0.00
ADMISSION FEES	240.00	240.00	240.00	240.00	0.00
KTU FEE	6,580.00	6,580.00	6,580.00	6,580.00	0.00
CAUTION DEPOSIT	5,000.00	5,000.00	5,000.00	5,000.00	0.00
SPECIAL FEE	2,910.00	2,910.00	3060.00	2,910.00	0.00
SWAF	3,850.00	3,850.00	3,850.00	3,850.00	3,850.00
INSTITUTIONAL DEV FUND	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
PTA	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00

SOCIETY	50.00	50.00	50.00	50.00	50.00
TOTAL	68,650.00	103,390.00	274,840.00	28,130.00	13,400.00

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

Admission to 50% seats (merit quota-lower 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 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 (<a href="https://cee.kerala.gov.in.">https://cee.kerala.gov.in.</a>), 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 <a href="https://cee.kerala.gov.in.">https://cee.kerala.gov.in.</a>

#### Seats in Merit quota (lower fee)\*

Course code	Course	Department	Intake
BB-G	Biotechnology & Biochemical Engineering	Biotechnology & Biochemical Engineering	30
CS-G	Computer Science & Engineering	Computer Science & Engineering	30
CL-G	Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Computer Science & Engineering	30
EC-G	Electronics & Communication Engineering	Electronics & Communication Engineering	60

ME-G	Mechanical Engineering	Mechanical Engineering	60
MA-G	Mechanical Engineering (Automobile)	Mechanical Engineering	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)	Second Year (Academic year: 2024- 25)	Third Year (Academic year: 2025- 26)	Fourth Year (Academic year: 2026- 27)
TUITION FEES	40,520.00	42,550.00	44,680.00	46,920.00
ADMISSION FEES	240.00	-	-	-
KTU FEE	6,580.00	5,830.00	5,830.00 [for ME, MA, BT] 5510.00 [for EC, CS, CL]	5,715.00
CAUTION DEPOSIT	5000.00	-	-	-

SPECIAL FEE	2,910.00	3,060.00	3,220.00	3,390.00
SWAF	3850.00	750.00	750.00	750.00
INSTITUTIONAL DEV FUND	5000.00	-	-	-
РТА	4500.00	700.00	700.00	700.00
SOCIETY	50.00	-	-	-
TOTAL	68,650.00	52,890.00	55,180.00 [for ME, MA, BT] 54,860.00 [for EC, CS,CL]	57,475.00

<sup>\*</sup> Subject to changes as per the directions from the competent authorities.

#### For admission in SCT contact

Over mail: admissions@sctce.ac.in

Over telephone: <u>9495565772</u>

Merit Quota(Lower Fee)

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

Admission to 50% seats (merit quota-lower 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 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 <a href="https://cee.kerala.gov.in.">https://cee.kerala.gov.in.</a>

# Seats in Merit quota (lower fee)\*

Course code	Course	Department	Intake
BB-G	Biotechnology & Biochemical Engineering	Biotechnology & Biochemical Engineering	30
CS-G	Computer Science & Engineering	Computer Science & Engineering	30
CL-G	Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Computer Science & Engineering	30
EC-G	Electronics & Communication Engineering	Electronics & Communication Engineering	60
ME-G	Mechanical Engineering	Mechanical Engineering	60
MA-G	Mechanical Engineering (Automobile)	Mechanical Engineering	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)	Second Year (Academic year: 2024- 25)	Third Year (Academic year: 2025- 26)	Fourth Year (Academic year: 2026- 27)
TUITION FEES	40,520.00	42,550.00	44,680.00	46,920.00
ADMISSION FEES	240.00	-	-	-
KTU FEE	6,580.00	5,830.00	5,830.00 [for ME, MA, BT] 5510.00 [for EC, CS, CL]	5,715.00
CAUTION DEPOSIT	5000.00	-	-	-
SPECIAL FEE	2,910.00	3,060.00	3,220.00	3,390.00
SWAF	3850.00	750.00	750.00	750.00
INSTITUTIONAL DEV FUND	5000.00	-	-	-
РТА	4500.00	700.00	700.00	700.00
SOCIETY	50.00	-	-	-
TOTAL	68,650.00	52,890.00	55,180.00 [for ME, MA, BT] 54,860.00 [for EC, CS,CL]	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 <a href="https://cee.kerala.gov.in.">https://cee.kerala.gov.in.</a>

# Seats in Merit Quota (Full fee)\*

Course code	Course	Department	Intake
BB-MG	Biotechnology & Biochemical Engineering	Biotechnology & Biochemical Engineering	21
CS-MG	Computer Science & Engineering	Computer Science & Engineering	21
CL-MG	Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Computer Science & Engineering	21
EC-MG	Electronics & Communication Engineering	Electronics & Communication Engineering	42
ME-MG	Mechanical Engineering	Mechanical Engineering	42
MA-MG	Mechanical Engineering (Automobile)	Mechanical Engineering	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 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)	Second Year (Academic year: 2024- 25)	Third Year (Academic year: 2025- 26)	Fourth Year (Academic year: 2026- 27)
TUITION FEES	75,260.00	79,030.00	82,990.00	87,140.00
ADMISSION FEES	240.00	-	-	-
KTU FEE	6,580.00	5,830.00	5,830.00 [for ME, MA, BT] 5510.00 [for EC, CS, CL]	5,715.00
CAUTION DEPOSIT	5000.00	-	-	-
SPECIAL FEE	2,910.00	3,060.00	3,220.00	3,390.00
SWAF	3850.00	750.00	750.00	750.00
INSTITUTIONAL DEV FUND	5000.00	-	-	-

00	-		
		-	-
3,390.00	89,370.00	93,490.00 [for ME, MA, BT] 93,170.00 [for EC, CS,CL]	97,695.00
3	3,390.00	3,390.00 89,370.00	ME, MA, BT] 93,170.00 [for

## KSRTC/SCT Quota

# Kerala State Road Transport Corporation (KSRTC)/SCT Quota Admission

Admission to 10% seats is for children of the employees of KSRTC/SCT. The allotment is done 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) 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 in turn 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 <a href="https://cee.kerala.gov.in.">https://cee.kerala.gov.in.</a>

#### Seats in KSRTC/SCT\* quota

Course code	Course	Department	Intake
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ВВ	Biotechnology & Biochemical Engineering	Biotechnology & Biochemical Engineering	6
CS	Computer Science & Engineering	Computer Science & Engineering	6
CL	Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Computer Science & Engineering	6
EC	Electronics & Communication Engineering	Electronics & Communication Engineering	12
ME	Mechanical Engineering	Mechanical Engineering	12
МА	Mechanical Engineering (Automobile)	Mechanical Engineering	6

# **Eligibility Criteria\*:**

- The applicant should be the child of a KSRTC/SCT employee.
- Applicants should have completed 17 years of age as on the 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)	Second Year (Academic year: 2024- 25)	Third Year (Academic year: 2025- 26)	Fourth Year (Academic year: 2026- 27)
TUITION FEES	75,260.00	79,030.00	82,990.00	87,140.00
ADMISSION FEES	240.00	-	-	-
KTU FEE	6,580.00	5,830.00	5,830.00 [for ME, MA, BT] 5510.00 [for EC, CS, CL]	5,715.00
CAUTION DEPOSIT	5000.00	-	-	-
SPECIAL FEE	2,910.00	3,060.00	3,220.00	3,390.00
SWAF	3850.00	750.00	750.00	750.00
INSTITUTIONAL DEV FUND	5000.00	-	-	-
РТА	4500.00	700.00	700.00	700.00
SOCIETY	50.00	-	-	-
TOTAL	1,03,390.00	89,370.00	93,490.00 [for ME, MA, BT] 93,170.00 [for EC, CS,CL]	97,695.00

NRI Quota

**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 2).

## 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\*

Course code	Course	Department	Intake
ВВ	Biotechnology & Biochemical Engineering	Biotechnology & Biochemical Engineering	3

CS	Computer Science & Engineering	Computer Science & Engineering	3
CL	Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Computer Science & Engineering	3
EC	Electronics & Communication Engineering	Electronics & Communication Engineering	6
ME	Mechanical Engineering	Mechanical Engineering	6
MA	Mechanical Engineering (Automobile)	Mechanical Engineering	3

# **Eligibility Criteria\*:**

- Applicants should have completed 17 years of age as on 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)	Second Year (Academic year: 2024-25)	Third Year (Academic year: 2025-26)	Fourth Year (Academic year: 2026-27)
TUITION FEES	121560.00	127,640.00	13,4030.00	140,740.00
REFUNDABLE DEPOSIT (Interest Free)	125000.00	-	-	-

ADMISSION FEES	240.00	-	-	-
KTU FEE	6580.00	5,830.00	5,830.00 [for ME, MA, BB] 5510.00 [for EC, CS, CL]	5,715.00
CAUTION DEPOSIT	5000.00	-	-	-
SPECIAL FEE	3060.00	3,220.00	3,390.00	3,560.00
SWAF	3850.00	750.00	750.00	750.00
INSTITUTIONAL DEV FUND	5000.00	-	-	-
РТА	4500.00	700.00	700.00	700.00
SOCIETY	50.00	-	-	-
TOTAL	2,74,840	1,38,140	1,44,700 [for ME, MA, BB] 1,44,380 [for EC, CS,CL]	1,51,465

PROSPECTUS FOR B.TECH DEGREE ADMISSION TO NRI SEATS 2 Sree Chitra Thirunal College of Engineering (SCT) is one of the pioneer and premier engineering colleges in Kerala. It was established in 1995 under the Government of Kerala in memoriam of the Great Maharaja of Travancore. It has the broad objective of grooming young men and women into technocrats through the process of engineering education, training and research. SCT offers 6 undergraduate, 3 postgraduate and Ph.D. courses in various disciplines. Applications are invited in the prescribed format to NRI seats, for admission of candidates to the following B.Tech Degree courses (4 years) for the academic year 2023-2024. Sl. No. Course Code No of Seats 1 B.Tech. in Biotechnology and Biochemical Engineering BB 3 2 B.Tech. in Computer Science and Engineering CS 3 3 B.Tech. in Computer Science & Engineering (Artificial Intelligence & Machine Learning) CL 3 4 B.Tech. in Electronics and Communication Engineering EC 6 5 B.Tech. in Mechanical (Automobile) Engineering MA 3 6 B.Tech. in Mechanical Engineering ME 6 Eligibility: Candidates who are eligible for B.Tech Degree admission as per the prospectus-2023-2024, issued by the Commissioner for Entrance Examinations, Government of Kerala, can apply if they satisfy the following conditions. i. Applicants should have completed 17 years of age as on the 31st December 2023. No relaxation in the minimum age will be allowed. There

is no upper age limit. ii. Only Indian citizens/ Persons of Indian Origin (PIO)/ Overseas Citizen of India (OCI) are eligible for admission. iii. The candidate should be a child/ward/dependant of an NRI as per the Section 2(o) of Kerala Professional College or Institutions Act XIX, 2006 and should enclose a declaration, in the prescribed form in original from the NRI along with the application. iv. Candidates should have satisfied the academic eligibility as per the KEAM-2023 Prospectus issued by the Commissioner for Entrance Examinations, Govt. of Kerala. How to apply: 1. Eligible candidates can register online though the official website of college (www.sctce.ac.in) before the last date notified. Keep a copy of the application form submitted and bring the same at the time of counselling. 2. An application fee of Rs.1,000/- (Rupees One thousand only) shall be remitted online to the following account. Name: Principal, SCTCE A/c No.: 67364920528 Account Type: Current Account Bank & Branch: SBI, SCT Engg. College Branch IFSC: SBIN0070851 3 3. Details of the online payment have to be entered in the online application form. Note:-While making online payment, student's name has to be included in the purpose / reference / narration part. After successful online payment, the applicant can take print out of the payment receipt for future references. The details of the payment receipt such as name of bank (the account from which the amount is transferred), amount, transaction reference no. etc. should also be included in the online application. Documents to be uploaded along with the application form. i. True copy of the SSLC / equivalent certificate mentioning the date of birth of the applicant. ii. True copy of the mark list of qualifying examination. iii. Copy of the Passport of the Sponsor concerned iv. Documents to prove NRI status: a) Copy of relevant pages of the passport containing visa details. OR b) Employment Certificate (should be attested by the Embassy) OR c) Certificate issued by a Scheduled Bank stating that he/she is a Non – Resident Indian holding an NRE account other than a Zero balance account. (Should be attested by the Embassy) v. A Declaration from the NRI in the form given in Annexure I of this Prospectus Selection: 1. Selection of candidates will be based on the rank list prepared for the purpose, observing the following criteria: a. Percentage of total marks obtained for the optional subjects in the qualifying examination prescribed for Engineering Entrance Examination by the Govt. of Kerala. b. If there is a tie, the Percentage of marks for Mathematics in the qualifying examination will be considered. c. If there is still a tie, the Percentage of marks for Physics/ (\*Chemistry/Computer Science/Biotechnology/Biology)/total marks in the qualifying examination will be considered in sequence. \*In case candidate has not studied Chemistry, marks obtained in Computer Science shall be considered. In case candidate has not studied Chemistry and Computer Science, marks obtained in Biotechnology shall be considered and in case candidate has not studied Chemistry, Computer Science and Biotechnology, marks obtained in Biology shall be considered. d. If there is still a tie, earlier date of birth will be taken into account. 2. The Rank list of candidates will be published on the college website within five days from the last date of receipt of application. The candidates have to attend an interview/counselling accompanied by a Parent/guardian and shall produce all the original certificates /documents for verification at the time of the interview. 4 3. The Candidate who does not turn up for the interview/counselling as per schedule at the place and time specified will forfeit his/her chance for admission and will not be considered for admission to any future vacancies. 4. The candidates are required to remit the prescribed fees at the time of admission depositing it to the College account maintained in State Bank of India, SCT Engineering College branch inside the Campus OR by Demand Draft drawn in favour of the Principal, SCT College of Engineering, payable at State Bank of India, Thiruvananthapuram. 5. Applicants who satisfy the eligibility conditions will alone be called for the interview/counselling for allotment, depending upon the number of vacancies. Merely sending an application and/or a call for the interview does not confer any claim for admission to the applicant. Incomplete applications and applications not in the prescribed format will be rejected without any notice. 6. In addition to the Annual Tuition Fee, Institutional fees such as Special Fees, Institutional Development Fund, Students Welfare Fund, University Fee, Affiliation Fee, Caution Deposit, PTA Fee

etc. as applicable will also be payable at the time of admission. 7. The last date of receipt of application, date of publication of rank list, mode/place/schedule of admission, date of closure of NRI admission etc. will be separately notified by the Principal, Sree Chitra Thirunal College of Engineering, through the official website (www.sctce.ac.in). 8. The following certificates in original are to be produced at the time of Interview/counselling. i. Certificate to prove age ii. Transfer Certificate from the institution last attended. iii. Conduct Certificate from the institution last attended. iv. Medical Certificate from a Medical officer not below the Rank of Asst.Surgeon (format is given in this document as Annexure II) v. Mark List of qualifying examination vi. Pass Certificate vii. Certificate for NRI status Fees: 1. Fee structure (Refundable deposit, Tuition fee etc.) will be fixed by the Government. 2. The following rate of Tuition Fee are prescribed to the NRI seats for the year 2022-2023, Tuition Fee per year: Rs. 1,21,560.00 (with annual increase of 5%) Refundable Deposit: Rs.1,25,000.00 (to be paid at the time of admission) 3. In addition to this, Institutional fees as notified by the college have to be paid at the time of admission. 4. No fee exemption/concession will be allowed to candidates seeking admission to NRI seats under any circumstances. 5. The candidates admitted against the NRI seats are required to remit the prescribed fees and deposit as per mode and time specified by the Principal, Sree Chitra Thirunal College of Engineering. The refundable deposits collected from the NRI students shall be refunded without interest on completion of 4 years or completion of the course whichever is later. The date of remittance of the deposit in the college will be considered for calculation of 4 years for refund of the refundable deposit. 5 Refund Policy: 1. Any student who gets admission under NRI seats, later discontinues his/her study from the College, TC will be issued as per conditions specified in the G.O.(Rt)no. 77/2019/H.Edn dated 18-01-2019. ie. In the event of a student withdrawing before the starting of the Course, the entire fee collected from the student, after a deduction of the processing fee Rs.1,000/ - (Rupees One thousand only) plus admission fee, will be refunded by the College. If a student leaves after the commencement of the Course and if the vacated seat is consequently filled by another student before last date of admission, the College will refund the fee collected after a deduction of the processing fee of Rs.1,000/ - (Rupees One thousand only) plus admission fee, and proportionate deductions of monthly fee. In case the vacated seat is not filled, the candidate is eligible to get refund of the security deposit only. All such refund will be processed only after closure of NRI admission 2023-24. Important Notes: 1. The Application form should be filled in carefully, furnishing the entire information called for. 2. Submit only one application form. 3. Ensure that you fulfil all eligibility criteria 4. Late and incomplete applications and those not in prescribed form will be summarily rejected. 5. The application fee is non-refundable. 6. Visit our website for important dates. 7. The applicants are advised to take a copy of the application form for their further reference and to produce it at the time of the selection process 8. Any other items not specifically covered in this prospectus will be decided by the provisions for the same in the KEAM 2023 prospectus / Principal, Sree Chitra Thirunal College of Engineering. 9. This prospectus is subject to modification as per the decisions of the Principal, SCT College of Engineering, Government of Kerala, AICTE and APJ Abdul Kalam Technological University without any prior intimation to the candidates. Sd/- PRINCIPAL Thiruvananthapuram, 19/05/2023 6 Annexure - I Declaration from the NRI to be enclosed with the duly filled up application form I hereby declare that I am employed/residing at or residence.) My passport No. is ...... I further declare that Shri/Smt/Kumari ...... (Name of Applicant) who is seeking admission to B.Tech. degree course in the SCT College of Engineering against NRI quota is my own child/ward/dependent coming under the definition of NRI candidates as per section 2(o) of Act XIX of 2006 and that I shall pay all the prescribed fees for the course of study in the college. In the case of dependents, the following

declaration is also required. I hereby declare that the above student is related to me as

(specify the relation) Station: Signature of NRI Date: Name Address: 7
Annexure - II Format of Medical Certificate Physical Fitness Certificate For admission to
Engineering/Medical/Agricultural course [other than B.ScHons (Forestry)course] [see Clause 13.3 (g)
& 13. 4] Signature of Candidate I, Dr after careful personal
examination of the case do hereby certify that Sri./Kum whose
signature is given above is found physically fit to undergo professional education. His/her
height, Weight, Chest and vision Signature: Name: Place : Reg. No.: Date :
Designation:

# **NRI ADMISSION SCHEDULE**

Particulars	DATE	TIME
Opening of online application	20/05/2023	12.30 PM
Closing of online application	31/05/2023	9 PM
Publishing of provisional rank list	02/06/2023	5 PM
Counselling (Tentative)	06/06/2023	Detailed schedule will be published along with the rank list

# Lateral Entry

# **Lateral Entry Admission to Second Year**

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

# Seats in Lateral Entry Scheme\*

Course code	Course	Department	Intake
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ВВ	Biotechnology & Biochemical Engineering	Biotechnology & Biochemical Engineering	6
CS	Computer Science & Engineering	Computer Science & Engineering	6
CL	Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Computer Science & Engineering	6
EC	Electronics & Communication Engineering	Electronics & Communication Engineering	12
ME	Mechanical Engineering	Mechanical Engineering	12
MA	Mechanical Engineering (Automobile)	Mechanical Engineering	6
MP	Mechanical Engineering (Production)	Mechanical Engineering	6

# **Eligibility Criteria\*:**

- Applicants should have completed 18 years of age as on 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 three year Diploma Examination in Engineering/Technology
  or Examinations recognized as equivalent thereto from 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 case of SC/ST/ SEBC or
  PwD candidates).
- Candidates should have qualified **LET** examination, conducted by the Commissioner for Entrance Examinations **(CEE)**, Government of Kerala with a valid score and rank.

#### Fee structure\*:

DETAILS	MERIT	MANAGEMENT
TUITION FEES	40,520.00	75,260.00
ADMISSION FEES	240.00	240.00
KTU FEE	7,630.00	7,630.00
CAUTION DEPOSIT	5,000.00	5,000.00
SPECIAL FEE	2,910.00	2,910.00
SWAF	3,850.00	3,850.00
INSTITUTIONAL DEV FUND	5,000.00	5,000.00
РТА	4,500.00	4,500.00
SOCIETY	50.00	50.00
TOTAL	69,700.00	1,04,440.00

# Postgraduate

The Institute currently offers 3 post graduate programs. All M.Tech programs from 2015 admission batch onwards are affiliated to APJ Abdul Kalam Technological University (KTU). All courses are approved. All courses are approved by All India Council for Technical Education (AICTE). The Institute offers the following post graduate programs:

# **Postgraduate Programs**

Program	Department/Branch	Specialization	Intake
M.Tech	Mechanical Engineering	Machine Design	18

Computer Science and Engineering	Computer Science and Engineering	18
Electronics and Communication Engineering	Signal Processing	18

#### Selection of candidates

Admission to the merit seats (15 Nos.) will be filled up by Director of Technical Education (DTE) from the rank list published by the DTE and the remaining (3 Nos.) will be filled up by the Selection Committee in the college. In the absence of candidates with GATE score, selection will be based on the aggregate marks upto 8th semester examination of B.Tech course

# Order of Priority given to candidates for selection from the rank list prepared in the College

- 1. GATE scholars from DTE's rank list
- 2. Non GATE scholars from DTE's Rank list
- 3. GATE scholars not included in DTE's rank list, but applied in the college
- 4. Non GATE scholars not included in DTE's rank list but applied in the college.

# **PROSPECTUS 2023**

## **Spot Admission 2022**

ശ്രീ ചിത്തിര തിരുനാൾ കോളേജ് ഓഫ് എഞ്ചിനീയറിങ്ങിൽ എംടെക്കിനു ഒഴിവു വന്നിട്ടുള്ള (സിഗ്നൽ പ്രോസസ്സിംഗ്, മെഷീൻ ഡിസൈൻ, കമ്പ്യൂട്ടർ സയൻസ്) ബ്രാഞ്ചുകളിലേക്കു ഒക്ടോബർ 21 ന് സ്പോട്ട് അഡ്മിഷൻ നടത്തുന്നു. വിദ്യാർത്ഥികൾ പ്രസ്തുത ദിവസം രാവിലെ 10 മണിക്ക് ബന്ധപ്പെട്ട രേഖകൾ സഹിതം കോളേജിൽ ഹാജരാകേണ്ടതാണ്.

#### **DOCUMENTS TO BE PRODUCED**

Second Allotment Memo from DTE

**Data Sheet** 

Engineering Degree Certificate and Mark lists.

GATE score card (for candidates with valid GATE score).

Community and Income certificate issued by the Village Officer for candidates who claim eligibility under SEBC quota.

Community certificate issued by the Tahsildar for candidates who claim eligibility for reservation under SC/ST quota.

Nativity Certificate from the Village Officer, in the case of Keralite students seeking admission under non-GATE category.

Candidates from Universities outside the State should produce eligibility certificate from among the Universities in Kerala with the application.

Proof for Date of Birth

**Transfer Certificate** 

Conduct certificate

Medical Certificate (from an officer not below the Rank of Asst.Surgeon)

#### **Fee Structure**

DETAILS	MERIT	KSRTC /SCTCE
TUITION FEES	11030.00	45000.00
ADMISSION FEES	240.00	240.00
KTU FEE	6970.00	6970.00
CAUTION DEPOSIT	5000.00	5000.00
SPECIAL FEE	3870.00	3870.00
SWAF	3600.00	3600.00

INSTITUTIONAL DEV FUND	5000.00	5000.00
PTA	4500.00	4500.00
SOCIETY	50.00	50.00
TOTAL	40260.00	69230.00

Convenor-Admission

## Prof.Sajith Sethu P

Associate Professor

Department of Electronics and Communication

9497165348,9495565772 admissions@sctce.ac.in

Co-convenor-Admission

## Prof.Sandhya L

Associate Professor

Department of Electronics and Communication

9388414820

Co-convenor-Admission Committee

# **Prof.Premkumar**

Associate Professor Department of Electronics and Communication

9496366561

# Research(Ph.D)

A P J Abdul Kalam Technological University offers research programmes in various disciplines of Engineering, Technology, Architecture, Basic Sciences and Mathematics, Management, and allied Inter Disciplinary areas leading to the award of the Degree of Doctor of Philosophy (Ph.D.). Department of Mechanical Engineering, Department of Computer Science & Engineering and Department of Electronics & Communication Engineering of SCTCE are research centres under APJ Abdul Kalam Technological University.

#### **Eligibility for Admission**

Candidates with the following qualifications are eligible for admission to Ph. D.

Master's Degree in Engineering/Technology, Architecture or a Master's Degree by research in Engineering/Technology with a minimum CGPA of 6.5 are eligible foradmission to the Ph. D. program.

Master's Degree in Basic Sciences or Mathematics with a minimum CGPA of 6.5.

Master's Degree in Computer Applications with a minimum CGPA of 6.5

For Ph.D. in Management, Master's degree in Management with a minimum CGPA of 6.5 or equivalent PG Diploma in Management from National Institutes with a minimum CGPA of 6.5 Master's degree in Engineering/Technology in Management related streams with a minimum CGPA of 6.5

Scheduled Caste / Scheduled Tribe / Other Backward Community (Non-Creamy Layers) / Differently-abled category candidates (with more than 40% disability) are eligible for admission with a minimum CGPA of 5.5 in all cases (i) to (IV) above. Certificate of disability issued by District Medical Board is to be produced in the case of differently-abled candidates.

The number of research scholars that a Professor, Associate Professor and Assistant Professor shall supervise at any given time is 8, 6 and 4 respectively. The students who are interested to join for Ph.D. programme have to appear for a written test and interview conducted by APJ Abdul Kalam Technological University. KTU will be publishing the list of selected candidates for their Ph.D. programme. The interested candidates can contact faculty members for identifying their research topics and they can take admission in our institution through KTU. A Doctoral Committee will be constituted for each candidate for monitoring their research works. Six months residential period is compulsory for part-time Ph.D. scholars while doing their course work. If research scholars are sincerely doing their work they can publish their papers in reputed Journals and present their papers in reputed international/national conferences. Minimum period for submitting the Ph.D. thesis is two years and Six months. Several faculty members are supervising Ph.D. scholars in their research areas as shown below.

Faculty Name	GuideType	Contact Details	Department & Research Area	Guideship Details
Sathish Kumar C (KTU - F11316)	Supervisor	kumarcsathish@gmail.com 9447637773	ELECTRONICS & COMMUNICATION ENGINEERING	Guideship Limit: 8 NormalGuideship Limit: 5 AdditionalGuideship Limit: 3 Presently Guiding: 4 Vacancy in Guideship: 4
ANILKUMAR S H ( KTU-F5003 )	Supervisor	shakumar69@gmail.com 9447340870	MECHANICAL ENGINEERING Area Of Research:Heat Transfer	Guideship Limit: 8 NormalGuideship Limit: 5

				AdditionalGuideship Limit: 3 Presently Guiding: 0 Vacancy in Guideship: 8
JAYAKUMAR E ( KTU-F5595 )	Supervisor	ejkumar@yahoo.com 9495070799	MECHANICAL ENGINEERING Area Of Research:Metallurgy and Materials Engineering	Guideship Limit: 4 NormalGuideship Limit: 4 AdditionalGuideship Limit: 0 Presently Guiding: 0 Vacancy in Guideship: 4
JISU ELSA JACOB ( KTU-F4616 )	Supervisor	jisuelsa@sctce.ac.in 9496325321	ELECTRONICS & COMMUNICATION ENGG Area Of Research:Biomedical Signal Processing	Guideship Limit: 4 NormalGuideship Limit: 4 AdditionalGuideship Limit: 0 Presently Guiding: 0 Vacancy in Guideship: 4
KAVILAL E G ( KTU- F5089 )	Supervisor	kavilal2001@gmail.com 8714247259	MECHANICAL ENGINEERING	Guideship Limit: 4 NormalGuideship Limit: 4 AdditionalGuideship Limit: 0 Presently Guiding: 3 Vacancy in Guideship: 1
LAKSHMI V S ( KTU- F5444 )	Supervisor	lakshmivs23@gmail.com 9895193140	ELECTRONICS & COMMUNICATION ENGG Area Of Research:Secure Communication and Signal Processing, IoT Security	Guideship Limit: 4 NormalGuideship Limit: 4 AdditionalGuideship Limit: 0 Presently Guiding: 0 Vacancy in Guideship: 4
LIBISH T M ( KTU- F5644 )	Supervisor	libishtm@gmail.com 9447324665	ELECTRONICS & COMMUNICATION ENGG Area Of Research:Opto Electronics	Guideship Limit: 8 NormalGuideship Limit: 5 AdditionalGuideship Limit: 3

			1	
				Presently Guiding: 3 Vacancy in Guideship: 5
MOHAN G ( KTU- F5409 )	Supervisor	mohan.g.menon@gmail.com 9496180175	MECHANICAL ENGINEERING	Guideship Limit: 8 NormalGuideship Limit: 5 AdditionalGuideship Limit: 3 Presently Guiding: 1 Vacancy in Guideship: 7
RADHAKRISHNAN K B ( KTU-F868 )	Supervisor	drkbrnair20@gmail.com 9447205767	BIOTECHNOLOGY AND BIOCHEMICAL ENGINEERING	Guideship Limit: 0 NormalGuideship Limit: 0 AdditionalGuideship Limit: 0 Presently Guiding: 0 Vacancy in Guideship: 0
SHEEJA MK ( KTU- F5915 )	Supervisor	mksheeja@gmail.com 9446484206	ELECTRONICS & COMMUNICATION ENGG	Guideship Limit: 8 NormalGuideship Limit: 5 AdditionalGuideship Limit: 3 Presently Guiding: 6 Vacancy in Guideship: 2
SMITHA PS ( KTU- F6112 )	Supervisor	smitha@sctce.ac.in 9447009943	ELECTRONICS & COMMUNICATION ENGG Area Of Research:Nanotechnology, Energy storage devices	Guideship Limit: 4 NormalGuideship Limit: 4 AdditionalGuideship Limit: 0 Presently Guiding: 0

# **Accreditation NBA**

The following courses of **Sree Chitra Thirunal College of Engineering, Trivandrum** have been accredited. Major benefits of the accreditation by NBA include AICTE preferential funding, top preference from companies conducting campus interviews, exemption from undergoing tests for higher studies and employment in foreign countries that have a tie up with NBA.

SI. No.	Name of Programme	Accreditation Status	Period of validity
B.Tech			
1	Computer Science and Engineering	Accredited	From Academic Year 2022-23 to 2024- 25
2	Electronics and Communication Engineering	Accredited	From Academic Year 2022-23 to 2024- 25
3	Mechanical Engineering	Accredited	From Academic Year 2022-23 to 2024- 25
4	Mechanical Engineering(Auto)	Accredited	From Academic Year 2022-23 to 2024- 25

# **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 Committees

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

SI No.	Name of the Body/Cell	Faculty in Charg
1	<u>Finance Sub Committee</u>	Principal
2	External Purchase Committee	Principal
3	External Works Committee	Principal
4	Internal Quality Assurance Cell	Principal
5	<u>Disciplinary Action Committee</u>	Dr.Anoop Kumar
6	Students Grievance & Appeals Committee	Principal
7	Students Welfare Committee	Dr.S.H.Anil Kuma
8	Grievance Redressal Committee for Faculty and Staff	Principal
9	Anti-Ragging Committee	Dr.E.Jayakumar
10	Internal Complaint Committee	Rejimol Robinso
11	Gender Justice Forum	Dr.Soniya.B
12	SC/ST Cell	Dr.Kavilal.E.G
13	Innovation & Entrepreneurship Development Cell	Sri. Sabu.V.R
14	Career Guidance & Placement Unit	Dr. Sabu.V.R
15	NSS Unit	Sri.Chitharanjan Sri.Baji K
16	Building, Civil & Fumiture Maintenance	Dr.George M Jos
17	Electrical, AC & Plumbing Maintenance	Dr.Boby Philip

18	<u>Transportation</u>	Sri. Rajesh.S.P
19	Library Council	Dr.Abhilash.S.S
20	Research & Consultancy Projects	D .Mohan. G
21	<u>Professional Societies</u>	Smt. Asha S
22	Computer Services & Networking	smt. Rejimol Rok
23	Collie Union & Studént Activities including CULT A WAY	Sri. George M Jo
24	<u>Canteen Committee</u>	Dr.Arun.M
25	Staff Welfare	Sri. Baji.K
26	<u>Hostel Committee</u>	Dr. Arun M
27	College Magazine, Publication & PublicRelation	Dr. Gijoy.S
28	Attendance Monitoring (Staff & Students)	Dr.Subu Surendr
29	AICTE Application & Accreditation	Dr.Subu Surendr
30	House Keeping	Smt. Ani Lawren
31	Class/Time table Monitoring	Dr.Shyji.S
L	1	1

# **Finance Sub Committee**

The Internal Complaints Committee ICC of SCTCE was constituted to conduct study about all the matters seeking financial implications of the College.

### **Committee Members:**

Member Name	Department
Joint Secretary	Finance Department, Kerala Government
FA&CAO	KSRTC
Dr.R.Sasikumar, Board Member	SCTCE
Sri.S.B.Asokan, Board Member	SCTCE
Principal	SCTCE
Administrative Officer	SCTCE

# **External Purchase Committee**

**The External Purchase Committee**of SCTCE was constituted to approve the purchases beyond Rupees Twenty Five lakhs and upto Rupees Two Crores.

# Members:

- 1. 1. Two members of the Board of Governors nominated by the Chairman
- 2. 2. Additional Secretary, Finance Department or nominee
- 3. 3. Head of the concerned department in SCTCE

### **External Works Committee**

**The External Works Committee** of SCTCE was constituted to approve the works beyond Rupees Twenty Five lakhs and upto Rupees Two Crores.

Committee Members:

Member Name	Department
Mr. Chandra Babu	Executive Director (Operation) in charge, KSRTC.
Additional Secretary	Finance Department ,Kerala
Mr. Nazeer P	Retired Executive Engineer, PWD
Dean (Planning and Development)	SCTCE
Executive Engineer	(Buildings Division) PWD
Sri.S.B.Asokan	Board Member as Chairman's Nominee
Principal	SCTCE

# **Internal Quality Assurance Cell**

# The Internal Quality Assurance Cell of SCTCE was constituted with following members

Sr.No.	Name	Designation	Department
1	Prof(Dr.)V.Syam Prakash	Principal	SCTCE
2	Dr.Subu Surendran (Co-ordinator)	Professor	Computer Science and Engineering
3	Dr. Libish T M	Professeor	Electronics and Communication Engin
4	Smt.Susmitha Kumari.S	Assistant Professor	Biotechnology and Biochemical Engine
5	Dr.Anup.M.S	Assistant Professor	Mechanical Engineering
6	Dr.Shimi Lawrence	Professor	Civil Engineering

7	Dr. R. Sasikumar	Member	Member BOG
8	Sri. Rajesh K G	Administrative Officer	SCTCE
9	Sri. Rajkumar R	Nominee	РТА
10	Dr. Abhilash S S	Assistant Professor	Mechanical Engineering
11	Sri. S. Venugopal	Joint General Manager	HLL Life Care Ltd
12	Sri. Biju K	Treasurer	IEEE Kerala section

# **Disciplinary Action Committee**

The Disciplinary Action Committee of SCTCE was constituted with following members.

# **Committee Members:**

Sr.No.	Name	Designation	Department
1	Dr.Anoop Kumar S Chairman	Associate Professor	Mechanical Engineering
2	Sri.Premkumar J	Associate Professor	Mechanical Engineering
3	Sri.Biju Jacob	Assistant Professor	Biotechnology and Biochemical Engineering
4	Smt.Kavitha K V	Assistant Professor	Computer Science and Engineering

# **Students Grievance Redressal Cell**

Objective:-

A Grievance Redressal Cell has been constituted for the redressal of the problems reported by the Students of the College with the following objectives:

Upholding the dignity of the College by ensuring strife free atmosphere in the College through promoting cordial Student-Student relationship and Student-Teacher relationship.

Encouraging the Students to express their grievances / problems freely and frankly, without any fear of being victimized.

To ensure effective solution to Student???s grievances with an impartial and fair approach.

To develop a responsive and accountable attitude among all the stakeholders in order to maintain a harmonious educational atmosphere in the Institute.

#### **Functions:**

The functions of the cell are to look into the complaints lodged by any student, and judge its merit. The Grievance Redressal cell is also empowered to look into matters of harassment. Anyone with a genuine grievance may approach the Redressal Cell members in person.

The students can approach the Cell for their grievances regarding academic matters, financial matters, health services, library, transportation and other central services.

#### **EXCLUSIONS:**

The Grievance Redressal Cell shall not entertain the following issues:

- 1. 1. Decisions of the College Council, Academic Council, Board of studies and other Administrative or Academic Committees constituted by the College.
- 2. 2. Decisions with regard to award of scholarship, fee concessions, medals etc.
- 3. 3. Decisions made by the college with regard to Disciplinary matters and misconduct.
- 4. 4. Decisions of the College about admissions in any courses offered by the Institute.
- 5. 5. Decisions by competent authority on assessment and examination result.

### Meeting:

The committee shall meet at least once in a month.

### Quorum:

Fifty percentage members of the Council shall constitute the quorum.

#### **Committee Members:**

Sr.No.	Name	Designation	Department
1	Prof(Dr.)V.Syam Prakash ( Chairman)	Principal	SCTCE

2	Dr.Libish T M(Convener)	Professor	Electronics & Communication Engineering
3	Sri.Harikuttan K(Co- Convener)	Associate Professor	Mechanical Engineering
4	Dr. Jayasudha J S	Professor	Computer Science and Engineering
5	Ms Aarna Shibu	Student	Electronics & Communication Engineering

# **Students Welfare Committee**

**The Students Welfare Committee** of SCTCE was constituted with following members.

Sr.No.	Name	Designation	Department
1	Dr.S H Anilkumar	Professor	Mechanical Engineering
1	Smt.Sandhya L	Associate Professor	Electronics and Communication Engineering
3	Sri.Chitaranjan K	Assistant Professor	Computer Science and Engineering

# **Grivence Redressal Committee for Faculty and Staff**

**The Grivence Redressal Committe for Faculty and staff** of SCTCE was constituted with following members.

Sr.No.	Name	Designation	Department
1	Prof(Dr.)V.Syam Prakash	Principal	SCTCE

2	Dr.Ajith R	Professor	Mechanical Engineering
3	Dr.Kavilal E G	Assistant Professor	Mechanical Engineering
4	Dr.Soniya B	Professor	Computer Science and Engineering

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### **Anti-Ragging Committee:**

As per AICTE notification and THE KERALA PROHIBITION OF RAGGING ACT, 1998, SCTCE has a zero-lenience policy on ragging . Any instance of ragging would attract Institute level punishment including cancellation of admission, suspension, rustication or expulsion from the Institute. Ragging also comes under punishable offence as per the law and order of our country. An Anti-ragging committee (ARC) is constituted for each academic year.

#### Measures to prevent Ragging:

So as to prevent ragging in the institution, During admissions, each student and their parents are required to submit an affidavit to the institution guaranteeing that they will neither indulge nor abet ragging.

On the first day of commencement of class, each student will be given an information bulletin which contains details of the Anti-Ragging regulations, necessary instructions for first year students on whom to contact in case of incidents or attempts at ragging. This includes the contact mobile numbers of the Institute ARC members, Hostel committee members, Staff Advisors and designated persons of the Institute Administration.

ARC will constitute an anti-ragging Squad (ARS) to maintain vigil, oversight and engage in patrolling to prevent ragging on a day to day basis. To prevent incidents of Ragging ARS members will maintain vigil at places vulnerable to ragging such as the canteen, first year block, CCF, Portico, Workshop premises etc especially during, morning hours (as and when the first year students reach the campus), lunch break and after class hours until each first year student leaves the campus. Each staff will be assigned as ARS on a rotation basis.

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Fu	nc	tı	or	ıs:

# The functions of the cell are to

- Ragging is inhuman, heinous, uncultured, unethical, immoral and unacceptable.
- Therefore the College has taken following decision to be implemented in the college as per the Govt instructions.
- Students are strictly warned not to resort to ragging activities in any form in the college campus.

# **Committee Members:**

Member Name	Mobile No
Dr.E.Jayakumar (Convenor)	9495070799
Smt.Asha S (Co-Convenor)	9447657274
Dr. Smitha P S	9447009943
Sri.SABU.V.R	9447388555
Smt.Vineetha Lekshmy P V	8113848498
Sri.Nelwin Raj	8281303789
Sri.Suresh L B	9562915120
Smt.Santhosh Lal P M	9995431602
Smt.Pushpakumaran	
Sri.Arun G.K	9446069350
Smt.Laila F	

## **The Internal Complaints Committee**

The Internal Complaints Committee ICC of SCTCE was constituted in accordance with the <a href="Sexual Harassment of Women at Workplace">Sexual Harassment of Women at Workplace</a> (Prevention, Prohibition, and Redressal) Act, 2013. The objective of the Committee is to take consistent action for prevention, prohibition and redressal of complaints received regarding sexual harassment and gender discrimination of women personnel at the workplace. The committee is constituted in our institute to go into and recommend necessary steps with regard to complaints on sexual harassment and to address issues related to Prevention, Prohibition and Redressal of such complaints.

The ICC will examine all matters relating to women in the workplace and will make suggestions and proposals to the institute administration regarding such matters. The committee will admit complaints from girl students/female staff members in the college. For the redressal of a complaint, the complainant is required to provide a written or online submission to the principal/convenor/ any member of ICC.

The Committee will make recommendations on actions to be taken on specific complaints and will report to the Principal.

### Committee Members:

Member Name	Mobile No
Dr.Jayasudha J S(Presiding Officer)	94955376533
Dr.Shyji S	9447310825
Smt.Ani Lawernce	9447700378
Sri.Divya J K	9497453352
Sri.Binu P Thomas	9446182063
Ms.Jeswin Elizabeth James -B7	8078236915
Ms.Akshara Bruno -R7	7994351611
Ms Devapromod -U7	8157097827

#### **Gender Justice Forum**

**The Gender Justice Forum** of SCTCE was constituted with following members.

Sr.No.	Name	Designation	Department
1	Dr.Soniya B	Associate Professor	Computer Science and Engineering
2	Dr.Rohini S	Assistant Professor	Biotechnology and Biochemical Engineering
3	Smt.Divya J K	Instructor Grade II(HG)	Biotechnology and Biochemical Engineering
4	Smt.Meena S R	Trade Instructor	Computer Science and Engineering
5	Ms.Arya S	Student	Electronics and Communication Engineering
6	Ms.Jyothika N	Student	Computer Science and Engineering
7	Ms.Pooja P S	Student	Computer Science and Engineering

### **SC/ST Committee**

The Scheduled Caste (SC) and Scheduled Tribes (ST) Cell in the institute promotes the special interests of students in the reserved category and to guide the students to optimally utilise the benefits of the schemes offered by the Government of India. The newly constituted SC/ST cell in SCTCE adheres to the guidelines of the Government of India as communicated by the MHRD and the AICTE with respect to the upliftment of the students and employees belonging to the SC/ST categories and other weaker classes.

- 1. It is expected to provide special inputs in areas where the students experience difficulties.
- 2. The Cell may conduct regular remedial coaching classes on life skills, personality development, writing assignments and making presentations.
- 3. The Cell also is expected to organize interactive sessions and informal meetings with students to attend to their personal, social and academic problems.

1. Conducting/Coordinating Training Programmes for Students and Staff: Teaching and Non-Teaching

# Committee Members:

Member Name	Mobile No
Dr.KAVILAL E G (Convenor)	8914247259
Sri.Rejimoan R (Co-Convenor)	9446459948
Sri.Baji K	9496371078
Smt.Gijoy S	9496330263
Smt.Kumar G S	9496811914
Sri.Suji A	9446900978

# Innovation & Enterpreneurship Development Cell

**The Innovation & Enterpreneurship Development cell** of SCTCE was constituted with following members.

Sr.No.	Name	Designation	Department
1	Sri.Sabu V R	Associate Professor	Mechanical Engineering
2	Sri.Sumesh C k	Assistant Professor	Mechanical Engineering
3	Sri.Biju Jacob	Assistant Professor	Biotechnology and Biochemical Engineering
4	Dr.Sreejith B	Assistant Professor	Mechanical Engineering

5	Dr.Jisu Elsa Jacob	Assistant Professor	Electronics and Communication Engineering
6	Sri.Arun G K	Trade Instructor	Electronics and Communication Engineering

RIGHT TO INFORMATION ACT, 2005 PUBLIC INFORMATION OFFICERS OF SCT
THIRUVANANTHAPURAM Public Information Officers Subu Surendran Associate Professor in
Computer Science and Engg. SCT College of Engineering Pappanamcode Thiruvananthapuram695018 Assistant PIO Abhilash S S Assistant Professor in Mech. Engg. SCT College of Engineering
Pappanamcode Thiruvananthapuram-695018 FIRST APPELLATE AUTHORITY OF SCT
THIRUVANANTHAPURAM Principal SCT College of Engineering Pappanamcode Thiruvananthapuram695018

## **College Information**

Vision and Mission of the Institute Vision: To become an Engineering and Technology institution which is renowned for producing professionally capable and socially responsible engineers. Mission: To create a learning process for students to acquire engineering fundamentals, in an environment that encourages analysis, team work, entrepreneurship and ethical values, thus preparing them for productive careers. Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies The Board of Governors: Sree Chitra Thirunal College of Engineering (SCTCE), Thiruvananthapuram was established by the Government of Kerala commemorating the Great Maharaja of Travancore - Sree Padmanbhadasa Sree Chithira Thirunal Balarama Varma (7 November 1912 – 20 July 1991). The institution, approved by AICTE, is affiliated to the University of Kerala and A P J Abdul Kalam Technological University. Though the institution was initiated by Kerala State Road Transport Corporation (KSRTC) in 1995, the ownership and management of the institution was taken over by a society in 1997 (memorandum of association for the establishment of the KSRTC-SCTCE, Thiruvananthapuram society. This was done in compliance with the TravancoreCochin Literary, Scientific and Charitable Societies Act XII of 1955. Hence the management of the institution is vested with a Board of Governors consisting of -1. Honourable Minister for Transport, Govt. of Kerala (Chairman) 2. Secretary, Transport Department, Govt. of Kerala (Vice-Chairman) 3. Secretary to Govt., Finance Department 4. Secretary to Govt., Higher Education Department 5. Chairman & Managing Director, KSRTC 6. Financial Advisor & Chief Accounts Officer, KSRTC, TVM 7. Director of Technical Education, Govt. of Kerala 8. AICTE Regional officer 9. Eminent Educationalist (1), nominated by the Chairman 10. Eminent Educationalist (2), nominated by the Chairman 11. Principal, SCT College of Engineering (Member Secretary) Powers and Functions of the BoG Subject to the provisions of the Memorandum, the Board shall have the following powers. 

To prepare and execute the plans and programmes pertaining to the administration and management of the college. 

To receive and keep custody of funds received as grants and contributions and to manage the properties of the college.  $\neg$  To prepare the budget estimates of the society for each year, and to sanction expenditure within the limits of the budget. ¬ To arrange the annual audit of the accounts of the society by a Chartered Accountant. 2 - Toprescribe and conduct courses of study, training and research in different branches of Engineering and Technology for the advancement of learning and dissemination of knowledge. 

To prescribe rules and regulations to hold examinations and declare the results and give awards for courses except the University Degree and with respect to the latter, make all such arrangements as it may be required by statutes, ordinance and regulations of the University to which the College is affiliated.  $\neg$ To institute and award Fellowships, Scholarships, Prizes and Medals — To provide for and supervise residence, health, discipline and the overall well-being of the students of the college. 
— To create teaching, administrative, technical, ministerial and other posts under the college and to make appointments thereto for efficient management of the affairs of the society/college and to regulate recruitment, control and service conditions of the staff. — To co-operate with any other organization in matters of education and training in Engineering and Technology; — To enter into agreements for and on behalf of the college. 
¬ To initiate or defend all legal proceedings on behalf of the society/college. 
¬ To appoint committees for the disposal of any business of the society/college or for tendering advice in any matter pertaining to the society /college. 
— To delegate to such extent as it may deem necessary, any of its powers to any officer or committee or committees constituted by it.  $\neg$  To consider and pass resolutions on the Annual Report, Annual Accounts and Financial Estimates of the Society that runs the college, as it thinks fit, such Annual Reports, Annual Accounts and Financial Estimates along with the resolution passed thereby by the Board being submitted to the society. — To make, adopt, amend, vary or rescind from time to time, bye-laws for the regulations of

and for any purposes connected with the management and administration of the affairs of the society/college and for the furtherance of its objectives.  $\neg$  To make, adopt, amend, vary or rescind from time to time bye-laws (a) for the conduct of the business of the board and committees to be appointed by it, (b) For the delegation of its powers, or (c) For fixing the quorum; and  $\neg$  To borrow or raise money from time to time for any purpose of the society, by promissory notes, or by taking credit from any bank or bankers, with or without giving any sureties or by such other means as the board may decide in their own absolute direction deem expedient.  $\neg$  To perform such additional functions and to carry out such duties as may from time to time be assigned to it by State Govt./Central Govt. to The Board shall ordinarily meet once in every three months provided that the chairman may, whenever he thinks fit and shall on the requisition of not less than four members call a social meeting. Not less than 15 days' notice shall be given of every meeting of the Board. π Four members of the Board including the chairman shall constitute the quorum for any meeting of the Board.  $\varpi$  In case of difference of opinion amongst the members, the opinion of the majority shall prevail. 3 to Each member of the Board, including the chairman shall have one vote and if there shall be determined by the Society, the chairman shall in addition have and exercise a casting vote. σ Every meeting of the Board shall be presided over by the Chairman and in his absence, by a member chosen from amongst themselves by the members present at the meeting. π Any resolution may be placed before the meeting of the Board, may be adopted by the circulation among all its members and any resolution so circulated and adopted by a majority of the members who have signified their approval or disapproval of such resolution shall be as effectual and binding as if such resolution had been passed at a meeting of the Board, provided that in every such case, at least four members of the board shall have recorded their approval of the resolution. Chairman The Chairman shall exercise such powers as may be delegated to him by the Board. Principal a. The principal of the college shall be appointed by the Board. b. The principal shall be Chief Academic and Executive Officer of the college and shall be responsible for the proper administration of the college and of the imparting of the instruction and maintenance of the discipline there in. All other staff of the college shall be subordinate to the Principal. He shall be the custodian of the records, the funds of the college and such other property of the college as the Board may commit to his charge. c. The Principal shall have such other power and perform such other duties as may be delegated or assigned to him by the Board. d. The Principal may delegate any of the powers to any of the subordinate with the approval of the Board. e. The Principal shall act as a secretary of the Society, the Board and such other committees as a Society or the Board may decide. f. In the event of the post of the principal remaining vacant or the principal being absent or unable to perform his duty for any reason, it shall be open for the Board to direct any Officer or Officers in the service of the Society to exercise temporarily such powers and perform such functions and duties of the Principal as the Board may deem fit. The general administration of the college is carried out by the Principal subject to the control of the Board of Governors. The members of the college staff also participate in the general administrative/academic work of the college as per the directions and supervision of the Principal. The Organizational chart is given below. 4 Figure 10.1: Organizational Structure of Our Institute 5 Works Committee The BoG vide decision No. 04-17/99 dated 03/06/1999 has resolved to constitute a works committee. It was also decided therein that "all works with an estimate above rupees one lakh and up to ten lakhs will be sanctioned by the Principal with the approval of works committee. Works above ten lakhs will be scrutinised by the works committee and be placed before the BoG. The BoG vide decision No. 47-07/2010 dated 16/03/2010 has decided to delegate the financial powers of rupees five lakhs to the Principal for the execution of works observing existing rules with the approval of the internal college level works committee and for works beyond that be placed before the purchase committee constituted by the BoG. The External Works Committee of SCTCE is

reconstituted with following members. i. Executive Director (Technical), KSRTC ii. Additional Secretary, Finance department or Nominee iii. Board Member iv. Board Member v. Dean (Infrastructure), SCTCE vi. Chief Engineer (Civil), KSRTC vii. Executive Engineer, Kerala PWD (Buildings), Thiruvananthapuram viii. Principal, SCTCE Finance Sub-Committee The finance subcommittee has the authority to propose suggestions on financial matters which are presented in the meeting of the BoG including the annual budget. The committee has the power to recommend a particular course of action in matters of financial commitments. The members finance subcommittee are, i. Joint Secretary, Finance Department, Kerala State ii. FA & CAO of KSRTC iii. Board Member iv. Board Member v. Principal, SCTCE vi. Administrative Officer, SCTCE Legal Affairs Sub-Committee (LASC):- LASC is constituted by the BoG. The purpose of LASC is to look into the Court Cases coming against the college. The Sub-Committee does not have the authority to make decisions. All recommendations shall be provided to BoG. The following individuals are designated by the Board as LASC members, i. Joint Secretary, Higher Education Department, Kerala State ii. FA & CAO of KSRTC iii. Board Member iv. Board Member v. Principal, SCTCE vi. Administrative Officer, SCTCE Departmental Promotion committee (DPC):- The regular placements to higher grades through Career Advancement Scheme in the case of teaching staff and other time bound higher grades/ratio promotions for Technical staffs, Ministerial staff and Library staff are done as in the Government of Kerala Service, 6 upon recommendation by the DPC (Teaching and Non-Teaching staff), as the case may be, and with the approval of the Board. College Academic Council: The College Academic Council is the supporting body to the Principal in the general administration of the college. It is empowered to consider and report on any matter concerning accommodation, courses of instruction, rules of discipline etc. referred to it by the Principal. However, the council shall not interfere in any matter with the general administration of the college, which is vested with the Principal. The College Academic Council consists of the Principal as the chairman and the following staff as its members. i. All HODs ii. Deans, Professor (PG studies) iii. One faculty representative from each Engineering Department other than the HOD (except for Mechanical Engineering which has 3 representatives) proposed by the Department staff meeting iv. Staff in charge of Students' Discipline Committee. v. Staff Advisor to Students' Union vi. One representative from Non-Teaching Staff (Academic-Technical) - Elected from their staff meeting- kept in abeyance vii. Invited Members a. PTA Joint Secretary b. Staff in charge of Examinations c. Placement Officer d. Administrative Officer The terms of the elected members (in representative capacity) shall be one academic year. Service Rules, Procedures, Recruitment and Promotional Policies: The service rules, procedures, recruitment and promotional policies for the institution are formulated by the BoG. These are formulated complying with the AICTE/UGC/ Kerala State and Subordinate Service Rules (KS&SSR)/Kerala Service Rules (KSR) norms. Fully transparent procedure is undertaken for the recruitment and promotion of faculty. Important information is circulated through e-mails and displayed in notice boards. General staff meetings are also convened and disclosure of important amendments are done. Everything in this regard is made available in the institution's web page. Decentralization in working Decentralization in working has been followed in SCTCE to ensure a more responsive, inclusive, effective and efficient functioning of the academic and administrative sectors. Administrative Decentralization: Under the Principal the Administrative Officer is the controlling officer of the entire administrative activities of the college. The following distribution of works are ordered for implementation. ADMINISTRATION SECTION 7 (A1) – EPF and ESI of all staff, Calculation of Income Tax, preparation of salary bill of all staff including daily wages and part time sweepers, Travelling Bills, Maintenance of service book of all staff members, Issue of salary Certificate, Works relating to Admission, OP files and any other work assigned by Principal/Administrative Officer/Finance Officer. (A2) - Right to Information Act-replying, Plan Fund, Establishment matters of all staff, their deputation and training, Appointment of staff, Works relating to AICTE, Maintenance of Attendance Register, Canteen, Security Guards, Issue of

experience certificates, Maintenance of Admission Register, Works relating to admission, Stock verification, Election and any other work assigned by Principal/Administrative Officer/Finance Officer. (A3) – All students matters related to University, Matters concerned with SC/ST students (egrantz), Disbursement of cheques to SC/ST students, Works relating to sessional marks, Education Verification, All types of scholarships including GATE scholarship, Students affairs including M.Tech students, Issue of Transfer Certificate and Course certificate, Issue of Railway concession, Works relating to admission, File relating to Office staff pattern, Keeping of all stamps (Seals) in the Office Works relating to Hostel, File relating to NSS and any other work assigned by Principal/Administrative Officer/Finance Officer. Apprenticeship Trainee – Receipt and distribution of tapals and dispatch, Purchase of Service stamps, Maintenance of stamp account ACCOUNTS SECTION (Ac1) – Preparation & Maintenance of Cash Book & Ledger, Upkeeping of Bank Transactions, Making accounting entries in TALLY software and updation after audit, Income Tax Matters, Matters connected with audit of accounts, FD, Daily fee collection statement, Floating of tenders, EMD Register, Refundable Deposit, Refundable Deposit Register, Reconciliation with Bank Account (fees), Filling of TDS return, Remittances of TDS, and TEQIP related files and any other work assigned by Principal/Administrative Officer/Finance Officer. (Ac2) – Caution Deposit to students, Collection of fees from students, Receipts of all cash/DD/cheques and its remittance to Bank, Refund of fees, educational loan etc., Issue of cheque and maintenances of Cheque Issue Register, Maintenance of Caution Deposit Register, Advance Register, Petty cash and Maintenance of petty cash register, LIC subscription, EPF and ESI subscription, Recoveries etc, Purchase of stationery items below Rs.3000, Payment of work, and any other work assigned by Principal/Administrative Officer/Finance Officer. (Ac3) – Day Book Entry, Purchase of items above Rs.3000/-, Repair and maintenance relating to vehicles of the institution, Insurance of vehicles, Purchase of library books and renewal/purchase of journals, Work relating to AMC of all machineries including computers and accessories, Quotation of printing, Preparation of salary of guest faculties, Fee Register and any other work assigned by Principal/Administrative Officer/Finance Officer. WORKS Civil Engineer- All matters related to civil works and maintenance. 8 Academic Decentralization: The Principal is assisted by Four Deans. Further, for creating a more comprehensive and result oriented environment, different committees are also constituted for specific purposes. These committees are represented by members of faculty from different departments. Every faculty is a member of either one or the other committee. This enables us to function in a democratic and representative nature within the campus. (A) Responsibilities and powers of the Deans Senior faculty members have been given additional charge of Dean as follows. I Dean (Research & PG) II. Dean (Academic) III. Dean (Students' Affairs) IV. Dean (Planning & Development) The various committees and the matters which are to be dealt with by each Dean are as hereunder. I. Dean (Research &PG) The Dean will co-ordinate and monitor all academic matters of Research & PG students in consultation with the Principal ● To look into the Research & PG admission. Has to co-ordinate all the activities related to the M.Tech admission. • Coordinate all academic activities of PG program. • 3. To conduct internal examination of PG program. • Formation and conduction of the meetings of various PG committees related to University examinations, students affairs etc. • Counselling/Mentoring/Guidance to PG students at various levels during their study period. II. Dean (Academic) The Dean (Academic) will act in consultation with the Principal, for the all-round academic developments of the Institute. Dean (Academic) will be the overall in-charge of the following committees. A. Committee 1. Library Council 2. Consultancy Projects 3. Professional Societies 4. Examination Committee 5. Continuing Education Cell 6. Attendance Monitoring B. Other matters All matters related to the Students' Concessions, Scholarships, Issue of certificates including Course & Conduct Certificate and Transfer certificate, All university related matters, Submission of sessional marks, Academic evaluations, Staff evaluation by students, Academic Calendar, Time-table and work load of staff, Submission of proposals to various

funding agencies for various projects and programs, Industry-Institution-Interaction Cell etc. 9 III. Dean (Students Affairs) All matters connected with students except academic are dealt by Dean Student's affair. Dean (Students' Affairs) will be the overall in-charge of the following committees. A. Committee 1. College Union and Students' activities (Arts, Tech and Sports) 2. Anti-Ragging Monitoring Committee 3. PTA 4. ALUMNI Association 5. NSS unit 6. Hostel Committee 7. College Magazine 8. Students' Grievance Redressal Cell 9. Discipline Committee 10. Women's Forum 11. Canteen Committee 12. Transportation B. Other matters Strengthening of Advisory System, Students Registration to higher semesters, Students tour University Exam discipline etc. The Dean (Student affairs) will also look into maintaining discipline in the college campus and monitoring the timely engaging of Theory/Lab classes. IV. Dean (Planning and Development) All matters connected with the creation of infrastructure and its maintenance is monitored by Dean Planning and development. Dean (Planning & Development) will be the overall incharge of the following committees. 1. Building & Civil Maintenance 2. Infrastructure Development 3. Electrical Installation and Maintenance 4. Civil Maintenance 5. A/C Maintenance 6. Plumbing Maintenance 7. Computer Services 8. Internal Purchase 9. House Keeping All requests related to the above matters should be processed through the Dean (Planning & Development). Though the Committees can function independently, the Dean has to ensure proper functioning of these Committees and implementation of their action plans in consultation with the Principal. Dean can also participate in the meetings of above committees and have to 10 ensure all the activities of the committees under his in accordance with the existing norms and the policy of the college B. HEAD OF DEPARTMENTS Responsibilities of the HODs • Participation in policy planning at the Institute level ● Provide academic and administrative leadership to the faculty, supporting staff and the students at departmental level. • Assign responsibilities of laboratories and other departmental works amongst the faculty and supporting staff. • Monitoring of all teaching and other student related activities in the department. • Communicate with the Principal and other HOD'S and senior functionaries, outside agencies, the faculty supporting staff and students. • Promotion of research and publication of technical papers. • Initiate action for the purchase of equipment, machinery and consumables for the labs. Tabulates tenders and quotations, recommend purchase of items to the Principal. ● Recommending appreciation/ disciplinary action against the faculty, technical staff and students of the department. • Conduct department meetings and recording it. • Promotion of Consultancy and Research activities. • Promote Industry – Student interaction • Invite and conduct technical talk in the relevant subject by eminent scholars Authority of HODs • Recommend leave to the faculty and the supporting staff. • Assigning the responsibilities for the various functions amongst the faculty and the supporting staff at the departmental level. • To prepare Annual Performance Appraisal of the faculty and the supporting staff. • Monitor the implementation of the Teaching plans and take corrective measures as and when required. • Presiding over the departmental meetings of the functionaries concerning issues related to various teaching, continuous evaluation and other activities related to the department/institute. List of Various Committees (i) Sree Chitra Thirunal College of Engineering Advisory Board (CAB): Role of the CAB: • Set benchmark on all academic and research activities of the college. • Advise on all teaching learning process of the college. • Advise on Research and consultancy activities of the college. • Monitor the progress of teaching, research and consultancy activities of the institute and suggest remedial measures. 11 • Act as a catalysing agent on networking with premier institutes of national/international stature. The present office bearers of the CAB is as follows, (ii) Internal Quality Assurance Cell (IQAC): IQAC is a significant administrative body responsible for all quality matters. It is the prime responsibility of the IQAC to initiate, plan and supervise various activities which are necessary to increase the quality of the institution. Responsibilities • Prepares an academic calendar for all programs in the institution • Supervises and

guides the activities of department committees and teams • Act as a mentoring body for all departments committees and teams • Reviews Mission & Vision for the institution and departments • Plans various development, delivery and assessment tools of POs at the institution level. • Obtains results of the assessment of internal analysis of student performance in tests, exams, assignments projects, etc. from Programme Assessment Committee (PAC) • Presents the results to the CAB for improvements or corrective action. (iii) Class and Course Committee: Class Committee for a B.Tech/M.Tech class shall comprise of a senior faculty who does not handle any course for the class as Chairman, faculty Advisor of the class and all the faculty members engaging different courses of the class and two student representatives from the class – one at a comparatively high academic level and the other at an average level. The faculty advisor concerned shall be the Convener of this committee. Course Committee – In the case of common courses for B.Tech (such as Mathematics, Physics, Chemistry etc.) a course committee has to be constituted by the Principal for each course. The chairman shall be a senior faculty member not offering the course. All faculty members handling the course for various classes and four student representatives among different classes shall be members. Functions The course committees and class committees shall meet at least thrice in a semester- the first at the beginning of the semester, the second and third after the first and the second internal tests respectively. These committees shall monitor the conduct of the course, adherence to the course plan, time schedule, completion of the syllabus, standards of internal tests and evaluation process. These committees will also address the difficulties faced by students and will take suitable remedial actions, if required. At the end of the semester, the committee should meet without the student representatives to review the conduct of the course and finalise the internal assessment marks and approve them. These committee functions according to the stipulation from Kerala Technological university guidelines (iv) Internal Audit Committee (IAC): 12 Internal Audit Committee, consists of a group of faculty members having representation from each department; with a senior faculty member as the coordinator, for a term of one year. The committee functions by conducting internal academic audit twice during each semester, and produce the relevant documents and records to the external auditor. IAC is also responsible for uploading the monthly report, annual report and producing the data before the external auditor. External auditor, a senior faculty, appointed by the University will visit an institution twice a semester. The online report given by the external auditor has to be viewed by the institution and has to make a reply on the comments served by the auditor. The IAC verifies the following documents, produced, course wise and department wise. ● Class Time Table & Faculty Time Table ● Students Roll List ● Students Batch List (for practical courses, projects & elective courses) • Minutes of course/class committees • Course Diary for all the courses including practical, seminar, project etc. ● Course File ● Tutorial Log book ● Equipment Log register used in Laboratories • Consolidated Attendance statement of students • Consolidated statement of marks of internal tests • Seminar presentation details • Project (Mini project/Design project/Final semester project) progress review reports • Register of internal evaluation marks • Student Activities Log Book (for B.Tech programme only) • Log book for summer and contact courses • Register of Remedial/Bridge/Language Lab classes • Minutes of Discipline, Academic and Student Welfare Committees • Consolidated semester grades of students • Result Analysis • HOD file (v) Building and Civil Committee: This committee is constituted to supervise and monitor all construction works in the institute. It is responsible for technical scrutiny of the design, estimates and the specification requirement of materials. It prepares the estimates of all construction works; repair and maintenance work. Expenditure sanction will be approved by the principal only after recommended by this committee. The committee shall meet as and often when necessary. The present office bearers of the committee are as follows (vi) Electrical Installation & Maintenance: • It oversees the operation and maintenance of electrical installation in the college. •

Necessary technical support for installing various equipment is also provided by the committee. • The committee takes steps for energy conservation and management in the institution from time to time. Electricity bill is continuously monitored; whenever there is spurt in consumption of electricity, the matter is brought to the notice of Principal. 13 • When there is re-electrification/new electrification demands, the site is visited by the committee and necessary design is done and estimation is made. On approval, the work in most cases is carried out by electrician and his support apprentices, under the supervision of the committee. In some cases expert labours from outside are also employed depending upon the urgency of the situation. • The committee has tied up with KSEB to conduct energy audit of the institution. • Interactions with statutory authorities like Electrical Inspectorate etc. are made through the committee. • The HT installation is also under the committee; committee oversees maintenance and operation of various devices/transformer in the substation. • The committee takes steps to ensure safe operation of the electrical installation. Necessary precautions for safe operation are issued from time to time. • Faculty in charge of electrical installation under Indian electricity rules: Dr Boby Philip (vii) Plumbing Maintenance and Water Supply Committee:- • The plumbing committee is responsible for the regular maintenance of plumbing related works inside the campus. • The committee ensures the supply of water throughout the day inside the campus. • The water coolers inside the campus is closely monitored and serviced by this committee. • The committee entrusts the plumber to purchase all the consumable items required for yearly maintenance related to plumbing activities The following staff members are constituted for this committee (viii) CGPU, Counselling Cell:- Career Guidance and Placement Unit (CGPU) is functioning in the college as a voluntary service to mould the budding engineers to suit the requirement of the industry and to give them a right orientation towards career planning. Functions: • To provide the career orientation/guidance to the students through workshops and training programs. • Awareness about the entrance to higher education like GATE, GRE, GMAT etc. through workshops and provide required orientation. • To arrange the much-needed soft skill training in areas like personality development, interpersonal communication, motivational aspects, interview etc. • To provide the aptitude training and company specific training program which helps the students to crack the tests. • To invite the prospective companies for the recruitment and placement of the potential candidates through campus hiring process. • To obtain the feedback from the industry about the performance of the students and to provide all necessary support to make the students ready for the industry requirements. Responsibilities and activities 14 The various training programs conducted are as follows: a. Induction and orientation program: Induction and orientation program is given for the first years at the beginning of the year. Duration of the program is three days which is likely to be increased in the coming years. The program is intended to provide the students an orientation towards the engineering curriculum and develop the right attitude from the beginning of their career. The program is intended to give the orientation in the following aspects: 

School to College transition program – To know about the curriculum and the KTU guidelines, following the guidelines of the college and mentorship details. 
— Engineering Academics – Introduction to various Branches, Higher Studies & Job Opportunities — Briefing the requirement for the various opportunities and how to meet them — Basic English Communication Skills- Verbal, Non Verbal & Mother Tongue Influence Reduction ¬ Motivation, Confidence Building & Attitude Tuning. ¬ Life Values, Personal Grooming, Hygiene & Behaviour Modification 

¬ Stage Fear Reduction, First Impression & Body Language b. Career counselling Program: Awareness program being arranged for pre-final year about how to select the career path and proper goal setting to achieve the success in the chosen career path. Guidance program is arranged about preparation for competitive exams for higher education such as GATE, CAT, GMAT, GRE etc. Various agencies who are pioneers in their respective fields are called to provide the awareness about the program and sample tests are

conducted by them to give an idea about the preparation needed to crack the exam. The final year students are offered programs on higher education and career opportunities abroad. Experts from relevant fields take sessions on the specified topics. Talks are conducted to create awareness about IELTS BEC and other language assessment and certifications. c. Soft Skill Training Program: Students are given training in various soft skills like resume preparation, interview skills, interpersonal skills, Group discussion, Video synthesis and Group activities. It is provided by the professional trainers and recently initiated MOU with Mahindra Pride School, which provides the soft skill training for the students by experts. The training in soft skill is being given by Mahindra Pride School for last two years. d. Aptitude Training Program: Aptitude skill development is done with the help of experts which will be a training spanning over 5-6 days. It includes training in analytical & logical reasoning and verbal aptitude. The training also sets apart one day towards mock recruitments which gives the feel of the real recruitment process. Normally the training professionals are selected by arranging a demo in front of the committee comprising faculty and students by various competitors. The best and economical group is selected based on the demo and the price. It was done by well-known professional group such as SMART, FACE, Pragmatix etc. The contents of the program are given below: 15 - Quantitative aptitude - • Basic math(numbers and puzzles) • HCF,LCM and simple and compound interest • Data Sufficiency • Analytical Reasoning • Logical Reasoning • Progression • Permutation and Combination • Ratios and Proportion • Averages and Blood Relations • Percentages, Profit and loss  $\bullet$  Speed, time and distance  $\bullet$  Time and Work  $\bullet$  Data Interpretation  $\neg$ Verbal aptitude • Parts of speech & Vocabulary Building • Synonyms, Antonyms • Analogies • Sentence Completion Sentence Correction & Incorrect sentence • Reading comprehension • Error detection Soft skills • Resume building — Group discussion / Group Activity / Video Synthesis — Personal interviews • Grooming e. Value added programs: Value added programs to bridge the gap between industry and institution is also given for the students. Session about value addition courses is arranged and the courses are conducted in the campus at affordable rates for the students. Value addition courses like Campus Connect Foundation Program and Altair certification program in the field of hypermesh are arranged in association with continuing education cell. (ix) Industry Institute Partnership Cell:- Objectives ● To tune the Program Educational Objectives in line with the requirements of the industry; to facilitate the future technocrats to cope with the technological development with required phase. • To provide the inputs to update facilities/infrastructure that helps in updating the knowledge of professional engineers to meet the growth and developmental needs of the industry. • To provide technical advances with industrial exposure through industrial visits, Joint Projects, Internships and webinars. • Widening and effectively implementing the area of Collaborative R&D and consultancy. Activities of IIPC: • Curriculum development – associating with experts from industry in curriculum planning and review. Identifying the gap and updating the University to include the topics to bridge the gap. Each department should conduct this exercise and propose the required changes before the next revision in the University syllabus. • Guest lectures by eminent personalities from Industry experts to update the students' knowledge. Resource persons to be identified in each subject and conduct at least two lectures in a subject. Activity to be monitored at the departmental level. • To help in organizing Industry Study Tour Program, visit to technical expo, technical museums, arrange industrial training for students. All such activities are to be conducted through IIPC. • Faculty exchange program – & Getting professionals from industry as visiting faculty & Deputation of faculty to industry to gain industrial experience • To encourage/assist the department level tie-ups or MoUs with industries for the mutual benefit, promote consultancy activities, training courses for industry people, 16 promote research and development activities with industry, Industry-Institute Intellectual exchange • To enable the students implement their theoretical knowledge to practice by executing projects in various industries. To provide internship,

industrial training programs for pre-final year students to acquaint them beforehand with the demands of the corporate atmosphere. • Personality development workshop for students relating to soft skills (communication skills/personality development) collaborating with industry experts in association with CGPU. • To help in organizing technical festivals/design competitions/technical quiz or contests. • In house training programme as per the request of the industry to bridge the gap, in the institution premises. • Technology transfer to the public as social responsibility to groom the youngsters in the skill development programs, in association with Continuing Education Cell. The following staffs are the officeholders of the cell. (x) AC Maintenance Committee:- This committee will look after the installation, testing and commissioning operation and maintenance of all ACs. The following members are constituted for this activity (xi) Transportation Committee:- Functions of Transportation Committee • Responsible for arrangement of transportation facilities for students and staff. • The transport committee is responsible for safety norms of the buses and other vehicles • To provide college bus to students, teachers and the Departments for different purposes like educational tour, visit for sports competitions etc. after proper assessment of the requisition and ensure optimum use of the college vehicle facility. • To arrange transportation facilities for experts, placement related personalities, etc. • The transport committee is responsible for fixing and collecting transportation fees. • The transport committee is responsible for identification of bus stops • Responsible for time management of buses • Verify documents of the Vehicle - Registration certificate - Certificate of fitness - Certificate of Insurance - Permit - Pollution under control - Driving licence - Fire Extinguisher - First Aid Kit • Responsible for periodical maintenance of all the buses and other vehicles, in case of any major repair should report to the Principal immediately • Responsible for a periodical check of the log books maintained by the drivers. The following staff members are assigned to look into the above discussed matters (xii) Library Council:- The library is the heart of an academic institution and plays an important role in all academic activities of the institution. The library council serve the academic community by providing 17 recent books/journals for effective teaching, learning and research. The main objective of library council is to monitor the activities of library and to initiate the steps for providing required facilities in the library. Digital library has been set up to provide computerized information by electronic storage, retrieval and dissemination. Library council caters to the information needs of the users. The members of library council identify the recent trends in the area of Science and Technology to equip the library for providing current and complete information in accordance with today's trends. The library council also concerns itself with the future of students by taking initiatives to provide books catering to different competitive exams. The library council has taken steps to do stock verification every year and to renew the Annual Maintenance Contract of the library automation Software. The library council monitor and maintain the following services provided by the library. • Lending of Books • Reference Section • Book bank facility • Articles/Journals Index Service • Proficiency Corner • News Paper clipping service. • CD-ROM usage • Internet browsing facility • Digital Library The library council has framed the following rules for the library, 1. Admission to the library is only on the production of the Identity card. 2. A borrower's card (library card) will be issued to every student at the time of admission. 3. Five books will be issued at a time for students and six books will be issued for staff members. Book will be issued as per their availability and has to be returned within 15 days, later fine will be collected from students at the rate of Rs. 1.00 per book per day. The staff members are exempted from the payment of fine. 4. Six books will be issued to students from the book bank facility. No fine is collected from students for the lending of books from book bank facility. 5. At the time of registration to each semester, no-dues certificate is to be obtained from the library by returning the books. 6. At the time of completion of the course or discontinuing or relieving, all the books are to be returned to library and no -dues certificate is to be obtained. 7. The student has to maintain discipline and silence in the

library. (xiii) Research & Consultancy Projects Committee: - This committee acts as the advisory and facilitating body for streamlining the conduct of research and consultancy activities in SCTCE. The committee shall take all appropriate steps with the objective of assuring quality research work in this institute. The committee shall comprise elected members from each department. The structure, duties and responsibilities of the committee are as follows, π The convener and co-convener of this committee is elected by the Principal in consultation with the academic council.  $\varpi$  The term of office of convener, co-convener and elected members is for one year. 18 π The committee shall meet at least six times a year.  $\varpi$  The convener and in his/her absence, co-convener shall preside at all meetings. π After each meeting, the committee shall submit a copy of the minutes of the meeting to the Academic Council/ Principal  $\varpi$  Promote research and research education within the college.  $\varpi$ Promote faculty consultancy in their areas of expertise  $\varpi$  Advise and formulate recommendations and provide information to Academic Council on research and consultancy and the respective policy guidelines and procedures. π Advise and recommend the academic council on matters related to administration, supervision and examination of students enrolled in research centres in this college towards PhD. To Monitor and review research and research education performance. To Advise and make recommendations to the Principal and Academic Council on promotion of different research enhancement schemes. π Consider proposals to start new research centres. π Formulate guidelines towards quality assurance of final year projects in B.Tech and M.Tech and streamlining those into publishable/ patentable research work. π Recommend research grant proposals and applications for approval. To Monitor and review the processes and outcomes of different research activities in this college. (xiv) Professional Societies monitoring committee:- This committee coordinates all the activities of student branches of professional bodies. (xv) College Union & Students' Activities Committee- This committee is formed with an objective of promoting and monitoring the extracurricular activities in the campus. The convenor of this committee is the staff advisor representative to the elected students' senate. (xvi) Canteen Committee:- The Canteen Committee is constituted to ensure the availability of nutritious and hygienic food in the campus and in the cafeteria and also to see that the kitchen premises conform to high standards of cleanliness. Every year the committee invite quotations from various contractors to run the canteen and cafeteria inside the campus. The committee selects one of the contractors on the basis of price and food safety license. It shall regularly monitor the matters related to pricing and meal plans and address issues and concerns from the college community regarding the food services. The committee ensures the timely delivery of best quality food items mentioned in the menu at various events conducted in the college. Role and Responsibilities • Quality checks to ensure that our canteen serve healthy and hygienic food. • Organize meetings to improve the functioning of canteen • Maintenance of kitchen utensils and electrical appliances as per needs • Ensure adequacy of safe drinking water and maintenance of water coolers in the canteen • Encourage regular feedback and consider suggestions for improvement (xvii) NSS Unit:- 19 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. The college NSS unit is now one among the most active NSS units under NSS Technical Cell, Govt. of Kerala. The NSS Unit of this college was registered in 2009 (Reg. No: 225). Henceforth NSS has 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 cultivation serving to water holding, green boosting, and serving to the purpose of creating livelihoods), 'NEYES' (skill development & entrepreneurship training), 'AMRUTAKERALAM' (campus cleaning and tree plantation), initiating Red Ribbon Club (catering to blood donation under KSACS), 'BHOOMIKORU KOOTTU' (Canal Cleaning, Pond Cleaning), 'HOME FOR

HOMELESS' (for providing shelter to the under privileged community), 'PUNARJJANI' (repairing & cleaning the old hospital equipment and furniture), Waste Management, Organ Donation Awareness Camp, Alcohol and Substance Abuse Awareness and Prevention Campaign, Swachh Mission activities etc. The college NSS unit received the Best Unit, Best Programme Officer & Best Volunteer awards from the Directorate of Technical Education, Govt. of Kerala. The unit received the State Level Best volunteer award from Govt. of Kerala. We proudly received the National Young Leaders Program Award from the Ministry of Youth Affairs and Sports. The NSS unit also received an award from the Dept. of Land Records & Revenue, Govt. of Kerala for the 'Best Journal' during the survey 'Map My Home'. Volunteers of SCTCE have bagged several prizes and cash awards in various State level programs. For the past few years NSSSCTCE has been continuously receiving appreciation awards from NSS Technical Cell, Govt. of Kerala. The social activities of NSS SCTCE received attention, appreciation and support from various Govt. departments, agencies, institutions, Govt. officials media, public, celebrities, social activists, politicians, ministers, people's representatives etc. Volunteers of NSS SCTCE also participated in the International Youth Exchange Program held at China in June 2017. The unit conducted 7 day Residential Camp, State Camp, District Camp etc. to unite NSS volunteers across the state facilitating the 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, Swach Misson Programs, agriculture, flood relief and rehabilitation activities 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 under privileged sections and also for the society are encouraged to be part of the unit. While the studies in SCT builds better intellectuals, NSS SCTCE builds strong and compassionate individuals with a loving and caring attitude. Volunteers who are successfully completing their volunteership get a certificate from Govt. of Kerala and 60 Activity Points from APJ Abdul Kalam Technological University. NSS unit SCTCE has lived up to its motto 'Not me But you' by setting a new standard in the field of social work. (xviii) Staff Welfare:- Roles and Responsibilities  $\varpi$  Help staff members in times of illness and difficulties. 20  $\varpi$ Conduct staff tour during vacation time.  $\varpi$  Settle staff disputes that harm the harmony of campus life.  $\varpi$  Forward cases of complaints and grievances of staff to the board of governors.  $\varpi$  Maintain records of income and expenditure of staff welfare fund. To Administer the Staff Welfare Fund and ensure its proper use. π Maintain minutes of the meetings and submit a report of the activities each semester to the Head of the Institution. σ Organize Welcome/ Farewell parties of the staff members. (xix) Hostel Committee:- Hostel committee functioning in the college is to provide accommodation facilities to the students. Every year, before the admissions begin, SCT invites nearby (within seven kilometres) private hostel owners for verifying their facilities as per SCTCE norms. The hostel committee members analyse and physically verify the facilities provided by the applicants and give a detailed report with its recommendations to the principal and form a list of approved hostels. This committee will periodically monitor the approved hostels and give suggestions to the authorities regarding mess facilities, health, safety and security thereby ensuring the proper functioning of hostels. The students' grievances regarding their hostel matters will be addressed and recommendations will be forwarded to the college grievance cell. Examination Committee:-Examination committee consists of a convener and members representing each department. The primary responsibility of the committee is to ensure smooth functioning of internal and external examinations. Examination committee prepares relevant timetable for conducting the internal examination. The question papers set by the faculty members for internal examination are collected by the committee and required number of copies are taken. Invigilation duty list is prepared and published in college website as well as the notice board prior to the examination. Allocation of rooms for conducting the examination is published in the student notice board on the day of examination.

The answer sheets returned by the invigilators are collected and distributed to the respective faculty members for valuation. The committee downloads and distributes hall tickets issued by the university to students before the University examination. The question papers are downloaded and required number of copies are taken 30 minutes prior to examination. Distribution of answer sheets and attendance sheets to the invigilators are carried out half an hour prior to the examination. The question papers are distributed to each classroom by the committee members five minutes prior to examination. The answer sheets are collected packed and sent to the university after each exam. Any malpractice reported by the invigilator will be addressed and reported to university as per norms. Examination committee ensures that adequate stationery, like answer sheets drawing sheets, graph papers etc. are made available. Any circular, office order or notification received from the university are processed in the examination cell, reply thereafter prepared and dispatched after getting Principal's signature or are circulated among department/students. 21 Continuing Education Cell:-The primary objective of the Centre for Continuing Education (CCE) is to provide training programs for both staffs and students of the college to improve their skills. It is also aims to provide skill development training programs to other students as well. CCE have representations from all the departments and a committee is constituted for this. The committee meets frequently to discuss its plan of action for each semester and the minutes are recorded. CCE has signed MOUs in connection with these objectives. 

Additional Skill Acquisition Program(ASAP) This is a centre initiated by the Government of Kerala and skill development training is provided to the dropped out students in 10th and the 12th grades in the following areas a) Four-Wheeler Service Technician b) CNC operator The training module includes a total of 160 hours of intensive training (60 hours of theory and 100 hours of practical training). It is then followed by 30 days of internship in a related industry in the nearby areas of the college. We are also focussing on developing a Centre for Excellence in Skill development in our college for the regular students of our college and the nearby colleges. The areas selected for the skill development includes a) Block chain Technology b) Artificial Intelligence c) Cloud computing ¬ Kerala Academy for Skill Excellence (KASE) It is also an initiative by the Government of Kerala aimed at skill development and discussions are going on diverse areas of skill development.  $\neg$ Premier Centre for Competency Training (PCFCT) It is a Chennai based private agency which is working in association with Additional Skill Acquisition Program (ASAP). An MOU was signed for this in 2014 and the following skill development programs were conducted in our college. a) Four-Wheeler Service Technician b) CNC operator c) Four wheeler auto electrical technician d) Soldering and Brazing Technician The training module includes a total of 160 hours of intensive training (60 hours of theory and 100 hours of practical training). College Magazine & Publications Committee:-Under the chairmanship of the Principal the Publication committee has been constituted with a convener, a co-convenor and few other staff members, from different departments for the purpose of enabling the timely publication of all publications made in the college. This committee is mainly responsible for the regulatory part of distribution and for taking care of al thel correspondence between the publication and the generation side of the production procedure. The primal role of this committee is to ensure the timely publication of the information bulletin of the college at the beginning of every academic year. This is 22 distributed to the newly joining students of the corresponding academic year providing with all information about the activities of the college. It also gives the list of faculty members and auxiliary staff. The student record that holds the details of the students from admission till completion of course are also printed under the guidance of this committee. The code of conduct that is to be fulfilled by every student is published as a booklet and distributed to the students at the time of admission. A college magazine is the perfect amalgamation for nurturing creativity and inspiring innovation. It always endeavors to reflect the values and the quality of the institution. This committee plan coordinate the editing and publishing of the college magazine along with the elected student union. Every year, the College Magazine is launched to

exhibit the literary skills and innovative ideas of teachers and students, highlights of the educational, cultural and sports activities of the Institution. The magazine committee provides an excellent intellectual environment for the faculties and students to pen their ideas and viewpoints. The primary duties that are to be performed by the committees are:- ● Editorial board has been constituted. Along with the members of publication committee, student members are also included. This includes the Chairman of the College Union, the General Secretary of the College Union, three student members nominated by the Executive Committee and the student editor. • The student editorial board is always guided by the committee in collecting and selecting the articles from the students and the faculties. • They are also guided in making the theme for magazine and collecting articles based on the theme. • They are also assisted in getting reports from the students/staff, other committees, departments etc that highlights the activities of the college during that academic year. • The committee does editing of all the articles at various levels and ensures that no reports/articles objectionable in nature are published. • The committee also ensures taking photographs of staff and students required for the magazine including all the events that takes place in the campus. • The committee also recommends the printing of magazine to a particular press based on the bylaws formulated by the college. • They are also assisted in giving publicity of magazine by conducting events like logo launch, managing social network pages and finally a magazine release function. • The steps are initiated to get the magazine printed by the academic year end and distribute the same to students and staff. (xxiii) Disciplinary actions/Student's Advisory System Committee:- The Hon'ble High Court of Kerala in R.P. No. 435/2003 has directed all the Universities/educational institutions in Kerala to lay down appropriate rules and regulations to enforce discipline on campuses which is applicable to all the students. Accordingly, the college council has formulated a code of conduct for students of this college. This is known as 'Sree Chitra Thirunal College of Engineering Students (Conduct and Disciplinary) Code2012' (made available in the information bulletin and college website). The Disciplinary Actions / Students Advisory Systems is the organ to implement the above code in the college. The Principal nominates all the members of the committee from among the permanent staffs of the college. All the HODs and Deans are ex-officio members of the committee. It has a convenor and a co-convener to look after the coordinative/administrative responsibilities. The committee meets regularly to assess the situation inside the campus. It also conducts emergency meetings to tackle any unforeseen situations in the campus. 23 (xxiv) Attendance Monitoring (Staff and students) Committee:- Attendance Monitoring Committee is responsible for the overall upkeep and maintenance of the attendance monitoring software of the college and ensures that the attendance policies of the college are enforced in computation of student attendance. For every lecture, attendance is taken and this data is computerized afterwards. The students and parents can log on to the attendance portal and can see the attendance details. Generate monthly absentee report, will be displayed on the notice board and also the report will be forwarded to respective staff advisors. It ensures timely up-gradation of software and hardware needs for the attendance monitoring system. (xxv) AICTE application, Accreditation & ISO Committee:- Functions and Responsibilities 1. Assessing the facilities of the college against AICTE norms which are revised from time to time and recommending corrective measures if any. 2. Online submission of relevant information for the extension of approval for the existing programs and preparing application for new courses in the AICTE portal. 3. Preparing mandatory disclosure on annual basis and publishing in the college web site. 4. Preparation and submission of application for NBA accreditation. 5. Responsible for applying ISO certification, conducting periodic audits (Internal & External) in connection with ISO Certification. (xxvi) Housekeeping monitoring committee:- Housekeeping committee consists of a convener and members to maintain a healthy, clean, orderly, safe and pleasant environment in the college. Functions of the committee include monitoring the following

activities. • Sweeping the floors regularly and cleaning it with disinfectants when necessary • Dusting the furniture in the office, classrooms and laboratories • Cleaning the glass surfaces regularly and keeping the work areas, storage areas and common areas free of trash ◆ Sanitizing the toilets by cleaning and disinfecting regularly • Keeping the walls free of cobwebs • Inspecting that the floors are not slippery during rainy season • Reporting and replacing any broken items (xxvii) Womens' Forum:- Women's forum has been constituted to address the issues of lady students in the campus. It has dealt with the problems of lady staff and students. The forum supports the betterment of ladies and encourages lady engineers in general. It has encouraged lady students to take part in events in and out the campus thereby helping them to get exposure to the latest technologies and in non-technical areas. The forum has encouraged the students to take part in seminars organized by the Vanitha commission in order to make them aware of their rights as a woman in today's world. Technical events and talks exclusively for ladies have been organized for the girl students in the college and from other colleges to get an exposure to the latest technologies 24 and meet great ladies from different walks of life and thereby get motivated by them. Issues reported by lady staff were enquired upon and suitable reports were reported. The following staffs have been constituted to look after Womens' forum activities. (xxviii) Class / Time table monitoring Committee;-Responsibilities a. Finalise timetable prepared by departments for each semester before the commencement of classes b. Ensure that uniform workload is maintained between faculty of same cadre in each department as stipulated by AICTE c. Report to Principal the decisions taken by committee and any additional faculty requirement for semester Functions:- • Hold meetings with members consisting of HoDs and faculty members who are in charge of timetable before commencement of semester • Scrutinise the timetable and workload of each department for the uniformity of workload and optimum work allotment for faculty • Obtain requirement for additional faculty from departments to handle excess workload in any semester • Recommend appointment of guest/contract faculty to Principal for meeting excess workload. (xxix) Website, Automation & Software Development:- The committee has been constituted this year. The roles and responsibilities of the committee includes managing the Official Website of the College, delivering various software solutions for college activities and providing automation support for various manual activities within the college. This year activities of the committee started with the introduction of the new website for College. The committee also tries to address some of the issues reported in the staff punching system implemented in the college. The committee is also working on the salary slip generation software for Office automation. (xl) Cult-A-Way/Cultural committee:- Responsibility — The cultural committee shall be responsible for all intra and inter college cultural events in the college. 
¬ To plan and schedule cultural events for the academic year. (Tentative dates to be included in the academic calendar of the institute) — The convener of the committee shall conduct a meeting of the committee to discuss and delegate tasks. ¬ Hold procedures to organize cultural events. ¬ To prepare the annual budget for various cultural events. 

To obtain formal permission from the college authorities to arrange programs.  $\neg$  To decide the date, time and agenda of the programs.  $\neg$ To inform members of staff and students about the events. — To arrange the venue and logistics (audio/video system, dias, podium etc) 25 ¬ To invite the Chief Guest and other dignitaries. ¬ To arrange mementos for guests and gifts/ certificates for the participants.  $\neg$  The committee shall display on the Notice Board/ Website the information about festivals to be celebrated. Events arranged for students in coordination with 'Student Cultural Committee are ● Fresher's Day ● Festival Celebrations • National Science Day • B. Tech Farewell • Annual Day • Cult-a-way events • Independence Day • Republic Day • Onam Celebration • Any other duties the Principal may assign (xli) Kerala Technological University Co-ordination: The committee consists of KTU Coordinator and senior faculty members. Meetings are convened, with the faculty advisors and HoDs, when ever

required. Discussion on KTU orders, clearance of doubts regarding KTU ordinance and the orders, attendance of students, activity points, registration processes are discussed in these meetings. (xlii) Innovation & Entrepreneurship Development Cell (IEDC) There are significant number of students who have valuable ideas which do not germinate and grow to completion due to lack of conducive environment and support. SCTCE has set up an IEDC in its campus to nurture entrepreneurs. Objective of the cell is to accelerate the successful development of entrepreneurial companies through an array of business support resources and services. The cell also aims to create awareness among faculty about the various facets of entrepreneurship as an alternative career option so that they can act as resource persons in guiding and motivating students. IEDC plays a major role in moulding student entrepreneurs through the support of Technology Business Incubation (TBI) Centres. Department of Science and Technology has set up many TBI across the country to provide targeted business assistance to young firms at their earliest stages of developments. Govt. of Kerala decided to set aside 1% of budget to promote entrepreneurship among students and also announced that the facilities and support would be extended to all educational departments and entrepreneurship clubs. As per the government order each entrepreneur is eligible for attendance relaxation up to 20% and grace marks up to 4% spread across semesters. All the programs and events of IEDC are monitored and controlled by the following committee. (xliii) Green Protocol committee:-The aim of the Green protocol committee is to implement Green protocol inside the campus. Green protocol is essentially a set of measures, when implemented, results in significant reduction of waste with the primary focus on prevention of use of disposables and using reusable alternatives like glass/stainless/porcelain cutleries. The major initiatives are: 26 • Bring food only as per requirement to avoid wastage • Promote ink pens to prevent accumulation of plastic waste through discarded ball point pens • Food and drinking water should be brought in stainless steel utensils and disposable materials should be avoided • Avoid paper and plastic cups and plates in public functions where food is served. Instead, utensils, that can be washed and reused, are to be used. ● Instead of discarding waste paper, deposit it in a common Materials Recovery Facility in the campus • Store electrical and electronic waste and hand it over periodically to scrap dealers • Avoid flowers draped in plastic covers and flex items during public functions in the campus and welcome dignitaries with a flower or a book (xliv) Sports Committee:- Objective: Sports committee has been instituted for the well-being of our students and to create scope for nurturing of skills in games and sports. It ensures the healthy participation of students in outside campus (inter-collegiate) events. Responsibility — Keeping stock of previous and current year's sports goods. — Ordering sports goods after consultation with the Principal  $\neg$  Arranging the venues for sports events after consultation with the Principal.  $\neg$  Drawing lots for various sports — Conducting sports events in the college — To recommend students for permission to participate in the intra or inter college events. 
¬ To recommend sanction for Entry/ Registration Fees to participate in various sports events. — To recommend duty leave to students who have taken part in sports events  $\neg$  Sort out any issues taking place in matches (team selections, objections etc.) — Holding sports events for staff members. — Maintaining records of all events attended by students outside the college, within the University and outside. Functions: The committee takes care of the day to day sport related actives of SCTCE ensuring maximum participation of students and staffs. Students are given training during morning and evening sessions by facilitating the service of coaches, without affecting academic activities. To support various sports competitions at the college level during the sports events. Prepare the college teams ready for events in university and intercollegiate levels. Prepare sports calendar for the academic year and budgeting the expenses. (xlv) Parents Teachers Association. The Parent Teacher Association (PTA) is formed with a view to maintain effective interaction between the parents and the college authorities. The PTA is giving considerable 27 assistance for improving the facilities in the college. For

the benefit of both students and faculty members, PTA has undertaken a number of development programs like: • Operation and maintenance of one college bus. • Financial support to students' participation in sports and cultural events. • Providing Students' amenities. • Financial support to technical and cultural fest -Cult a way. • Full support for centralizing the attendance tabulation under PTA. • Support for buying accessories like testing components etc. to the practical labs. • Funding for the extension of CCF timing from 4.30 pm - 7 pm for the use of students. ● Financial support for purchasing books in the reference libraries of each departments. • Tutorial DVD's from IIT Madras (nptel.iitm.ac.in) were procured by PTA & supplied to all departments for the use of the students and teachers. • PTA has also instituted cash awards to the toppers among the final year students from each branch. The PTA is also rewarding outstanding final year projects of the students every year and assisting in training programs for the students and for their placements. (xlvi) Alumni Association. The Sree Chitra Thirunal College of Engineering Alumni Association (SCEAA) was formed in 2005 and is a body which is registered under the 12th section of Travancore - Cochin literary, scientific and charitable societies act of 1955. It has been formed with the following objectives: ● To maintain the contacts of the alumni of the Sree Chitra Thirunal College of Engineering, Thiruvananthapuram with the alma-mater. • To provide a forum for bringing the old students of the college, so that they can contribute effectively to the cause of Engineering education and research in the country. • To promote cultural and social contacts among the old students, present students and staff of the college so as to develop a sense of tradition and heritage in this great family, which in turn will lead to the further growth and prosperity of this great institution and her progeny. ● To institute prizes, scholarships, book banks, research grants etc. for the students of the college. • To provide opportunities for developing entrepreneurship and practical know how among the graduating students and also to impart vocational and career guidance to them. • To help the students graduating from the college in securing professional training and employment consistent with their qualification. • To function as a purely non-profit organisation in the pursuit of such other projects solely connected with the educational and cultural objectives mentioned above, as the General Body may decide from time to time. A few of the activities of the association are as follows: 

Arun-Aneesh Memorial Awards This award, which was instituted in fond memory of late Sri. Arun and Sri Aneesh, two students of Computer science and Engineering department of this college, promotes academic excellence in undergraduate engineering course. The award is 28 given every year on the 15th of August to the toppers of all engineering branches in the fifth semester B.Tech degree examination. — Book Donation Scheme This scheme is intended at donating textbooks and reference books useful for undergraduate courses in engineering for various engineering departments of this college. The scheme was formally launched on 15th August 2009, by which several textbooks of immense use were donated on behalf of the association to the departmental library of Computer Science and Engineering branch. — Training and Placement Assistance The association is constantly prepared to assist the Career Guidance and Placement Unit (CGPU) of the college in helping the students of this college in securing placements in reputed firms inside and outside the country. The association frequently arranges talks and seminars for providing guidance to students on placement related matters. The alumni members of the college, who are currently employed in various reputed firms maintain constant contacts with the students and the CGPU to offer valuable assistance for placements. — Promotion of Extra-curricular Activities The association is also keen in promoting extra-curricular and co-curricular talents of the students in this college. It generously offers considerable amounts for conducting various such events in the college. ● SCTCE Alumni Association sponsored an Open Air stage for the college last year. This awesome venture was made possible by SCT alumni and the building cost was around Rs 5 Lakhs. • Every year SCTCE Alumni association give financial assistance for the conduct of College Onam celebration and Cult- a Way. • SCTCE alumni

association established a Photostat machine counter inside college premises. Grievance Redress Mechanism. To maintain an atmosphere of democracy, high equality and justice, as per the ruling of Honourable High Court, the following committees are initiated to address the discriminations encountered, if any by the students :- ● Grievance cell ● Anti Ragging Cell ● Internal Complaint Committee(Anti Sexual Harassment) Students Grievance Redressal Cell a Grievance Redressal Cell (GRC) exists in the college for the redressal of the problems reported by the Students of the College. Objective of GRC are as follows, π Upholding the dignity of the College by ensuring strife free atmosphere in the College through promoting cordial Student-Student relationship and Student-Teacher relationship. 29 π Encouraging the Students to express their grievances / problems freely and frankly, without any fear of being victimized. π To ensure effective solution to Students' grievances with an impartial and fair approach. π To develop a responsible and accountable attitude among all the stakeholders in order to maintain a harmonious educational atmosphere in the Institute. Functions: The functions of the cell are to look into the complaints lodged by any student, and to take action based on its veracity. Anyone with a genuine grievance may approach the Redressal Cell members in person.  $\neg$  The students can approach the Cell for their grievances regarding academic matters, financial matters, health services, library, transportation and other general services. EXCLUSIONS The Grievance Redressal Cell shall not entertain the issues connected with the following bodies: 1. Decisions of the College Council, Academic Council, Board of studies and other Administrative or Academic Committees constituted by the College. 2. Decisions with regard to award of scholarship, fee concessions, medals etc. 3. Decisions made by the college with regard to Disciplinary matters and misconduct. 4. Decisions of the College about admissions in any courses offered by the Institute. 5. Decisions by competent authority on assessment and examination result. Meeting: The committee shall meet at least once a month. Quorum: Fifty percentage members of the Council shall constitute the quorum. Grievances Handling Committee Members Anti-Ragging Committee: As per AICTE notification and THE KERALA PROHIBITION OF RAGGING ACT, 1998, SCTCE has a zero-lenience policy on ragging. Any instance of ragging would attract Institute level punishment including cancellation of admission, suspension, rustication or expulsion from the Institute. Ragging also comes under punishable offence as per the law and order of our country. An Anti-ragging committee (ARC) is constituted for each academic year. The present office bearers of the ARC are: Measures to prevent Ragging So as to prevent ragging in the institution, during admissions, each student and their parents are required to submit an affidavit to the institution guaranteeing that they will neither indulge nor abet ragging. 30 On the first day of commencement of class, each student will be given an information bulletin which contains details of the Anti-Ragging regulations, necessary instructions for first year students about the officials to contact in case of incidents or attempts of ragging. This includes the contact mobile numbers of the Institute ARC members, Hostel committee members, Staff Advisors and designated persons of the Institute Administration. ARC will constitute an anti-ragging Squad (ARS) to maintain vigil, oversight and engage in patrolling to prevent ragging on a day to day basis. To prevent incidents of Ragging ARS members will maintain vigil at places vulnerable to ragging such as the canteen, first year block, CCF, Portico, Workshop premises etc. especially during the morning hours (when the first year students reach the campus), lunch break and after class hours until each first year student leaves the campus. Each staff will be assigned as ARS on a rotation basis. The Internal Complaints Committee ICC of SCTCE is constituted in accordance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013. The committee is constituted in our college to go into and recommend necessary steps with regard to complaints on sexual harassment and to address issues related to Prevention, Prohibition and Redressal of such complaints. The details regarding the functioning of the ICC is provided to the students, at the time of admission through an information bulletin and it

also made available in the institution web page. The ICC will examine all matters relating to women in the workplace and will make suggestions and proposals to the institute administration regarding such matters. The committee will admit complaints from girl students/female staff members of the college. For the redressal of a complaint, the complainant is required to provide a written or online submission or oral representation addressed to the principal/convenor/ any member of ICC. The committee will follow relevant Acts, Rules, Office Memorandums of Government of India and Court Orders etc as applicable and recommended by AICTE from time to time. The committee act as an Inquiry Authority or sometimes if necessary will institute an external enquiry committee on a complaint of sexual harassment. The Committee will make recommendations on actions to be taken on specific complaints. The Committee will report to the Principal. The committee will also organize gender sensitization programmes for staffs and students to ensure knowledge and awareness of rights, entitlements and responsibilities spelled out in the Sexual Harassment Act, 2013. Students Senate: The college has Students Senate, an elected body from the whole students of the college with an executive committee having office bearers in various posts. Its objectives are 1. To enable the students in effective delivery of duties, taking responsibilities and observing the rights of citizenship 2. To promote opportunities for the development of character, leadership, efficiency, knowledge and spirit of service among the students 31 3. To encourage sports, arts and other cultural educational and recreational activities those are incidental and conducive to the above objectives 4. To voice out the grievances of the students to the attention of the concerned authorities 5. To work for the general welfare of the student community. The election to the student's senate will be conducted complying with the norms stipulated in the Lingdo Commission Report, which has been subsequently approved by the Honourable Supreme Court. The student's senate will have an executive committee with the office bearers as per the guidelines issued by the University of Kerala and Kerala Technological University. Election will be usually held as per the schedule announced by the University The Student Senate has following office bearers 1. Chairman 2. Vice Chairman 3. General Secretary 4. Two Councillors to the University 5. Editor of the College Magazine 6. Arts Club Secretary 7. Secretary for Sports 8. One member representing the students of each year of the Degree and Post-graduate courses 9. Two members are elected by the lady students of the college. 10. One member representing the student belonging to the scheduled caste or scheduled tribes to be nominated by the executive committee in case none of the elected members of the committee belong to SC/ST 11. Honourable Treasurer and Staff Advisor (Ex. Officio.) The Executive Committee shall function in accordance with the general guidelines issued as and when by the University. The SENATE shall be the apex student body and it shall meet at least 4 times an academic year. The Executive Committee shall formulate the general policies, its activities and prepare an annual financial estimate at the beginning of each academic year and shall get the approval of the SENATE for the same. Principal will be the Patron of the SENATE and if any dispute occur in SENATE an appeal shall be to the Patron. Delegation of financial powers The financial power of the institution is solely in the hands of the Principal. The Principal can sanction expenditure below rupees 5 lakhs for the purchase of equipment/execution of works observing Stores Purchase Manual and other existing rules with the approval of the Internal College level Purchase/Works Committee. The Purchase/works beyond Rs.25 lakhs will be done with the approval of External Purchase/Works Committee and Board of Governors. For the further smooth, transparent and speedy decisions in financial matters order have been issued as per Order No.575-A1/2010/SCTCE dated 05/04/2010 authorising the Administrative Officer to spend, an amount up to Rs.5000/- for meeting all types of expenditures. Moreover, to discharge duties enjoyed as Head of Office in respect of withdrawal and disbursement or all money and the maintenance of the cash book and 32 connected subsidiary records subject to the conditions that prior sanction of the Principal shall be obtained in cases where the power is not delegated to the Administrative Officer, the sanction being accorded specifically or

the vouchers being passed by the Principal in such cases. Administrative Officer has the power to draw all establishment bills of employees including part time and contingent employees of the college and duly countersigned contingent bills. In this regard, an amount of Rs.5000/- is being maintained for meeting day to day contingent expenses. He can sanction TA advances and settlement of TA claims of employees of the college whose tour and tour diaries have been got approved by the Principal. Administrative Officer can draw and disburse all kinds of scholarships/stipends/grants to students The present AO is deputed by the State Government and is an officer in the rank of Under Secretary, Government of Kerala. An amount of rupees 5000 (Petty cash) is allotted from PTA to each head of the department to meet contingency requirement. Transparency and availability of correct/unambiguous information in public domain Right to information (RTI): According to the regulations of RTI act – 2005, the act is implemented in the college. As per the rules there is a public information officer, assistant public information officer and first appellate authority for the implementation. The details of the office and its regulations are in the public domain. Information bulletin: At the beginning of every academic year the college brings out an information bulletin which contain the details regarding the admission requirements for B. Tech programs, Fee structure, Lateral entry schemes, Scholarships and Stipends, Selection of Candidates, Attendance monitoring, Leave rules, college timings, conduct and disciplinary code. All the required information about the college are made available in, http://www.sctce.ac.in/ All instructions and notices are also circulated online through emails.

## **Principal**

### Dr. C. Sathish Kumar

Dr. C. Sathish Kumar served as the Principal of Rajiv Gandhi Institute of Technology Kottayam and Government Engineering College Idukki, each for 2 years. He has experience of more than 32 years as faculty in Government Engineering Colleges in the state. He received B.Tech. degree in Electronics & Communication Engg. from TKM College of Engineering Kollam and M.Tech. degree from Indian Institute of Technology Bombay. He received his Ph.D. degree from PSG College of Technology Coimbatore, under Bharathiar University. He served as the Dean of Faculty of Engineering and Chairman of Board of Studies (PG) in University of Calicut. Dr Sathish was member of the Syndicate and the Board of Governors of APJ Abdul Kalam Technological University, Thiruvananthapuram during 2021-23. He officiated also as the member of Academic Council and Convenor of Syndicate Standing Committee on Examinations in APJ Abdul Kalam Technological University. He was a Senate Member of Cochin University of Science and Technology during 2021-23. He has guided two research scholars for their Ph.D. degree. He has more than 40 research publications which include 10 SCIE and 2 Scopus research papers. He has acquired around 38 lakhs for the institutions through sponsored projects from various agencies. He has organised two national conferences. He is the reviewer of six SCIE international journals. He has served as Ph.D. examiner of Anna University Chennai, Pondicherry University, and University of Kerala.

#### **Dean Academic**

Dr. Anoop Kumar S

**Dr. Anoop Kumar S**, completed his B.Tech Degree in Mechanical Engineering, from **College of Engineering**, **Trivandrum** in 1993. He took his MTech degree in Mechanical Engineering (Machine Design) from **College of Engineering**, **Trivandrum** in 1995.. He joined in SCTCE as Lecturer in Mechanical Engineering on 18 <sup>th</sup> October 1996. He has a now **27 years** of teaching experience to his credit. He has eleven publications in journals including SCIE/SCOPUS/UGC- CARE indexed journals and fourteen conference publications to his credit.. He has reviewed publications in journals like Industrial Lubrication and Tribology, Journal of the American Oil Chemists' Society, Biomass Conversion and Biorefinery etc. as well as conference publications.. He has acted as subject expert in the departmental promotion committees of NIIST and VSSC.

## Significant responsibilities he held recently at college/university level are:

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 Co-ordinator, College chapter of Indian Society of Non Destructive Testing (ISNT)

Member, Internal Quality Assurance Cell, SCTCE

Member, High Power Committee for Accreditation, SCTCE etc.

## His professional society activities are listed below:

Fellow and Chartered Engineer – Institution Engineers, India.

Life Member of Indian Society for Technical Education (ISTE)

Life Member Indian Society of Non Destructive Testing (ISNT)

Life Member of Tribology Society of India (TSI)

### His major areas of interest are:

Tribology

Composites

**Operations Management** 

#### Dean P.G. Studies

Dr. S. H. Anilkumar

**Dr. S. H. Anilkumar**, completed his B.Tech Degree in Mechanical Engineering, from College of Engineering, Trivandrum in 1992. He took his MTech degree in Mechanical Engineering (Thermal Science) from College of Engineering, Trivandrum in 1995. He started his carrier as Lecturer in Mechanical Engineering at The Indian Engineering College, Vadakkangulam, Tamilnadu from 31st October 1994. From 27th November 1995 onwards he worked as Lecturer in Mechanical Engineering at College of Engineering [ IHRD ], Chengannur. He joined in SCTCE as Lecturer in Mechanical Engineering from 28th October 1996. From 28th October 2001 onwards he has worked as Senior Lecturer in Mechanical Engineering. He joined for PhD in National Institute of Technology, Calicut on 23rd July 2004 as a sponsored candidate. Subsequently, he was awarded PhD in Mechanical Engineering, from National Institute of Technology, Calicut in the year 2010. He has a total of 27 years of teaching experience. He has four journal publications and ten conference publications to his credit. He has chaired and presented papers in International Conferences at Imperial College,

London and Heidelberg, Germany in the year 2008. He is a reviewer of Institution of Engineers Journal and National Conference publications. He has participated in many short term courses at IIT Madras, IIT Kanpur, IIT Bhubaneswar, NIT Calicut and other Engineering colleges in India. He has acted as subject expert in the departmental promotion committees of NIIST, VSSC and SCTIMST. He held the post of the HOD of the Mechanical Engineering Department from 1st Nov 2013 to 28th April 2016. He was in charge of Principal from 19th April 2017 to 4th June 2018. Presently he is working as Dean PG studies of this Institution.

He is a 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.

### His areas of interest are:

Convective Heat Transfer in an enclosure utilizing different fluids

Waste management in Transport sector

**Internal Combustion Engines** 

Research Methodology

#### Professor and Dean - Student Affairs

Dr. Shyji

Dr. Shyji completed his B.Tech (1997), M.Tech (2001) and PhD (2019) in Mechanical Engineering from University of Kerala. He joied 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**

### 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	Phone No.
Sajitha Kumari R	Administrative Officer	94463 0197
Indulekha K. N	Junior Superintendent	949701709

Biju V A	Junior Superintendent	944703332
N K Pradeep Kumar	Civil Engineer	944785542
Asha G. K	Head Accountant	9495954320
Lekshmi V	Senior Clerk	944758978
Asha R.P	Confidential Assistant	989567328
Aswathy R.B	LDC	949726886
Priyadarshini M. R	Clerical Assistant	994780823
Sri.Giju C	Electrician	984722950
Sri.Kirannath .G	Plumber	949552077
Sambasivan S	Driver (Senior)	974518085
Anil P	Driver Grade II (Higher Grade)	940044585
Sreekanth V S	Driver Grade II	999535357
К. Аууаррап	Office Attendant	0471-24711
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	

# **Academic Programs**

The Institute currently offers 7 undergraduate and 3 post graduate programs. All programs up to 2014 admissions are affiliated to Kerala University. All B.Tech and M.Tech programs from 2015 admission batch onwards are affiliated to APJ Abdul Kalam Technological University (KTU). All courses are approved. All courses are approved by All India Council for Technical Education (AICTE). The Institute offers the following undergraduate and post graduate programs:

# **Undergraduate Programs**

Program	Department/Branch
	Computer Science and Engineering
	Biotechnology and Biochemical Engineering
	Electronics and Communication Engineering
	Mechanical Engineering
	Mechanical Engineering (Auto)
B.Tech (Regular)	Computer Science and Engineering(Artificial Intelligence And Machine Learning)

### **Postgraduate Programs**

Program	Department/Branch	Specialization
	Mechanical Engineering	Machine Design
	Computer Science and Engineering	Computer Science and Engineering
M.Tech	Electronics and Communication Engineering	Signal Processing

# Community

### **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, SwachhMisson 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 inorder 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. Lanscape 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 2014Prof. (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 (IIChE), Student Chapter, SCTCE, TVM-18. The IIChE 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 intellegence 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.

Al verse, 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 immensly 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 pide" 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 opticnetwork 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, ITB. 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- digitallibrary@sctce.ac.in
- E- journals/ E-books
- Printed journals/ News papers
- Previous Question Papers
- Profciency 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

# **Library Team**

Name	Designation
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 is providing very good facilities for the development of sports activities among the students. The entire sports activities of the college is coordinated by the sports committee headed by Principal. Convenor of the committee will be a faculty nominated by Principal during every academic year. The committee members are also nominated by principal among faculties and other supporting staff of the institution. Present convenor is Dr. Arun M. Assistant Professor Dept. of Mechanical Engineering.

Apart from this as per KTU statute a sports council also functioning in the college. The convenor of the committee is faculty in charge of sports activity. The members are two elected members from staff, sports secretary of the college and two student members.

## **FACILITIES**

Institution is having a Basketball court, Badminton court, Volley ball court, Nets for practicing cricket and a practice facility for Hand ball. Students are permitted to practice in various turfs located nearby the institution whenever required.

## **COACHES**

There is a Physical Education Officer is appointed in the college on contract basis from PTA to take care of sports activities. Mr. Sanclin Nelson who is specialized in basketball is holding the position currently. The appointment of this post is taken care by the PTA. Apart from this hand ball team is provided with a coach during championship seasons. Mr. Athul S S Nair is holding the present position of handball team coach.

#### **ACHIEVEMNETS 2022-23**

#### **HANDBALL**

Our team participated in the KTU A-Zone handball tournament and was qualified for the KTU Interzone handball Tournament. A team selection trials was organized in the month of October 2022 and a team of 16 players were selected. The coaching camp was organized in the college. The camp was handled by Coach Athul S S Nair, former handball team captain of Govt. Arts College Trivandrum. The coaching camp prior to the A-zone tournament started on October 22. The camp was later shifted to VHSS Nemom. Practice was done in the morning. Several practice matches were organized with several teams from Trivandrum. Also University Handball players and Kerala Handball team players assisted in the coaching camp. The KTU A-Zone tournament was held on November 14, 2022. Coaching camp prior to Inter-zone started on November 20.

The team was led by 3 rd year student Mr. Govind K (Captain), Abhishek H (Vice-Captain)

Handball team with KTU-A Zone Runner UP Trophy

## **FOOTBALL**

Our college football team has exhibited very good performances in various championships. Team secured 3 rd place in KTU- A Zone championship and won the championship of TKM intercollegiate tournament 2022-23. The team was lead final year student Mr. Akash P.

KTU-A-ZONE- 2 ND RUNNER UP

Champions-TKM Foot Ball tournament-SOMBRERO

## **BASKETBALL**

Our basketball team were the 2 nd runner up in KTU-A zone championship and able to won the intercollegiate tournament conducted by Mohandas College of Engineering. The team was lead by final year student Mr. Nithin Sreekumar. Mr. Nithin was also a member of KTU Basketball team and represented the university in south zone basketball championship.

KTU-A Zone Basketball-2 nd Runner UP

Champions- Intercollegiate tournament of Mohandas College of Engg.

#### **CRICKET**

Our college team were the first runner up of KTU A Zone cricket tournament and qualified for KTU Inter-zone cricket tournament. The team leas by final year student Mr. Ananad

Cricket team with Runners UP trophy of KTU- A-zone

#### кно-кно

Our Kho-Kho team participated in the KTU A zone championship and secured the 3 rd position.

Kho-Kho team Second Runner UP

#### **ATHLETIC TEAM**

Our 26 athletes participated in KTU- Athletic meet held at Chandrasekharan Nair Stadium. Mr. Nithin S of fourth semester Automobile Engineering secured bronze medal in Discuss Throw Men.

#### **VOLLEY BALL TEAM**

Our women volley ball team participated in the KTU-Inter zone volleyball championship at TKM College of Engineering Kollam. Men team also participated in the KTU-Inter Zone championship.

#### **KABADI TEAM**

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

#### **BADMINTON TEAM**

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

# **Additional Skill Acquisition Programme**

## Additional Skill Acquisition Programme (ASAP)

Our college have signed an MoU with the Additional Skill Acquisition Programme (ASAP) Kerala, which is a Section-8 Company of the Department of Higher Education, Government of Kerala, that focusses on skilling students and the general community and our own students to enhance their employability. Instituted 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, by offering different contemporary courses of various domains and curating them to a ready-to-deploy workforce.

Nodal Officer: Dr. Shyji S

Associate professor in Mechanical Engineering

Mob:-9447310825

Mail ID:-shyjis@sctce.ac.in

Technical Staff:Suresh LB

Trade Instructor

Mob:-9562915120

Mail ID:-sureshcherukara@yahoo.com

## Skill Delivery Platform of Kerala (SDPK)

Skill Delivery Platform of Kerala"-SDPK, is a project linking various Engineering colleges in Kerala with the IT parks through a Tele-presence network. The project is aimed at creating State- of-the-art Technology enabled Learning platform that will enable remote delivery of high quality skills programme and industry – the platform to be enabled through dedicated network backbone, Telepresence solution and Learning Management system. The project is aimed at providing a learning platform connecting 150 Hi-Tech classrooms in the Engineering colleges of the state, which can deliver skills training to a large number of students each year.

Nodal Officer: Dr. Shyji S

Associate professor in Mechanical Engineering

Mob:-9447310825

Mail ID:-shyjis@sctce.ac.in

Technical Staff:Suresh LB

Trade Instructor

Mob:-9562915120

Mail ID:-sureshcherukara@yahoo.com

# The main objectives of the SDPK are:

To provide State-of-the-art Technology enabled Learning platform that will enable remote delivery of high quality skills programme and industry.

Deploy the learning platform connecting various Hi-Tech classrooms of the different Engineering colleges throughout the state.

Implementation of an effective e-Learning solution with collaboration features to use in a distributed environment.

Deliver formal skills delivery programme through Minor degree, various certification programmes, expert lectures etc. to enhance the learning opportunities and employability of students.

#### Hostel

Hostel committee functioning in the college is to provide hostel facilities to the students . Every year the hostel committee invite quotations from various hostels to provide hostel facility within 7 KMs from the campus. Then the hostel committee visited these hostels and verify the facility and neatness. Then a list of approved hostels will be published in the college notice board.

Suggested List of Boys Hostel- 2023

HOSTEL NAME Owner Contact number Address Distance from SCTCE Hostel Fees Including Food (Rs) Total Capacity Vaccancy as on 01.08.2023 Akshaya Hostel Smt. Bindhu 8129795560 Near SBI, Pappanamcode & Kuttikadu Lane, Opposite Dental clinic 200 m 6000 30 20 Achus Hostel Smt. Suha G S 8136954246, 9495697518 Susha Bhavan, Palace road, Pappanamcode (Opp. KSRTC central works) 300 m 6200 16 3 Sreedeepam Boys Hostel Sri. Sreeju 9446186940, 9446684604 Kairali Garden, Viswambharan Road, Pappanamcode 450 m 6000 80 10 Blossom Hostel Smt P Santhamma 8891361798 Nandanam, Opposite Anathapuri School, Viswambaran Road Pappanamcode 750 m 6000 10 10 Vipas Hostel Sri. Santhosh Kumar 9447244188 Kairali Garden, Viswambharan Road, Pappanamcode 1 Km 5500 25 18 Atham Boys Hostel Sri. Nagarajan 8848726001 SivaLalitham, TC 52/3245 Viswambaran Road Pappanamcode 1.1 Km 6000 12 8 Niaz Hostel Sri.M K Nazar 9447321328, 8848096564 Niyas Building, Karakkamandapam, Nemom P O 1.6 Km 6000 65 23

Suggested List of Girls Hostel- 2023

Chinnus Hostel Smt. Usha Rajkumar 9496260318, 0471-2495513, 9446795513 Chirakkara Palace Lane, Opposite KSRTC Central Work , Papanamcode 250 m 6500 6000 55 15 Athukshay Girls Hostel Smt. Bindhu 8129795560 V S Appartment, Chirakkara Lane, Kaimanam 450 m 6000 50 40 Deepa Prabha Ladies Hostel Smt. Linsa 9633391299, 9995460253 Deepa Prabha, Opposite Aster Lab, Near Whitedammar, NH Road side, Pappanamcode 500 m 6000 25 25 Sai Hostel Smt. Sreeja S S 9497853750, 9645370579 TC 51/1965, Parthipuri, Papanamcode, Opposite Cavaliar India Coaching Centre 550 m 6500 6000 25 10 Sudarsanam Ladies Hostel Smt. Suja Rani 9846724455, 6238331992 Vivek Nagar, NSS Karayogam Road, Kaimanam 800 m 6000 50 14 Reyaash Home Stay Smt. Sharmila S 9037666515, 8089402500 TC 52/539, MRA-B 9,Mangalassery Lane, Oppo. Govt. Polytechnic, Kaimanam 1 km 6500 10 10 Ammus Hostel Smt. Neelambika 9020973188 TC 53/2439(1), Opposite CSIR NIIST, Industrial Estate P.O, Pappanamcode 1.5 km 6000 58 54 Aashiyana Hostel Smt. Reetha 9447229223 Karakkamandapam junction, Nemom 1.5 km 6500 6000 5500 52 23 Aashiyana Hostel Annexure Smt. Hiranmayi 8137872437 Karakkamandapam, Nemom 1.6 km 6500 6000 5500 48 26

There are significant number of students who have valuable entrepreneurial ideas which do not germinate and grow to completion due to lack of necessary environment and support. SCT College of Engineering has set up an Entrepreneurship Development Cell (EDC) in its campus to nurture entrepreneurs. Objective of the cell is to accelerate the successful development of entrepreneurial companies through an array of business support resources and services. The cell also aims to create awareness among faculty about various facets of entrepreneurship as an alternative career option so that they can act as resource persons in guiding and motivating students. EDC plays the major role in molding student entrepreneurs through the support of TBI (Technology Business Incubation Centers). DST( Department of Science & Technology) has set up many TBI across the country to provide targeted business assistance to young firms at their earliest stages of development-when they are most vulnerable which result in a greater than average chance of success. Govt. of Kerala decided to set aside 1% of the budget to promote entrepreneurship among students and also announced that the facilities and support would be extended to all educational departments and entrepreneurship clubs. As per govt. order each entrepreneur is eligible for attendance relaxation up to 20% and grace marks up to 4% spread across semesters.

All the programs and events of EDC are monitored and controlled by a committee of faculty members from various departments.

## **Parent Teacher Association**

The Parent Teacher Association (PTA) is formed with a view to maintain effective interaction between the parents and teachers. The PTA is giving considerable assistance for improving the facilities in the college for better learning experience.

# For the benefit of students and faculty members, PTA has undertaken a number of development programs like:

- Financial support for encouraging students' participation in sports and cultural events.
- Building of basketball court.
- Financial support to technical and cultural fest -Cult-a-way.
- Full support for centralizing the attendance tabulation under the Attendance Monitoring Cell.
- Support for buying accessories/ components/consumables etc to the practical labs.
- Funding for the extension of CCF timing from 4.30 pm 7:00 pm for the benefit of students.
- Financial support for purchasing books in the reference libraries of all departments.

- Tutorial DVD's from NPTEL Madras (nptel.iitm.ac.in) were procured by PTA & supplied to all departments for the use of the students and teachers.
- PTA has instituted cash awards for the toppers among the passing out students from each branch.
- The PTA provides necessary support for outstanding final year projects of the students.
- Gives out proficiency prize to First Year BTech Degree Examination Topper in each branch.
- Assistance for training programs for the students.
- PTA runs a stationery store for the benefit of students selling articles at reduced rates.
- PTA finances operation and maintenance of a College Bus.
- Provides funds for improving amenities for students.
- Support for Emergency expenses associated with Exams/Recruitment/Classes.

## The office bearers of the PTA:

#### **President**

Dr. C. Sathish Kumar

Principal

9447637773

# **Vice President**

Smt.Laila F

9846889518

## **Joint Secretary**

Sri.K. Pushapakumaran

8075279206

# **Secretary**

Dr. Boby Philip, Teacher

# Treasurer

Dr. Shimi Lawrence

9495627711

# **Executive Committe Members**

Sri. Ajaykumar. VR

9447344208

Sri. Jayakumar PR

9496152665

Sri. Venugopal

9447341251

Sri. Shibu S

9539030780

Adv. Anil Kumar

9446585585

Smt. Prasanna GL

8848069140

Dr.Soniya B
9447202200
Dr. Anitha CS
9447373700
5447575700
Dr. K.B. Radhakrishnan
9447205767
Dr. K.Nisha Jose
9446149873
PTA Office Staff
Smt.Bindu.G.S
Clerk
Smt.Sudha P
Store Assistant
Smt.Sasikala R

Dr. S.H. Anil Kumar

Dr. Anoop Kumar S

9447340870

9447553730

Cleaning Staff	
Smt.Shameena	
Cleaning Staff	
Smt.Shailaja V Nair	
PT Sweeper	
Smt.Lekha O	
PT Sweeper	
Smt.Sindhu V	
PT Sweeper	
Sri.Aneesh Chandran	
Bus Attender	

**SCTCE ALUMNI ASSOCIATION (SCEAA)** 

SCT College of Engineering, Pappanamcode, Thiruvananthapuram, is one of the most reputed, premier engineering educational institution in Kerala and is affiliated to APJ Abdul Kalam Technological University. It was established in 1995 under the Transport Department, Government of Kerala. The college has a dynamic alumni association that contributes towards the development and welfare activities of the college and the association has chapters all over the globe. In the past two decades, the SCTCE Alumni Association has played a critical role in the college's growth. The main objective of the association is to foster strong bonds among alumni, providing a platform for networking, collaboration, and mentorship opportunities. The Association has the powers to enroll members, form committees, sub-committees and call for periodical meetings and to form chapters inside India and abroad to achieve the objective of the Association. Sree Chitra Thirunal College of Engineering Alumni Association (SCEAA) was formed in 2005 and is a body which is registered under the 12th section of Travancore – Cochin literary, scientific and charitable societies act of 1955.

## **ABOUT US**

#### **Alumni Association**

The college has a dynamic alumni association which involves actively on development and welfare of the college. The alumni association has chapters in cities in India including Mumbai, Delhi, Bangalore, Chennai and Kochi. The alumni chapters outside India include Qatar, and UAE Chapters. The main objective of the association is to foster strong bonds among alumni, providing a platform for networking, collaboration, and mentorship opportunities. The Association has the powers to enroll members, form committees, sub- committees and call for periodical meetings and to form chapters inside India and abroad to achieve the objective of the Association. Sree Chitra Thirunal College of Engineering Alumni Association (SCEAA) was formed in 2005 and is a body which is registered under the 12th section of Travancore – Cochin literary, scientific and charitable societies act of 1955

The executive committee represents the interests of all alumni by promoting the intellectual, cultural, and financial growth of the College.

The Mission of the Alumni Association is:
i) To sponsor and support any activity for the cause of education in the college.
<b>ii)</b> To aid and organise activities having the singular objective of providing new opportunities to the Students of SCTCE.
<b>iii)</b> To award scholarships and stipends for study, research and apprenticeship for students by creation of an endowment.
iv) TTo build, erect and construct and to aid and assist in the construction of student amenities.

#### **Executive Committee**

**Dr.C Sathish Kumar** 

President

Principal, SCTCE

Sri. K. S. Gopakumar

Vice President

9447088866

Treasurer
9995566456
Dr. Rinu Sathyan
Members
9495392468
Sri Anoop M. S.
Members
9496814506
Sri Noble Bhasi
Members
9947379176
Sri Baiju Bhaskar S. B.
Members
9447377977
Sri Kesavan K.
Members
9176760066
Sri Anjith R. S.
Members
9495392597

Dr. Kavilal E.G.

Secretary

8714247259

Joint Secretary

9544452293

**Sri Al Muneef** 

Smt. Kuttymalu V.K.

# Sri Vipin V. S. Members 8089256325 Sri Shyam S. Members 8943231992 Sri Aswin S. Members 9946662480 **Sri Faiz Mohammed Haneef** Members 9995301605 Dr. Sreejith B. J. Members 9447101133 Special invitees (members who are teachers in 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.

#### **EVENTS**

We hold a variety of events on campus and in locations throughout the world, from lectures to exclusive career panels to cultural activities. Participate in these occasions to advance your profession, develop new relationships, and revive existing ones.

## **ARUN ANEESH MEMORIAL AWARD**

This award, which was instituted in fond memory of late Sri. Arun and Sri Aneesh, two students of Computer science and Engineering department of this college, promotes academic excellence in undergraduate engineering course. The award is given every year on the 15th of August to the toppers of all engineering branches in the fifth semester B.Tech degree

#### DR. RUCHI SHARMA ENDOWMENT SCHOLARSHIP

Dr. Ruchi Sharma was a student of the Mechanical Production Engineering branch during 1999-2003. She had successfully completed her graduation in 2003. After completing her graduation, she joined Amruta School of Business, Coimbatore, for pursuing MBA. She completed her post- graduation in Marketing and Operations in 2006. The same year she got placement at IBS Software Services as a senior business consultant. She served the company for more than 3 years. The real passion of Ruchi was sharing knowledge, an attitude she had shown throughout her life. This made her to join the KIID School of Management as Assistant Professor in 2009. And, there she taught students for 3 years.

Ruchi always had an aim to achieve more heights in her life. Her appetite to learn more made her register for the Doctoral program in September 2012 at NEOMA Business School, Rouen, France which is ranked fourth in France. Her consistent hard work enabled her to submit the thesis on time and obtained her Ph. D in Business Model, Innovation and Strategic Management in June 2016. Based on an interview through Skype she joined as Lecturer in Analytics in Business School at Coventry University UK in August 2015 Subsequently she got promoted to Senior Lecturer post in an open position in Business Analytics in June 2018. All of sudden, life's fortune turned upside down in Ruchi's life journey. She was diagnosed with cancer. It was expected that she will fight back bravely and come back to life. But God's decision was different and she was taken to eternity on 5th July 2019. Ruchi lost her battle to cancer at the age of 37. In order to enlighten her memory forever in the field of education, the parents along with her Mechanical Production 1999 -2003 batch classmates, started a scholarship in the name of Dr. Ruchi Sharma. This scholarship is meant for those students who emerge as the topper in the university exam in the first and second-semester exams.

#### PROJECTS & DONATIONS MADE BY ALUMNI TO OUR ALMA MATER

Construction of an open stage in front of the college – 2017. (Project Cost Rs. 5 Lakh)

Class of 2005-2009 batch EC – Already raised 10 Lakhs for constructing the front gate of the college.

Installation of AC in seminar hall- all departments (5 lakhs)

Constructed photostat and printing facilities for students inside the campus (3 lakhs)

Financial support to various cultural activities of students (5 lakhs)

#### PROJECTS PLANNED BY ALUMNI ASSOCIATION FOR THE FUTURE.

Renovation of the OPEN stage in front of the college (8 lakhs)

Indoor stadium & Sports Facility (45 lakhs)

# **CONTACT US**

**Contact:** Alumni Association, Ground Floor, Main building, SCTCE Campus, Pappanamcode, Thiruvananthapuram - 695 018

Email: sctalumniassociation@gmail.com

## **Computer Science & Engineering**

## **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 <u>Table</u>

## **Department Faculty**

## **DR.SONIYA B**

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Professor

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#### **MEENASR**

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## JAYAN J

Trade Instructor

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## **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.

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 AIIL (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 10 th 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. SHIJO 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. Boby Philip, Assoc. Professor (EE), SCTCE

from other department			HOD, BC&BT Department	
Student representative	1	Member	U6- ANAND A S,	Abhinav SS, Student, Sixth Semester Mech. Engg.
PTA representative	2	Member	Smt. Shobhana Kumari	Smt. P. Laila

# **B.Tech**

- 1. Mechanical Engineering
- 2. Mechanical (Automobile) Engineering
- 3. Mechanical (Production) Engineering

#### M.Tech

## 1. Mechanical Engineering (Machine Design)

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 2014Prof. (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 quapties of teamwork, leadership, mutual understanding and co-existence and to provide exposure to pubpc and executive communication.

To bridge the distance between the textbook syllabi taught and the practical apppcation 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 oftechnology. IEEE's core purpose is to foster technological innovation and excellence for thebenefit of humanity. IEEE and its members inspire a global community to innovate for abetter tomorrow through highly cited pubpcations, 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 beleaders of tomorrow. The members of IEEE Student Branch SCT are actively involved inorganising 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 pubpc 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 pght 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

#### **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 exceled 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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# **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, legation, bacterial transformation etc.). Major equipments: Horizontal and vertical gel electrophoresis units, Gel documentation system, Thermal cycler (PCR machine), UV Tran 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 flowchamber, 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 ow 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, Laminarhood, 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 ow 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, Refractrometer, 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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#### **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 multiinstitutional 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 ef ciency. 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**

#### TRAINING PROGRAMMES CONDUCTED

- Dr Boby Philip organised KTU sponsored STTP on E Mobility during 26 June to 1 July 2019
- Dr Boby Philip and Smt. Reshmi Krishnan S., orgainised 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 Boby Philip volunteered as conference convener for IEEE RAICS 2021 and IEEE PES Asia-Pacific Power and Energy Engineering Conference 2021 held at Trivandrum
- Dr Boby 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 Boby 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 Boby 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

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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.