



NEC

Bulletin 2024 - 2025



YEARS OF ACADEMIC EXCELLENCE

TNEA
COUNSELLING
CODE
4962



NATIONAL ENGINEERING COLLEGE

(An Autonomous Institution - Affiliated to Anna University, Chennai)

K.R. Nagar, Kovilpatti – 628 503 www.nec.edu.in principal@nec.edu.in



THIRU.K.RAMASAMY
1936 - 2019

அறிய - ஆற்றல் - உலகம் - மனம்

Code of Conduct

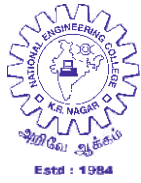
'Manners maketh a man'. The aim of education is not merely acquisition of knowledge, but also the development of character. Hence educational institutions have great responsibility of developing the holistic personality of the students. Students of the Engineering College should realise that they belong to a privileged class among the student community. Hence, they are expected to display self-imposed discipline and exemplary character. They are expected to abide by the below mentioned regulations and code of conduct which are primarily designed to channelise their potential for moulding them into good citizens.

- ▶ Students are expected to be courteous in speech and action while communicating with their staff and fellow students.
- ▶ They should follow the proper dress code and should maintain good manners. They should wear lab coats while attending the laboratory classes and workshops.
- ▶ Students should maintain dignity and decorum inside the college premises.
- ▶ Students should not indulge in any form of misconduct such as discrimination (Based on Individual's Gender, Caste & Religious beliefs) and intentionally damaging or destroying Institute property
- ▶ Students should act in a way that highlights the discipline and esteem of the college while he/she is on and off campus.
- ▶ Ragging is strictly prohibited inside the campus.
- ▶ The genuine grievance of the students should be amicably settled only by peaceful negotiations with the authorities concerned.
- ▶ Disobedience, malpractice during Examinations, bad conduct and non-observance of the rules of the college shall be met with strong disciplinary action.

National Engineering College	
Managing Committee	
Tmt. Chennammal Ramasamy	Chairman
Thiru. K.R. Krishnamoorthy	Vice Chairman
Thiru. K.R. Arunachalam	Correspondent
Thiru. C. Sankaranarayanan	Secretary
Tmt.K.Vijayalakshmi	Member
Tmt.A.Chennammal	Member
Selvi.A.Shanmathi	Member
Selvan.A.Niteesh Ram	Member

Governing Board

Tmt. Chennammal Ramasamy M.Duraisampuram, Nalattinpuhur - 628 716	Chairman
Thiru. K.R. Krishnamoorthy M.Duraisampuram, Nalattinpuhur - 628 716	Member (Management)
Thiru. K.R. Arunachalam M.Duraisampuram, Nalattinpuhur - 628 716	Member (Management)
Thiru. C.Sankaranarayanan Pazhankottai, Sankarankovil Tk. Tirunelveli Dt.	Member (Management)
Selvi.A.Shanmathi M.Duraisampuram, Nalattinpuhur - 628 716	Member (Management)
Selvan.A.Niteesh Ram M.Duraisampuram, Nalattinpuhur - 628 716	Member (Management)
Mr.L.S.Manivannan L.S.Mills Ltd., Post Box.12, Madurai Road, Theni-625531.	External Member (Industrialist, Managing Director Nominee of Management)
Dr.M.Vijayaraj Professor & Head, Dept. of ECE, Govt. College of Engineering, Trivandrum Road, Tirunelveli-627007	University Nominee
Dr.P. Subha Karuvelam Professor(CAS), Department of Electrical and Electronics Engineering GCE, Tirunelveli-627007	State Govt.Nominee
Dr. A.Shenbagavalli Prof./Dean(Academic), Dept. of ECE National Engineering College	Member (Faculty nominated by the Principal)
Dr.M.A.Neelakantan Sr. Dean (I & FA), National Engineering College	Member (Faculty nominated by the Principal)
Mr.P Jeevanandam	Member Administrative staff
Dr. S.Shanmugavel Director, National Engineering College	Member
Dr. K.Kalidasa Murugavel Principal, National Engineering College	Member Secretary (Ex-Officio)



NATIONAL ENGINEERING COLLEGE

(An Autonomous Institution - Affiliated to Anna University, Chennai)

K.R.Nagar, Kovilpatti - 628 503, Thoothukudi District.

VISION

Transforming lives through quality education and research with human values.

MISSION

- ▶ **To maintain excellent infrastructure and highly qualified and dedicated faculty.**
- ▶ **To provide a conducive learning environment with an ambience of humanity, wisdom, creativity and team spirit.**
- ▶ **To promote the values of ethical behaviour and commitment to the society.**
- ▶ **To partner with academic, industrial and government entities to attain collaborative research.**

A Brief History of the College

The College is set amidst sylvan surroundings against the backdrop of the Western Ghats. It has an excellent rural landscape and is far from the madding crowd. It provides an ideal atmosphere for academic pursuits. The college came into being in 1984, duly sanctioned under the self-financing scheme under the Government of Tamil Nadu. During the past Thirty Nine years, the college has grown and expanded phenomenally. Today it offers seven undergraduate courses and five postgraduate courses and the college is affiliated with Anna University. From the academic year 2011, the college has attained its autonomous status. It is approved by the All India Council for Technical Education, New Delhi and is an institutional member of the Indian Society for Technical Education.

Location

National Engineering College is situated in a 163 acre campus on the National Highway (NH-44) between Kovilpatti and Tirunelveli, 4 km South of Kovilpatti and it has easy accessibility either by road or rail. The Institution is 100 km from Madurai and 489 km from Chennai. Madurai is the nearest airport.

Courses Offered

The College presently offers the following courses.

B.E. degree Course in

- ◆ Mechanical Engineering
- ◆ Electronics & Communication Engineering
- ◆ Computer Science and Engineering
- ◆ Electrical & Electronics Engineering
- ◆ Civil Engineering

B.Tech. degree Course in

- ◆ Information Technology
- ◆ Artificial Intelligence and Data Science

PG degree Course in

- ◆ Computer Science and Engineering (M.E.)
- ◆ High Voltage Engineering (M.E.)
- ◆ Embedded Systems Technologies (M.E.)
- ◆ Information Technology (Information & Cyber Warfare)(M.Tech)

All the UG courses are accredited by National Board of Accreditation(NBA) - Tier-I. The institution is listed in the band 150 -200 NIRF Innovation ranking and accredited by National Assessment and Accreditation Council with 'A' grade effect from 2022 for 5 years.

National Engineering College

DIRECTOR

Dr.S.Shanmugavel, B.Sc., D.M.I.T., Ph.D.,

PRINCIPAL

Dr.K.Kalidasa Murugavel, M.E., Ph.D.,

Sr.Dean (I&FA) and (R&D)

Dr.M.A.Neelakantan, M.Sc., Ph.D.,

Dean(Academic)

Dr.A.Shenbagavalli, M.E., Ph.D.,

Dean(TCP)

Dr.K.G.Srinivasagan, M.E., Ph.D.,

Dean(Innovation & Entrepreneurship)

Dr.K.Manisekar, M.E., Ph.D.,

Dean (Student Affairs & Industrial Relations)

Dr.B.Paramasivan, M.E., Ph.D.,

CONTROLLER OF EXAMINATIONS

Dr.D.Manimegalai, M.E., Ph.D.,

Administration

The day-to-day administration of the institution is carried out by the Principal in consultation with the Director, the Chairman, and the Correspondent of the College.

Duration of The Course

The course for the Bachelor of Engineering and Bachelor of Technology degree shall extend over four academic years (Eight consecutive semesters). The course for the Master of Engineering shall extend over two academic years (four consecutive semesters). Each semester normally consists of 90 working days or 450 hours or 540 periods of 50 minutes each.

Eligibility for the Degree

A candidate shall be eligible for the Degree if he/she has satisfactorily undergone the above period and has passed the prescribed examinations in the respective semesters.

Regulations for the Payment of Fee

The tuition fee for each year should be paid on or before the due date. Defaulters will have to pay the late fee along with the Tuition fees. If the fees are not paid on or before the due date of the odd semester, the names of such defaulters will be removed from the ERP for attendance. Such students, in case of readmission, should pay a readmission fee of Rs. 500/- along with the arrear fee and late fee. A student will have to pay the fees for the whole year if his/her name is on the roll and attendance recorded during any part of the semester. All fees should be paid through the online process using ERP (by visiting the College website) and by demand draft in the case of awaiting a bank loan.

Attendance

- ◆ Every student is expected to attend classes regularly and punctually.
- ◆ Students are not permitted to be absent from classes without getting prior permission/leave.
- ◆ Leave application should be submitted in the prescribed form to the Principal through the tutor concerned.
- ◆ In all cases where the need for leave can be foreseen, leave should be obtained in advance. In case of emergency or unforeseen circumstances as in the case of illness, leave application should be submitted on the day of attending.
- ◆ The Principal may call for a medical certificate in support of an application for leave on grounds of illness.
- ◆ The minimum attendance prescribed by the University for admission to University End Semester Examination is 75%. The student is expected to secure not less than 75% attendance in each course in that semester.

Identity Card

Every student is given a smart card carrying his/her photograph and contact details on it. They should keep their smart card with them whenever they are within the college premises and produce it whenever they are asked for. Smart cards are given to both staff members and students.

Tutor System

Every student will be under the care and guidance of a faculty, who is appointed, as his/her tutor. About 20 students will be assigned to each tutor who will also act as their local guardian and assist them in all matters of academics as well as other activities. The tutor will maintain a record book for each of his/her wards. The record book will contain all information concerning the students' attendance, marks obtained in the university examinations, monthly tests, achievements if any in Curricular, Co-curricular and Extra-curricular activities, and disciplinary proceedings if any taken against the student. Student counselling plays a vital role in a student's life. Hence the students are advised to meet their tutor frequently and discuss their problems freely. They should ensure that all the information concerning their progress and achievements in the college is duly entered in the record book.

Representations

Any representation to the Principal should always be routed through the tutor and Head of the Department.

Important rules to be followed by the students while attending Laboratories and Workshops

Students should be extremely careful in handling the equipment while working in laboratories. They should take at most precautions to avoid injuries. Students should be very careful while doing experiments to avoid breakages or damages. Wearing shoes and fairly tight dresses aid to prevent injury. Damages to equipment, causing loss to the college, may deprive the students of the opportunity to make further use of them. Any such damages caused to equipment should be immediately brought to the notice of the staff in-charge of the laboratory, and the cost of damage should be borne by the student. Special instructions given by the staff in-charge of laboratories should scrupulously be followed.

Special Instruction

Students shall not enter the College in an inebriated condition failing which, will result in the dismissal of the student from the College as per Anna University Rule.

ACADEMIC RELATED COMMITTEES

CONTROLLER OF EXAMINATIONS (COE)

COE	Dr. D. Manimegalai	Professor/CSE
DEPUTY COE	Dr. R. Muthukumar	Professor/IT
ASSISTANT COE	Mr. D. Vijayakumar	AP(SG)/CSE
MEMBER	Ms. S. Karthika	AP/ECE

INSTITUTIONAL AND FACULTY AFFAIRS(I&FA)& RESEARCH AND DEVELOPMENT

SR.DEAN(I&FA)	Dr. M.A. Neelakantan	HOD/S&H
COORDINATOR	Dr. R.V. Maheswari	Professor/EEE
MEMBER	Mr. A. Andrews	AP(SG)/MECH

TRAINING & PLACEMENT CENTRE(TPC)

DEAN	Dr. K.G. Srinivasagan	Professor & Head/IT
CONVENER	Dr. V. Manimaran	Associate Professor /IT
MEMBERS	Dr. N.B. Prakash	Professor/EEE
	Dr. S. Dheenathayalan	AP(SG)/CSE
	Dr. P. Ramanan	AP(SG)/MECH
	Mr. M. Sathishkumar	AP(SG)/ECE
	Dr. S. Rajagopal	AP(SG)/IT
	Dr. B. Shunmuga priya	AP(SG)/CSE
	Ms. P. Rampriya	AP/AI&DS
	Ms. B. Revathe	AP/S&H
Mr. V. Arulpandian	AP/CIVIL	

ACADEMIC AFFAIRS & FACULTY DEVELOPMENT

DEAN	Dr. A Shenbagavalli	Professor/ECE
MEMBERS	Dr.K Mohaideen Pitchai	Professor/CSE
	Dr. F Michael Thomas Rex	Associate Professor /MECH

MEMBERS	Dr. K.J.Prasanna Venkatesan	Associate Professor/ECE
	Dr. S Geetha,	Associate Professor/S&H

DISCIPLINE COMMITTEE

Dr. K.Kalidasa Murugavel	PRINCIPAL
Dr. S. Tamilselvi	HOD/ECE
Dr. M. Willjuice Iruthayarajan	HOD/EEE
Dr. S. Iyahraja	HOD/MECH
Dr. M.A. Neelakantan	HOD/S&H
Dr. R.V. Maheswari	Asso.Warden/Ladies Hostel
Dr. S.Dheenathayalan	Asso.Warden/Gents Hostel

STUDENT AFFAIRS AND TECHNOBATION

DEAN(SA &IR)	Dr.B.Paramasivan	Prof./AI&DS
COORDINATOR	Dr.S.Rajagopal	AP(SG)/IT
MEMBERS	Dr. K. Thoufiq Mohammed	AP(SG)/MECH
	Mr K.Rajkumar	AP(SG)/CSE
	Dr.A. Nichelson	AP(SG)/S&H
	Dr.S.Lavanya	AP/ECE
	Mr. K. Karthikkumar	AP/EEE
	Mr. B. Gowtham	AP/CIVIL
	Ms.P.Swarna Gowsalya	AP/AI&DS

INTERNAL QUALITY ASSURANCE CELL (IQAC)

HEAD	Dr.L Kalaivani	Prof/EEE
COORDINATOR	Dr. R. Harichandran	Prof/MECH
MEMBERS	Dr. S Chidambaram	Associate Professor/IT
	Dr.M.Gengaraj	AP(SG)/EEE

TIME TABLE(THEORY & PRACTICAL)

CONVENER	Dr R Manjula Devi	AP(SG)/ECE
MEMBERS	Mrs.M Manimegalai	AP/IT
	Mr. C. Veera Ajay	AP/MECH
	Ms. M. Balamaheswari	AP/CIVIL
	Mr.P.Samuel Pakianathan	AP(SG)/EEE
	Dr. B. Annaraj	AP/S&H
	Ms.M. Kanthimathi	AP/CSE
	Ms.K.Poorani	AP/AI&DS

PARENTS TEACHERS ASSOCIATION

CONVENER	Dr.J. Naskath	Associate Professor/CSE
MEMBER	Dr.E.Ramachandran	AP(SG)/S&H

ALUMNI ASSOCIATION

COORDINATOR	Dr.K.G.Srinivasagan	Prof., Dean(TCP)
ASSO. COORDINATOR	Dr.D. Vigneshkumar	Associate Professor/MECH
ALUMNI COUNCIL COORDINATOR	Ms.V.Anitha	AP/IT
MEMBERS	Mr.P.Samuel Pakianathan	AP(SG)/EEE
	Ms.R.Harshani	AP/CIVIL
	Ms J.E.Jeyanthi	AP/ECE
	Ms.M. Kanthimathi	AP/CSE
	Ms.P.Rampriya	AP/AI&DS

INSTITUTION AND LEARNING MANAGEMENT SYSTEM (I&LMS)

CONVENER	Dr.D.Venkat Kumar	Prof/MECH
COORDINATOR	Dr.S. Kalaiselvi	Associate Professor/CSE

MEMBERS	Ms.S.Santhi,	AP/IT
	Mr.G.Ganapathy	Technical/Maintenance
	Mr.B.Guru moorthy	Software Developer
	Ms.S.Kabila	Software Developer

KR INNOVATION CENTER& INSTITUTION INNOVATION COUNCIL -BUSINESS INCUBATOR CELL

CHIEF EXECUTIVE OFFICER	Dr G Vinoth	
COORDINATORS	Dr K Manisekar	Dean(I&E)
	Dr. I.Sankar	Associate Professor/MECH
CO-COORDINATOR	Dr.T Sakthi	AP (SG)/Hum

PREINCUBATION & NEWGEN IEDC

CHIEF COORDINATOR	Dr. I.Sankar	Associate Professor/MECH
MEMBERS	Mr.P.Kasirajan	AP/CIVIL
	Ms.K.Amsaveni	AP/CSE
	Dr B.Venkatasamy	AP/EEE
	Ms.C.K.Balasundari	AP/ECE
	Mr T Sivabalan	AP/S&H
	Ms.P.Rampriya	AP/AI&DS

NATIONAL ACADEMIC DEPOSITORY (NAD)

CONVENER	Dr. P. Ramanan	Associate Professor/MECH
MEMBER	Mrs. S. Renuka Devi	Lab.Tech/S&H

PROFESSIONAL STUDIES

ISTE STUDENTS CHAPTER & STAFF CHAPTER

CONVENERS	Ms.V.Veera Anusuya	AP/AI&DS
	Mr.G.BalaMurali	AP/CIVIL

COMPUTER SOCIETY OF INDIA (STUDENTS' BRANCH)

CONVENER	Mrs.M.Manimegalai	AP/IT
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IEEE STUDENT BRANCH

CONVENER	Dr.T.S.Arun Samuel	Professor/ECE
MEMBER	Ms.P.Priyadharshini	AP/CSE

INSTITUTION OF ENGINEERS (I) STUDENTS AND STAFF CHAPTER

CONVENER	Ms.R.Rathi Pathi	AP/CSE
MEMBER	Mr. C. Veera Ajay	AP/MECH

MATLAB FORUM

CONVENER	Dr.B.Vigneshwaran	AP (SG)/EEE
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EXTRA CURRICULAR ACTIVITIES

NATIONAL CADET CORPS (NCC)

Coy No. : 2/9(TN) Sig.Coy.NCC, Sanctioned Strength: 100 Cadets

Coy Commander	Major N.B Prakash	Prof. /EEE
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NATIONAL SERVICE SCHEME (NSS)

(INCLUDES BLOOD DONATION CLUB AND RED RIBBON CLUB)

Programme Officer (Unit I)	Dr.C. Balamurugan	Asso.Professor/ECE
Programme Officer (Unit II)	Dr.K.Latha	AP/S&H

FINE ARTS CLUB

(INCLUDES YOUTH WELFARE ASSOCIATION AND YOGA CLUB)

CONVENER	Mr A.Shenbagharaman	AP(SG)/CSE
MEMBERS	Ms.P.Arishenbagam	AP/ECE
	Ms.C.Dhanalakshmi	AP/EEE
	Dr. A. Panimaya Valan Rakkini	AP(SG)/S&H

ROTARACT CLUB

CONVENER	Dr.R.Rajakumari	AP(SG)/CSE
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SOCIAL MEDIA

COORDINATOR	Dr.E.Ramachandran	AP (SG)/S&H
MEMBER	Mr. R.Krishnamoorthy	Designer

LITERARY CLUB

COORDINATOR	Ms. S Jeba	Soft Skill Trainer
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READERS PARK

CONVENER	Dr.K Karunai Raghavan	Librarian
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VOICE OF NEC

COORDINATOR	Dr.R.Manjula Devi	AP (SG)/ECE
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GENERAL COMMITTEES

ANTI-RAGGING COMMITTEE

CHAIRMAN	Dr.K.Kalidasa Murugavel	PRINCIPAL
MEMBERS	Dr.M.A.Neelakantan	HOD/S&H
	Dr.D.Manimegalai	COE
	Dr. S. Chithiraikumar	AP (SG)/S&H
	Ms. M. Balamaheswari	AP/CIVIL

INTERNAL COMPLAINTS COMMITTEE (ICC)

CONVENER	Dr. V Gomathi	Professor & Head/CSE
MEMBERS	Dr.R V Maheswari	Professor/EEE
	Dr.S.Dheenathayalan	AP (SG)/CSE
	Ms.S.Bairavi	OA/ECE
	Mr.S.Palraj	OA/MECH
	Ms.I .Muthu Selvi	Student/Research Scholar

MEMBER	Mrs.R.Lalithambigai	Official-NGO
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REVENTION OF SEXUAL HARASSMENT (POSH) CELL

CHAIR PERSON	Dr. D Manimegalai	Professor/CSE
SECRETARY	Ms. N Gowthami	AP/IT
MEMBERS	Dr. S. Rajakumari	AP (SG)/CSE
	Ms.S Basitha Parveen	AP/S&H

MINORITY CELL

CONVENER	Dr.K Mohaideen Pitchai	Professor/CSE
MEMBERS	Mr F.Antony Jeffrey vaz	AP/EEE
	Mr.I.Vivek Anand	AP (SG)/ECE
	Ms.S Jeba	Soft Skill Trainer

GENDER EQUITY CELL

CHAIR PERSON	Dr. K. Kalidasa Murugavel	Principal
CONVENER	Dr. J. Naskath	Asso.Prof/CSE
MEMBERS	Mr. S Cammillus	AP (SG)/CSE
	Mr.S.Kannan	AP/CIVIL
	Ms.R.Suguna	AP/IT

SC/ST COMMITTEE

CONVENER	Dr.C Chella Gifita	Asso.Prof/CIVIL
MEMBERS	Dr F Michael Thomas Rex	Asso.Prof/MECH
	Mr.M. Ashokpandiyan	AP/CIVIL
	Ms.S.Mugunthamala	AP/ECE
	Dr.E.Ramachandran	AP (SG)/S&H

EQUAL OPPORTUNITY CELL

CONVENER	Dr. V. Ramasubbu	AP/S&H
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ANTI-DRUG COMMITTEE

CONVENER	Dr. N.B. Prakash	Professor/EEE
MEMBERS	NSS Programme Officers	

OBC CELL

CONVENER	Dr. A.Saravana Selvan	Asso.Prof/ECE
MEMBERS	Ms.R.Vazhan Arul Santhiya	AP/CSE
	Ms.G.Ramya	AP/IT

GENTS HOSTEL

ASSOCIATE WARDEN	Dr. S. Chithirai Kumar	AP(SG)/S&H
	Dr.S.Dheenathayalan	AP(SG)/CSE

RESIDENTAL WARDENS

Mr R.Marichamy	Mobile Number: 73958 54951
Mr S.Karthikeyan	Mobile Number: 91165 63571

LADIES HOSTEL

ASSOCIATE WARDEN	Dr.R V Maheswari	Professor/EEE
	Ms M. Balamaheswari	AP(SG)/CIVIL

RESIDENTAL WARDENS

Ms M Bhagavathi	B.com.,	Mobile Number: 77087 92474
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BULLETIN

CONVENER	Ms S Gopiga Devi	AP/S&H
MEMBER	Mr. R.Krishnamoorthy	Designer

CANTEEN & CAFETERIA

COORDINATOR	Dr.M.Annapoopathi	AP(SG)/S&H
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TRANSPORT

TRANSPORT MANAGER	Mr V Alagar Ramanujam
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DEPARTMENT ASSOCIATIONS

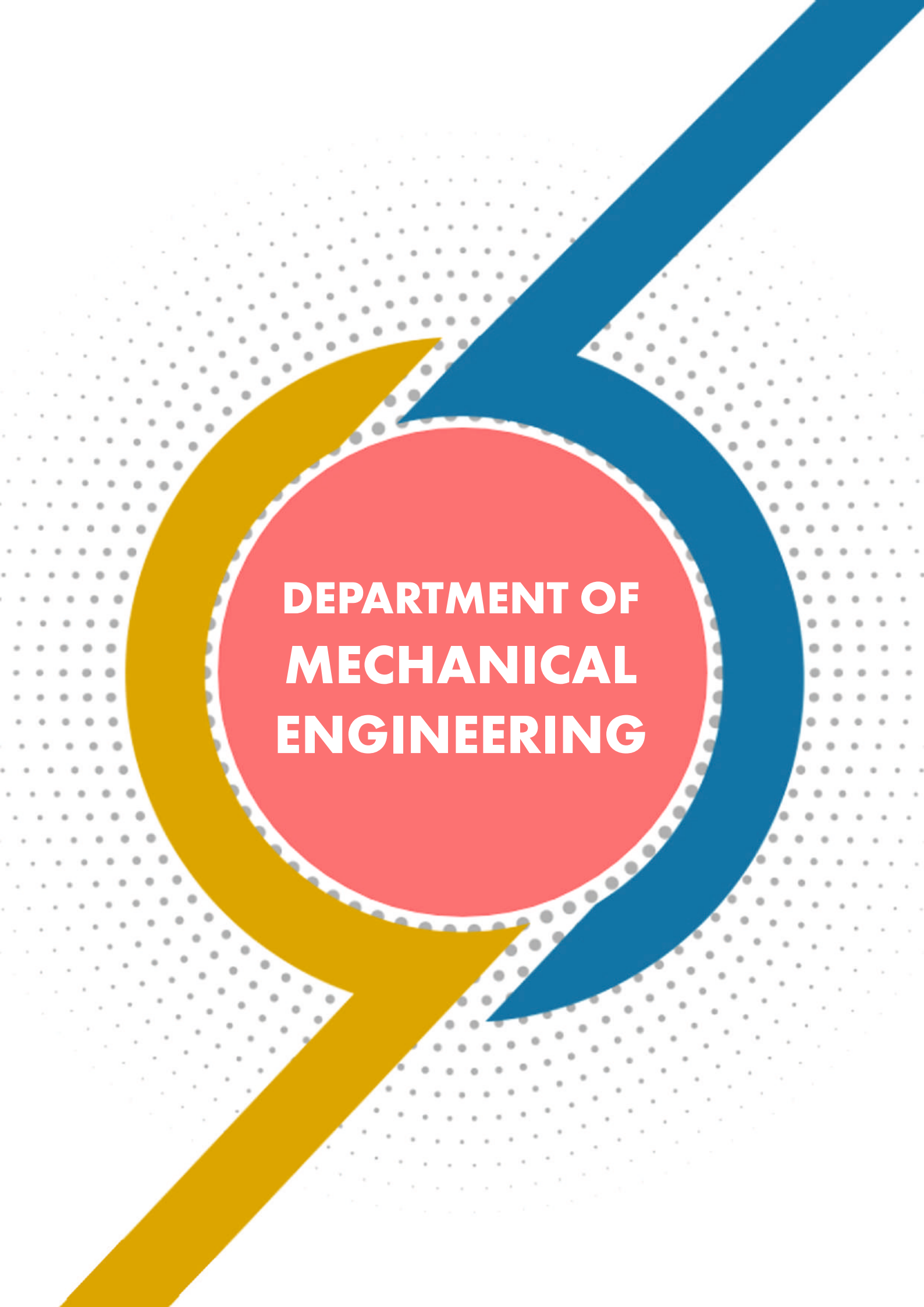
MECHANICAL ASSOCIATION	SOCIETY OF MANUFACTURING ENGINEERING (SME)
	SOCIETY OF AUTOMOTIVE OF ENGINEERS STUDENTS CHAPTER
	INDIAN SOCIETY OF HEATING REFRIGERATING AND AIR CONDITIONING ENGINEERS (ISHARE) STUDENTS CHAPTER
	ROBOTICS & AUTONOMOUS VEHICLE
CSE ASSOCIATION	CISCO NETWORKING ACADEMY
	LINUX DOMAIN
	IT CLUB
	BLOCK CHAIN CHAPTER
ECE ASSOCIATION	MISTRAL ACADEMIC CLUBS-Embedded Domain
	ELECTRONICS CLUB
ECE ASSOCIATION	SMART PROTECTION AND CONTROL CLUB
CIVIL ASSOCIATION	STANDARDS CLUB DETAILS(SC-10947)
AI&DS ASSOCIATION	MISTRAL ACADEMIC CLUBS-AI MACHINE LEARNING DOMAIN
	AI CLUB
S&H ASSOCIATION	QUIZ-CLUB
	SCIENCE-CLUB
	MATHS CLUB

GOVERNMENT EXAMINATIONS

MEMBERS	Dr. K.J.Prasanna Venkatesan	Associate Professor/ECE
	Dr.R.Vignesh Kumar	AP (SG)/MECH
	Dr A Nicleslon	AP (SG)/S&H

GOVERNMENT EXAMINATIONS

CONVENER	Dr.K Karunai Raghavan	Librarian
MEMBERS	Mr A Arumugam	Machinst/MECH
office Assistants of all departments		

The logo features a central red circle containing the text 'DEPARTMENT OF MECHANICAL ENGINEERING'. This circle is surrounded by two thick, curved lines: a yellow one on the left and a blue one on the right. The background is white with a pattern of small grey dots. Two thick diagonal lines, one yellow and one blue, cross the scene from the bottom-left to the top-right, passing behind the central elements.

**DEPARTMENT OF
MECHANICAL
ENGINEERING**

Department of Mechanical Engineering

The Department of Mechanical Engineering came into being from the inception of the institution in the year 1984. The Department's vision and mission is to produce well-qualified Mechanical Engineers every year.

VISION

Producing globally competitive Mechanical Engineers with social responsibilities

MISSION

- ▶ Imparting quality education by providing an excellent Teaching-Learning environment
- ▶ Inculcating qualities of continuous learning, professionalism, team spirit, communication skills and leadership with social responsibilities.
- ▶ Promoting leading-edge research and development through collaboration with academia and industry.

Some of the salient features of the department are given below.

- ▶ B.E. – Mechanical Engineering is accredited by the National Board of Accreditation (NBA), New Delhi, for the fourth time from 2000 onwards.
- ▶ Accredited by the Institution of Engineers (IE).
- ▶ AICTE Approved Intake is 60 students per year for B.E. Mechanical Engineering.
- ▶ Supported by 15 qualified, dedicated faculties, among them 11 faculties holding a doctoral degree and Engaged 2 adjunct faculties with more than 20 years of industrial experience to give industrial exposure to the students
- ▶ Anna University Chennai recognized the Department as the Research Centre for the PhD Programme.
- ▶ Nine internal and external research scholars are pursuing their PhD in the department with cutting-edge technologies.
- ▶ A Memorandum of Understanding (MoU) has been signed with M/s. Honeywell Technologies., Madurai, F.L.Smith Private Limited, Chennai, Adroit CAD Solutions Pvt. LTD, Chennai, NEST Industrial Academy, Chennai, SIEMENS Industry Software India Pvt.LTD, Gurgaon, Haryana, BOSCH Ltd., Niva Engineering, Chennai, M/s. Maker Global, Hyderabad and TryCAE Industrial Engineering Pvt. Ltd., Tiruchy, for consultancy and project work.
- ▶ Student chapter from the Society of Automotive Engineers- SAE INDIA, National Engineering Association is functioning well.
- ▶ Head Quarters of Society for Manufacturing Engineers (SME), a National-level technical research Journal Entitled "Journal of Manufacturing Engineers (JME)" is promptly released once every 3 months by SME.
- ▶ Five funded research projects from BRNS, DST & AICTE have been completed, and one funded research project from DST-SERB is ongoing for the current academic year.
- ▶ GATE coaching and Campus placement and training facilities are in progress.
- ▶ Campus requirement opportunities from TCS, Renault Nissan, Axiscades Technologies, Zoho, Accenture, Brakes India, Gulf Asia Engineering, Caterpillar India, Delta India, Data Patterns, Myunghwa Automotive India, SPIC, etc.
- ▶ A well-planned curriculum consisting of core and elective courses with the collaboration of industry for a better understanding of advanced, higher-level topics.

- ▶ Mechanical Engineering organizes technical seminars, and frequent industrial visits, for students, etc.
- ▶ Many international and national research publications from various fields, such as production, manufacturing, design, energy engineering, thermal engineering, robotics, composite materials, applications of intelligent optimization techniques and management, etc., are published annually.
- ▶ Business Incubator for innovation and application of technology in small-scale business.
- ▶ CDIO, NDT, and R & D Laboratory have been constructed for new product development and research.
- ▶ Students are engaged in innovative research work for new product development. The department has developed 65 new products and filed 27 patents, 5 design patents and 14 product patents have been granted.

Centre for Energy Studies & Centre for Manufacturing Sciences

The Centre for Energy Studies and Manufacturing Sciences was established in 2009. The centres are trying to establish collaborative research work with R&D institutions in the Energy & Manufacturing engineering field.

Laboratories

The department has well-furnished conventional classrooms, well - equipped online teaching facilities, elective halls, a Smart classroom and seminar hall (250 capacities), and fully equipped laboratories and workshops. Further, some special equipment is also available to execute research activity in the laboratories. The details of the workshop and laboratories with equipment are listed below

Machine Shop: Gee-dee Weiler Lathes, Gear Hobbing Machines, Milling Machines, Planner and Surface Grinding, Capstan and Auto Lathes, Variable Speed Metal Cutting Band Saw, Tool & Cutter Grinder and Injection Moulding Machine.

Workshop: Carpentry, Smithy, Fitting, Foundry and Welding Sections with all infrastructure facilities.

Instrumentation and Metrology Laboratory: Autocollimator, Surface Roughness Tester, Carriage Diameter Measuring Machine, Gear Rolling Tester. Profile Projector, Temperature, Force, Displacement, Vibration / Shock and Torque Measuring Setups. Olympus - Optical Microscope (OM) with Motic Image Plus2 image analyzing software.

Dynamics Laboratory: CAM Analyzer, Whirling of shaft apparatus, Vibration tester and Vibration Analyzer setup, Gyroscopic setup, Governors experimental setup and Digital Storage Oscilloscope (DSO) with FFT.

Hydraulics Laboratory: Flow measurement devices and fluid machines like Francis, Kaplan, Pelton Wheel Turbines, and different types of pumps, Friction in pipe apparatus, Flow through notches and Reynolds Apparatus.

Automation / Mechatronics Laboratory: Hydraulic, Pneumatic and Electro-Pneumatic trainer kits. Automation Studio 5.3 software, Servo controller for Closed/Open loop control system, i5 Intel 4th generation processor desktop computers with 17" LED monitors.

Materials Testing Laboratory: Computerized 60-ton UTM test setup, 200-ton capacity of Analog UTM setup 200-ton capacity of compression testing machine, Digital Vickers's hardness tester, Torsion testing machine. Diffusion bonding setup with a vacuum chamber, Fatigue test setup, Impact Test Setup, Crashworthiness Test Setup.

Metallurgy Laboratory: Metallurgical Microscope, Muffle Furnace and facilities for specimen preparation.

CAD Laboratory: High-end servers with 6 core processors, workstations, and i5 processors. PCs with intranet and internet connectivity, A0 size plotters, printers, and scanners. Licensed software like CATIA V5R10, COSMOS/M5.0, ANSYS 12.0, Solid Works, AutoCAD, NISA, and Math CAD with its recent updation.

Digital Fabrication Lab: The Digital fabrication laboratory is established in our Mechanical Engineering Department. Currently, this laboratory is equipped with an imported VMC machine from DMG MORI-Germany & CNC machine of Sprint 16 TCLX, MTAB FMS Setup comprising of CNC lathe- XLTURN, CNC milling - STARMILL and integrated with Robot system, Coordinate Measuring Machine (CMM), RCS 6 Robot trainer kit, MTAB Articulated FANUC Robot and its linear slider with raw material chute, desktop computers with latest i5 Intel processor and 17inch LED monitors. Licensed software MTAB- CNC STARMILL and XLTURN, ESPRIT and SOLID CAM. Equipment such as a 3D printer, Coordinate Measuring Machine and Pick and Place Robot are also available in this laboratory. Further, we also planned to install the latest additive manufacturing machines, such as Selective Laser Melting (SLM), Wire-EDM laser marking machines, etc., in the subsequent years. The main objective of establishing this laboratory is to provide more hands-on training to the students with the latest CNC cutting-edge technology apart from the regular curriculum. Hence, the student will be given training on actual industrial production machines within the campus. The hands-on training would increase students' skill sets and make them industry-ready engineers, and they would have better placement opportunities in mechanical and allied industries.

Advanced Materials Laboratory: Creep Testing machine, Universal Tensile Tester machine, Hydraulic Compression moulding machine, Muffle furnace, Tribo meter, Probe sonicator and Impact testing machine, Thermogravimetric Analyzer, 3D Tubule Mixer

Advanced Computing Laboratory: 40 computer systems and various advanced design and drafting software like CATIA V5R10, ANSYS 10.0, ABAQUS, RAMCAD, etc.

IC Engines Heat Transfer & Steam Laboratory: Test rigs and testing equipment related to major thermal engineering processes including, Cooling Tower, Condensation apparatus

Energy Simulation Laboratory: Solar simulator facilitates performance study of different PV systems, battery charging and discharging characteristics, performance analysis of the different solar thermal equipments like collectors, water/air heaters, solar drier, still and TRNSYS software package.

Quality Control Laboratory: Full-fledged conventional Non-Destructive laboratory with Ultrasonic Testing Machine, Radiographic Film Viewer, Magnetic Particle Testing Machine

Advanced Welding Laboratory: The Mechanical Engineering Department has established a Welding lab. Pulsed Tungsten Inert Gas (TIG) welding machines and Metal Inert Gas (MIG) welding machines have been purchased to facilitate the laboratory, worth Rs.5 lakhs to extend the research in the welding area.

Research Area

Faculty members are doing their research work in the following field and have published it in peer-reviewed international Journals.

- ◆ Optimization Techniques
- ◆ Welding
- ◆ Metal Forming
- ◆ Design and analysis of large-diameter slewing ring bearings
- ◆ Solar Thermal and Photo-voltaic systems
- ◆ Thermal Energy Storage
- ◆ Pressurized imperfect tori-spherical thin shells
- ◆ Diffusion Bonding of Dissimilar Metals
- ◆ Friction Stir Welding (FSW)

- ◆ Heat Exchangers
- ◆ Non-destructive analysis
- ◆ Vibration analysis and controlling
- ◆ Natural composites
- ◆ Fibre-Metal Laminates
- ◆ Powder Metallurgy
- ◆ Scheduling and Allocations
- ◆ Nanomaterials
- ◆ Heat Transfer Enhancement

Notable achievements of the Department

- ▶ Carried out 5 projects worth more than Rs. 1.4 crores to BRNS, AICTE, DST and one project from DST-SERB are in progress.
- ▶ Strong in product development - developed 8 new products for commercialization, including 3 product/process development projects funded by MSME.
- ▶ A total of 27 patents had been filed by the department, of which 5 design patents and 14 product patents were granted.
- ▶ Excellent research facilities for the development and characterization of new materials for various applications
- ▶ The department is leading towards 100% placement by providing consistent skill-based training.

Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) Students Chapter

ISHRAE Students chapter encourages students to opt for careers in the HVAC&R industry. Knowledge dissemination is done through seminars, quiz contests, plant and site visits, and by providing a platform for leading employers to recruit candidates who are members of ISHRAE student chapters. ISHRAE promotes research in the field of HVAC&R technology. It offers financial support to Graduate/postgraduate students and research scholars to carry out innovative work on R & D in Technology, Systems, and Processes. Through this chapter, students could avail various benefits like easy access to all ISHRAE Technical Publications, International exposure through International Associates, Workshops, Conferences, Training Programs, Placement activities, financial support for project work etc.

Society for Manufacturing Engineers (SME)

The Society for Manufacturing Engineers (SME) is a professional body that offers engineers, scientists, manufacturers and students an opportunity to disseminate technical concepts and knowledge by becoming a member and joining together as a family to explore recent developments in the manufacturing field. Journal of Manufacturing Engineering (JME) is an outcome of efforts made by the Society for Manufacturing Engineers, a forum shared by Academic, R & D institutions and industry. The journal aims at integrating the advances that are taking place in these diverse sectors. The scope includes all aspects of Science, Technology and Engineering relevant to Manufacturing. JME has nearly 200 subscribers from all over India. JME has published 16 Volumes so far with quarterly issues.

Society Of Automotive Engineers – Student Chapter

"SAE INDIA National Engineering College Collegiate Club" was initiated in 2008 and is presently functioning with 105 student members. The objective is to enhance students' knowledge of recent developments in the automotive sector. Many programs and expert lectures by eminent persons are organized on behalf of the club

The student members use the regularly updated SAE website, including free access magazines, to grade their knowledge. The SAE programs aim to showcase the talents of student members. The interests of students are overwhelming to take part in the club.

Auto Club

An exclusive Auto club for students studying mechanical engineering and other engineering specialties is been established in 2024 with the integration of NEC Alumni Association. The real enthusiasts for automobiles like you gather to exchange stories, gain knowledge from one another, and engage in entertaining an exploration of the world of cars and automation.

Why Join Auto Club?

Community of Enthusiasts: Connect with fellow Automobile lovers who share the passion. Exchange tips, stories, and experiences that only true enthusiasts can appreciate.

Exciting Events: The club organizes a variety of events that cater specifically to college students. Explore new destinations, learn essential maintenance skills, and make memories with friends who share interest.

Educational Opportunities: Access to workshops and guest speakers on topics like Automotive maintenance, car care tips for students, navigating the automotive industry as a young enthusiast, and more. Learn valuable skills that will serve well beyond college.

Networking and Career Development: Attend club events and take advantage of networking opportunities to establish connections with individuals in the automotive sector. Learn about job openings, internships, and career routes in the automotive industry.

Expertise and Resources: Professionals in the automotive sector and seasoned NEC Alumni Association members can provide a plethora of expertise. The club is a go-to place to talk about the newest trends.

Support and Camaraderie: Join a supportive community where members help each other with technical issues, and recommendations.

Membership is open to all college students who have a passion for cars and a desire to explore the automotive world with fellow enthusiasts.

FACULTY LIST

Teaching		
Name of the Faculty	Qualification	Designation
Dr.S.Iyahraja	M.Tech. Ph.D.,	Professor & Head
Dr.K.Manisekar	M.E., Ph.D.,	Professor & Dean
Dr.D.Venkatkumar	M.E., Ph.D.,	Professor
Dr.R.Harichandran	M.E., Ph.D.,	Professor
Dr.M.Kathiresan	M.E., Ph.D.,	Professor
Dr.P.Ramanan	M.E. Ph.D.,	Associate Professor
Dr.I.Sankar	M.E. Ph.D.,	Associate Professor


Dr.D.Vignesh Kumar	M.E. Ph.D.,	Associate Professor
Dr.F.Michel Thomas Rex	M.E. Ph.D.,	Associate Professor
Dr.R.Vignesh Kumar	M.E. Ph.D.,	Assistant Professor(SG)
Mr.A.Andrews	M.E.,	Assistant Professor(SG)
Mr.K.Sudalaiyandi	M.E.,	Assistant Professor
Mr.R.Jaya Venkatesh	M.E.,	Assistant Professor
Dr.K.Thoufiq Mohamed	M.E., Ph.D.,	Assistant Professor(SG)
Mr.C.Veeraajay	M.E.,	Assistant Professor
Dr.Vivekanandan.M	M.E., Ph.D.,	Adjunct Faculty
Mr.Ananthan.S.S	B.E., M.Sc., (Engg.)	Adjunct Faculty

Humanities

Dr.T.Sakthi	M.Com., M.Phil., Ph.D.,	Assistant Professor(SG)
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Non-Teaching

Name of the Faculty	Qualification	Designation
Mr. C. Rathakrishnan	ITI	Turner
Mr. A. Marimuthu	ITI	Plumber
Mr. M. Ponmadasamy	ITI	Black Smith
Mr. S. Tamilselvan	ITI	Moulder
Mr. M. Manikandan	ITI	Fitter
Mr. R. Sathishkumar Raja	DME	Lab. Technician
Mr. S. Senthilkumar	DME	Lab. Technician
Mr. J. Kandasamy	MCA	Assistant Programmer
Mr. S. Balasubramani	ITI	Welder
Mr. A. Arumugam	ITI	Machinist
Mr. S. Palraj	MCA	Department Assistant
Mr. R. Jayaraman	ITI	Welder

The logo features a central red circle containing the text 'DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING'. This circle is surrounded by two thick, curved lines: a yellow one on the left and a blue one on the right. The background is white with a pattern of small grey dots. A thick blue diagonal line runs from the top right towards the center, and a thick yellow diagonal line runs from the bottom left towards the center.

**DEPARTMENT OF
COMPUTER SCIENCE
AND ENGINEERING**

Department of Computer Science and Engineering

Computer Science and Engineering department was established in 1984 to create socially responsible and excellent computer professionals and young researchers. It aligns with the vision and mission of the institute in imparting high quality education to the students. The department strives to be among the most preferable programs by integrating a comprehensive curriculum process and promoting self-learning practices.

VISION

To produce globally competent, innovative and socially responsible computing

MISSION

- ▶ To provide world-class teaching –learning and research facilities
- ▶ To stimulate students' logical thinking, creativity and communication skills effectively.
- ▶ To cultivate awareness about emerging trends through self-initiative
- ▶ To instill a sense of societal and ethical responsibilities.
- ▶ To collaborate with industries and government organizations.

Program Educational Objectives (PEOs)

- PEO 1:** Achieve their professional career in industry/academia by applying the acquired knowledge of computer science and engineering.
- PEO 2:** Engage in life-long learning and enhance their capabilities by embracing cutting edge technical advancements.
- PEO 3:** Excel in collaboration with interdisciplinary teams and diverse stake holders for persevering successful start-ups.

Program Specific Outcomes (PSOs)

- PSO1:** Build domain specific expertise by showcasing deliverables in the field of Application development, Business Intelligence, Computational Intelligence and Cyber Security
- PSO2:** Build knowledge base for students to solve complex technical problems through participation in global contests and hackathons.

Features of the Department

- ▶ AICTE-approved intake is 120 students per year for B.E CSE and 12 students for M.E. CSE.
- ▶ Recognized Research Centre by Anna University Chennai to offer Ph.D. and M.S. (By Research) degrees, with scholars actively pursuing their research.
- ▶ Consistent placement record of above 90% with the highest salary of 12.5 LPA and an average salary of 5.2 LPA, with 100+ students getting placed in reputed companies.

- ▶ Offering research-oriented higher-level settlement for PG students.
- ▶ All laboratories and classrooms are equipped with ICT facilities to enhance integrated learning.
- ▶ Supported with 7 different Computing Laboratories for students' academic activities and 3 different Research Laboratories for research activities, all equipped with higher-end computer systems and servers.
- ▶ 150 seating Capacity of Air-Conditioned Seminar Hall with a fully furnished audio system, wall-mounted LCD projector, and glazed floor tile.
- ▶ 10 Nos. of smart classrooms with 80 seating capacity.
- ▶ Following Outcome Based Education (OBE) and Choice Based Credit System (CBCS) with well-tuned Core Courses, Open Elective Courses, and Trans-Disciplinary Courses for flexible knowledge transition.
- ▶ GATE coaching forum for higher studies and Department-level Students Technical Training Programme (STTP) for placement.
- ▶ Offering verticals and honors courses with specialization options for advanced learning.
- ▶ Offering CISCO Certified CCNA course and Infosys certified courses.
- ▶ Active participation in TCS CodeVita with students achieving high ranks in the competition.
- ▶ Multiple funded research projects from NewGen IEDC are currently ongoing.
- ▶ Promoting design thinking, problem-based, and project-based learning experiences through engagement with the NEC innovation and entrepreneurship ecosystem.
- ▶ Computer Science and Engineering Association (CSEA) and other co-curricular chapters are actively functioning to motivate the students to develop leadership qualities, organizational skills, and effective communication skills.
- ▶ Memorandum of Understanding (MoU) signed with Adroit Soft India Pvt. Ltd., Chennai, since April 2020; M-Tutor Private Limited, Chennai; TryCAE Industrial Engineering Private Limited, Trichy.
- ▶ Exclusive department library with a recent collection of books on different topics.

CSE department remains committed to fostering a conducive learning environment that encourages academic excellence, research innovation, industry collaboration, and holistic student development.

Focus Group

Each Focus Group is led by a Focus Group Head who stimulates discussion and exploration among group members. The staff members help students gain deep insights and specialized knowledge in their areas of interest. Our department is having 6 Focus Groups (SIG) for their concerned research, to discuss and explore the recent advancement of their respective study.

- ◆ Business Intelligence**
- ◆ Full stack Development**
- ◆ Artificial Intelligence and Machine Learning**
- ◆ Theory and Algorithms**
- ◆ Internet of Things**

◆ Augmented Reality and Virtual Reality

◆ Image Processing Research Centre:

The Image Processing Research Centre is typically an interdisciplinary research facility focused on advancing the field of Image Processing, Computer Vision using Artificial Intelligence and Machine Learning, Augmented Reality, Virtual Reality, Natural Language Processing and Metaverse. This Centre was well equipped with high-performance computing resources, where the expertise extends beyond traditional engineering solutions. It fosters collaboration among students, researchers and faculties from diverse backgrounds. Such collaboration often leads to innovative solutions and methodologies in image-processing domain. The Centre's research findings and technologies find applications in numerous fields including medical imaging, remote sensing, surveillance, robotics, augmented reality (AR), virtual reality (VR), and recently in machine learning and artificial intelligence. The Centre Collaboration with TryCAE Industrial Engineering Pvt., Ltd., Trichy and M-Tutor Pvt., Ltd., Chennai. Currently working on Consultancy Projects worth Rs.3,50,000/- and product development activities worth Rs.6,00,000/-. The resources in this lab facilitated many students to get internship offer and placement offer.

◆ Centre for cryptography and Information Security:

Centre of cryptography and information security (CCIS) is a research laboratory established to promote inter-disciplinary cutting-edge research among various departments in theoretical as well as the applied research on cryptography. PG and UG scholars who are working in the research areas such as cryptography, cyber security, network security, block chain technology and quantum algorithms in cryptography.

Academic Laboratory Facilities:

Laboratories are important educational resources for developing software professionals. The department is well equipped with 7 computer laboratories with latest hardware and software to cater the academic needs of the students.

Interactive Computing Laboratory: Data structures laboratory, Java Programming laboratory, Mobile Application Development Laboratory, Object Oriented Analysis and Design Laboratory, C# and .Net Laboratory and Front End Web development courses are conducted in this lab.

AI & DL: This laboratory is used for Data Science, Digital Image Processing and Machine Learning related courses. It is equipped with necessary software for student's project work.

CISCO Laboratory: CISCO Certified CCNA course is supported. Apart from that, this lab supports Computer Networks Laboratory, Networks Security Laboratory, MANET/VANET Simulation Tools, Product Development laboratory and Python Courses.

Common Computer Centre: This lab is used to do Computer Practice and Primary Programming Laboratories exclusively for first year courses. The first year students make use of this lab for Technology Enabled Learning, Online Courses and assessments.

Remote Monitoring Management and Information Security Laboratory: This laboratory is equipped with software to do Business Analytics, 3D animations, UML Designs, Mini Projects and Creative Image Manipulation courses.

Dr.A.P.J.Abdul Kalam Computer Centre: This laboratory is used for doing Internet and Web Technology, Computer Networks Laboratory, Advanced Data Structures Laboratory, Object Oriented Programming Laboratory Operating System Laboratory and Front End Web Development course for other department UG students.

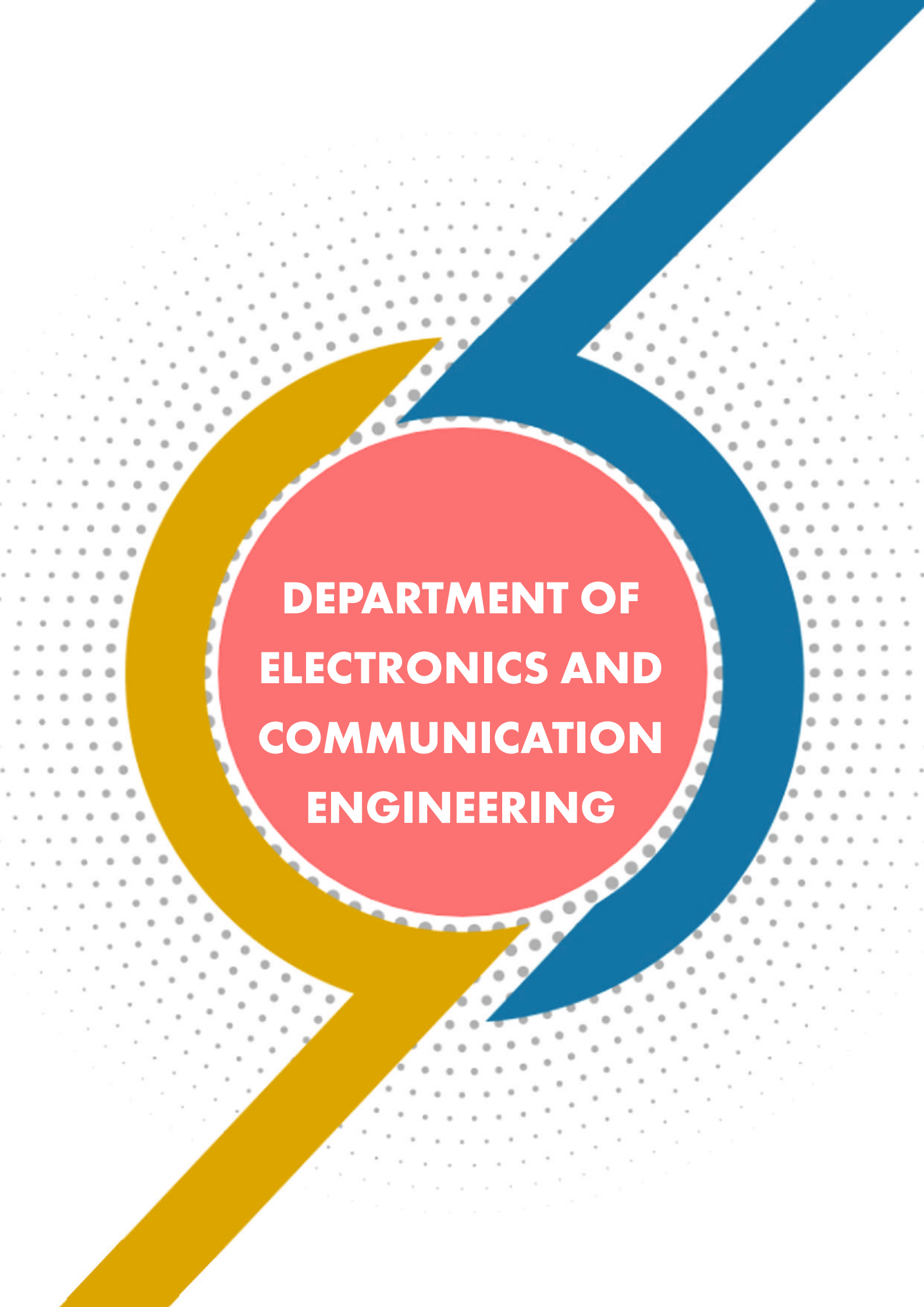
Sir C.V.Raman Computer Centre: This laboratory is used for doing Computer Networks Laboratory, Object oriented Programming Laboratory, Open Source Systems Laboratory, Front End Web Development and R programming courses for UG students.

In addition to these laboratories, the department has domain specific laboratories such as Image Processing Research Centre, Sensor Networking Laboratory, Adhoc Networking laboratory and Cloud Computing laboratory which are established through various funding agencies like AICTE, DRDO, CSI and IE(I) for research and development. These laboratories are well equipped with specialized software and computing facilities to carry out research work on various projects by the faculties and students in research related areas.

FACULTY LIST

Teaching		
Name of the Faculty	Qualification	Designation
Dr.V.Gomathi	M.Tech. Ph.D.,	Professor & Head
Dr.D.Manimegalai	M.E., Ph. D.,	Professor
Dr.K.Mohaideen Pitchai	M.E., Ph. D.,	Professor
Dr.S.Kalaiselvi	MCA., M.E. Ph.D.,	Associate Professor
Dr.J.Naskath	M.E., Ph. D.,	Associate Professor
Dr.R.Rajakumari	M.E. Ph.D.,	Assistant Professor (SG)
Mr.D.Vijayakumar	B.E., M.S.,	Assistant Professor (SG)
Dr.G.Sivakama Sundari	MCA., M.E. Ph.D.,	Assistant Professor (SG)
Dr.B.Shunmugapriya	M.E. Ph.D.,	Assistant Professor (SG)
Dr.S.Dheenathayalan	M.E. Ph.D.,	Assistant Professor (SG)
Mr.A.Shenbagharaman	M.E.,	Assistant Professor (SG)

Teaching		
Name of the Faculty	Qualification	Designation
Mr.K.Rajkumar	M.E.,	Assistant Professor(SG)
Ms.D.Thamarai Selvi	M.E.,	Assistant Professor
Ms.M.Kanthimathi	M.E.,	Assistant Professor
Ms.D.Abisha	M.E.,	Assistant Professor
Mr.J.Karthikeyan	M.E.,	Assistant Professor
Ms.P.Priyadharshini	M.E.,	Assistant Professor
Ms.R. Vazhan Arul Santhiya	M.E.,	Assistant Professor
Ms.Navedha Evanjalini.R	M.E.,	Assistant Professor
Ms.A.Lincy	M.E.,	Assistant Professor
Dr.J.Ida Christy	M.E.,	Assistant Professor
Ms.S.G.Janani Ratthna	M.E.,	Assistant Professor
Ms.Rathipathi.R	M.E.,	Assistant Professor
Ms.Pappathi Jancyrani.M	M.E.,	Assistant Professor
Ms.Amsaveni.K	M.E.,	Assistant Professor
Ms.R.Srimathi	M.E.,	Assistant Professor
Ms.Pavithra	M.E.,	Assistant Professor
Ms.K.Amutha	M.E.,	Assistant Professor
Ms.M.Mahalakshmi	M.E.,	Assistant Professor
Non – Teaching		
Name of the Faculty	Qualification	Designation
Ms.G.Menalosani	MCA.,	System Programmer
Ms.P.Prasannadevi	B.E.,	Lab Technician
Ms.K.Mahalakshmi	B.Sc.,	Lab Technician
Mr.K.G.Shankar	BCA.,	Department Assistant
Mr.A.Rakesh	Diploma	Attendar

The logo features a central red circle containing the text 'DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING' in white, bold, uppercase letters. This circle is surrounded by two thick, curved lines: a yellow one on the left and a blue one on the right. The background is white with a pattern of small grey dots. Two thick diagonal lines, one yellow and one blue, cross the scene from the bottom-left to the top-right, framing the central elements.

**DEPARTMENT OF
ELECTRONICS AND
COMMUNICATION
ENGINEERING**

Department of Electronics and Communication Engineering

Electronics and Communication Engineering (ECE) department was established in 1984 to produce engineers with rich knowledge in core and allied fields. It offers an under-graduate program B.E. - Electronic and Communication Engineering and a post-graduate program M.E. – Embedded System Technologies. ECE department has been recognized as a research centre for pursuing a doctoral degree in Information and Communication Engineering. The department is equipped with state-of-the-art facilities that offer a conducive environment for the students to do academic, research and innovation activities. The department has well qualified and dedicated faculty team to educate and mentor the students to achieve their career goals.

VISION

To produce Electronics and Communication Engineers capable of generating a knowledge economy with social responsibility.

MISSION

- ▶ To impart high quality education with ethical behaviour.
- ▶ To equip the students compatible with recent trends in Electronic industries.
- ▶ To develop leadership qualities with humanity, wisdom, creativity and team spirit
- ▶ To provide a passionate environment for continual learning.

Program Educational Objectives (PEOs)

Programme educational objectives are broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

PEO 1: Graduates will have successful technical career in core and related fields.

PEO 2: Graduates will pursue higher education and work in Research and Development for solving real world problems.

PEO 3: Graduates will have leadership qualities with social consciousness and ethics.

Program Specific Outcomes (PSOs)

PSO1: Analyze and design a compact and efficient system using modern tools in VLSI and Embedded systems.

PSO2: Design and develop systems to solve contemporary problems in signal processing, communication, and networks for applications using modern tools and techniques.

Features of the Department

- ▶ B.E. (Electronics and Communication Engineering) program is accredited as Tier-1 UG program by the National Board of Accreditation, New Delhi.
- ▶ ECE department is recognized as a Research Centre by Anna University Chennai.
- ▶ Outcome-based education and choice-based credit systems are followed.
- ▶ To meet the expectation of industries from graduates, the department engages industrial experts in framing curriculum and syllabus. The department inducted adjunct faculty from industry.

- ▶ The department has 9 curricular labs and 4 special labs such as Product Development Centre, Semiconductor Chip Testing lab, Research & Development Centre and Centre for Antenna / PCB Design & Fabrication. The department has seminar hall and smart class room equipped with ICT tools for teaching and learning process. It also has ICT enabled classrooms.
- ▶ The department has consistent placement record of above 90% with the highest salary of 16 LPA and an average salary of 4.55 LPA, with 108 students getting placed in reputed companies.
- ▶ Department has signed MoU with IIT Guwahati, IIT Hyderabad, M/s.Tessolve Semiconductor Private Limited, and M/s. Mistral Solutions Pvt. Ltd. for student skill transformation on various domains.
- ▶ Offering research-oriented higher-level settlement for PG students.
- ▶ All laboratories and classrooms are equipped with ICT facilities to enhance integrated learning.
- ▶ Exclusive department library with a recent collection of books on different topics.

Focus Group

Our department is having 6 Focus Groups (SIG) for their concerned research, to discuss and explore the recent advancement of their respective study.

- ◆ **Signal and Image Processing**
- ◆ **RF and Antenna**
- ◆ **Wireless Technology**
- ◆ **Networking and Cyber Security**
- ◆ **VLSI and Semiconductor Device Modeling**
- ◆ **Embedded System Design**

Each Focus Group is led by a Focus Group Head who stimulates discussion and exploration among group members. The staff members help students gain deep insights and specialized knowledge in their areas of interest.

Academic Laboratory Facilities:

Laboratories are important resources for under graduates of engineering courses to validate their theoretical understanding through experiments. The department has 9 laboratories to cater the academic needs of the students..

Electronic Devices and Circuits Laboratory: This lab is used to study, design and analyze electronic circuits such as biasing circuits, amplifiers, oscillators, and filters using diodes, transistors, FETs, and transformers. It is equipped with function generators, cathode ray oscilloscopes, digital storage oscilloscopes, and regulated power supplies to develop circuit design and analysis skills.

Integrated Circuits Laboratory: This lab is used to design and construct analog and digital electronic circuits using analog and digital ICs. It is equipped with IC tester, digital IC trainer kits, function generators, DSOs and other consumables to do experiments on signal operations, filter design, oscillators, data converters, comparators, multiplexers, flip-flops, counters, shift registers, sequence detectors, waveform generators.

Microprocessor Laboratory: This lab is used to demonstrate microprocessor hardware and software using trainer kits and interfacing modules. The students develop skills in assembly language programming, CPU, memory, interfacing programmable peripherals and I/O design using this lab facility. It is equipped with Microprocessor kit (8085), Microprocessor kit (8086), Microcontroller kit (8051), Interface boards such as PPI, DMA Controller, Interrupt Controller, Timer, ADC, DAC, Serial Communication, Stepper Motor, Traffic Control, Keyboard and display control, PC based interface, Oscilloscopes, Function generator, power supply, RS 232 cable & connector, Universal programmer.

Digital Signal Processing (DSP) Laboratory: DSP laboratory is well equipped with high-performance intel core i5 & i7 systems with internet connectivity. Software packages such as MATLAB R2021B, Lab VIEW, Multi Sim, ORCAD Capture PSpice, Easy PC, Top view simulator, Visual C++ and Code Composer Studio are installed in the systems. Real time signal/image processing studies are carried out using target board TMS320C6711/6713/6416/6748 Processors.

VLSI Laboratory: To meet out the recent trends in IC design, this laboratory is equipped with the following software and hardware tools. CADENCE Perceptual licensed tool, Quartus II SOPC Builder Tool, Xilinx VLSI Software foundation series 5.1i, Xilinx Software System edition Ver.11.1. Hardware equipment available: Xilinx Spartan 3 /Spartan 3E FPGA Trainer Kit, Xilinx make Universal FPGA Trainer Kits., Complex Programmable Logic Device (CPLD) Trainer kit, Universal Trainer Model MXUK, Universal VLSI Trainer Kit, Universal Multi-vendor Development Kit, Altera make Cyclone III FPGA Trainer Kits, Altera make Cyclone V FPGA trainer Kits with SOPC Builder, ZYNQ FPGA Development Board, GensysVirtex 5 FPGA Development Board, Automatic Test Engineering Training Kits.

Networks and Cyber Security Laboratory: Networks laboratory offers an impression of networking and how network security strategies are deployed to address the availability pillar of the CIA triad. This Lab is equipped with Fedora Linux Server, Routers, Switches, Hubs, 42-inch Smart TV, Wall mounted projector, Benchmark LAN trainer kits and highly configured i5 Intel systems loaded with Fedora. The laboratory stocked with Dell EMC Server incorporate with the vSphere virtualization platform handles High-Performance Computing (HPC) workloads like software-defined storage, virtualization and data analytics. This lab is equipped with higher-end computer systems in which networking and security tools like NS2 Simulator, Wireshark, Cisco Packet tracer, VMware Workstations, VM-Box, Sys-Internals Suite, Nmap, Snort are installed.

Wireless Technology (WiTech) Laboratory: State-of-the-art Wireless Technology Laboratory is equipped with cutting-edge facility and equipment necessary for the students, faculty members, researchers and innovators to enhance knowledge and do research in the area of emerging wireless system design. This lab consists of Universal Software Radio Peripheral (USRP) transceivers, 2x2 MIMO USRPs, sub-6GHz 5G Software Defined Radio (SDR) kits and spectrum analyzers to rapidly prototype physical layer protocols and systems. It is also equipped with standardized wireless evaluation boards, including LoRa nodes & Gateways (indoor as well as outdoor), Wi-Fi, and Bluetooth Low Energy (BLE), antenna trainer kits, and basic modulation & demodulation kits to facilitate product development and testing.

Embedded System Laboratory: This Laboratory is equipped with higher-end processors based systems which enable students to design Processor-specific embedded system with added intelligence. The major equipment available are ARM 7 Embest Teaching kit, ARM 9 Embest Teaching kit, Tiny 2440 (ARMII) kit, LPC 21XX Philips Development kit, SBC 6 XXX Samsung development kit, MCB 1857 Cortex M3 kit, Cortex M4 development segger, MSP430 Development boards, Development kit 8700 (OMAP 3750) kit, PSoC Development kits, ARM 9-LPC 2929 Evaluation Board, RL-78 Renesas Evaluation Board. This lab also has respective IDEs for each processor family such as CROSS Works for MSP 430, CROSS Works for ARM 7, Cube suite, PSoC creator, IAR workbench for MSP430, Keil version- 4 Professional, SAND TIGER Board, SEGGER emPower Board, Intel NUC Board, Real Sense Camera ZR300 (Stereo Vision), Logitech 720P (Mono Color Vision) and ARMMBED boards.

e-Yantra Robotics Laboratory: e-Yantra lab encourages a “Can-do” attitude amongst students, that prepares them for a career in research or as technology entrepreneurs. Students are encouraged to use robots to solve real-life problems. The major equipment are Firebird V Robot, Spark V Robot, AT Mega 2560 Development Board, PS9V51 Development Board, Arduino Mega 2560 Board, Robotic Arm - 2 -axis, 4-axis, Parallel Gripper, Metal gear Servo motor, GPS interfacing module for the robot, Raspberry pi board, AVR ISP USB Programmer, Zigbee module, USB TV Tuner for interfacing wireless camera with laptop, Two Axis camera pod with wireless camera.

Special Laboratory Facilities:

The department has the following 4 special laboratory facilities to cater for the needs of the students to transform their skills and develop knowledge on core placement, innovation and research.

Semiconductor Test Engineering Laboratory: This lab is established in 2017 in Collaboration with M/s. TESSOLVE Semiconductors Pvt. Ltd., Bangalore to develop students’ skills in semiconductor test engineering domain. This Lab includes ADM's LG Lite ATE kits, Universal load boards, MOKUGO ATE Kits and industry-oriented study materials. After successfully obtaining the STE-SDE certification by M/s. TESSOLVE Semiconductor Pvt. Ltd., the students will get placement in TESSOLVE Semiconductors Pvt. Ltd.

Product Development Centre: Product development Centre is established in 2017 to nurture the students to convert their innovative ideas into products. It is equipped with sensors, actuators, embedded development boards, IoT trainer kit and IoT connectivity modules to develop products. Through this centre the students are disseminating their core knowledge in developing products and they are participating in various competitions like Hackathons and getting recognitions. This center is also utilized for regular curricular activities such as product development laboratory, mini project and main project.

Research and Development Centre (R&D Centre): This facilitates a conducive environment for post graduate students and Ph.D. research scholars with state-of-the-art facilities to do research activities. This centre is equipped with spectrum digital boards, thermal image processing workstations, ARM cortex boards, camera interfaces, display interfaces, higher end computer system and TCAD software. These

facilities are utilized for doing research in the area of embedded system design, thermal image processing and semiconductor device modeling. This centre is also equipped with EMI/EMC compatible work tables and seating arrangements to design and test electronic system using higher end processors.

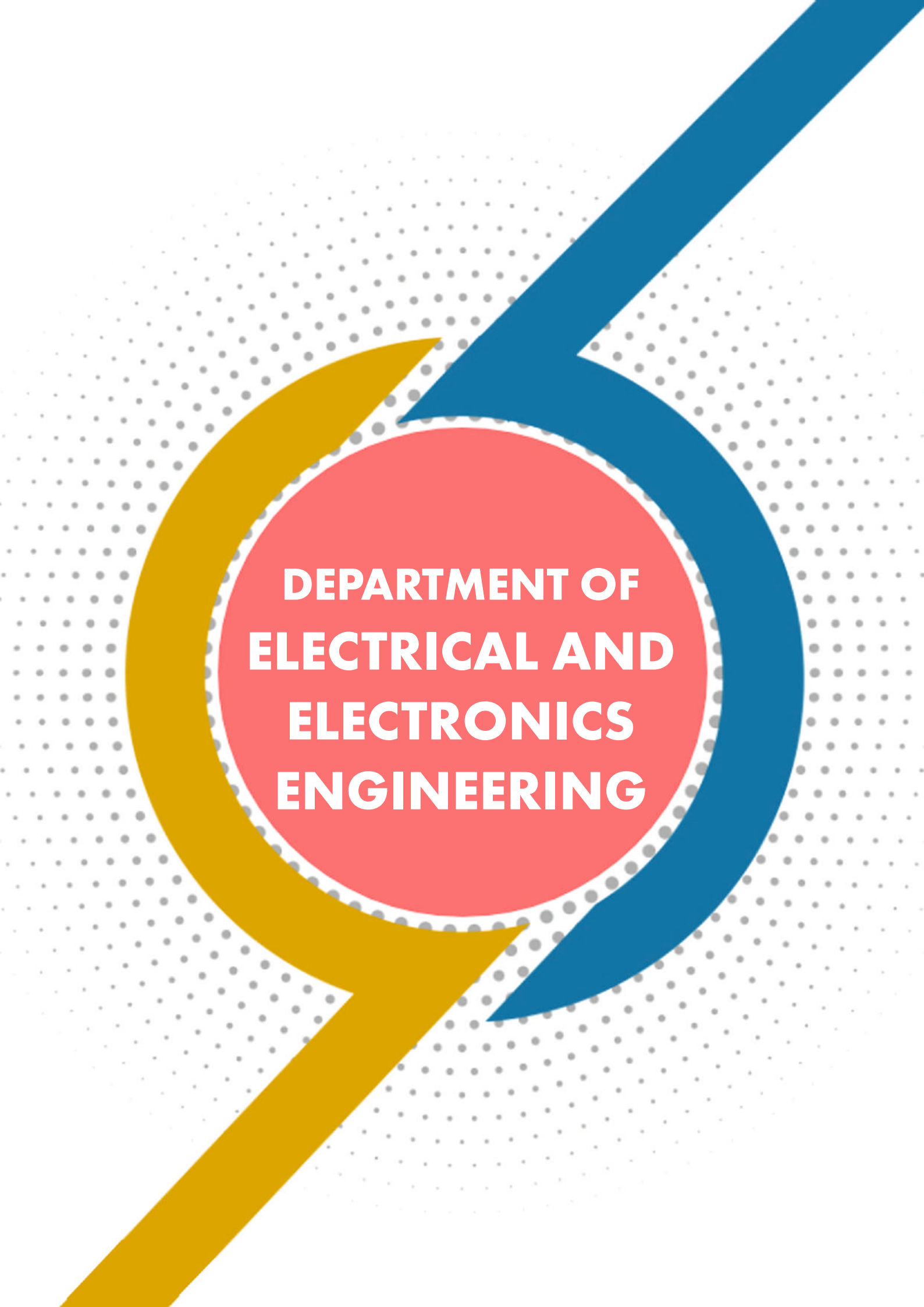
Centre for Antenna / PCB Design and Fabrication: This Centre was established in the ECE department during the academic year 2022-2023. This centre enables faculty and students to develop prototypes. It also supports faculty members conducting research in the RF and microwave domains by allowing them to fabricate designed antennas. The laboratory is equipped with a PCB Prototype Making and Antenna Designing Machine and the High Frequency Structure Simulator (HFSS) software tool. Students working on projects use the HFSS software for simulations and proceed with fabrication once the simulation results meet their specifications.

FACULTY LIST

Teaching		
Name of the Faculty	Qualification	Designation
Dr.S.Tamil Selvi	M.Tech. Ph.D.,	Professor & Head
Dr.A.Shenbagavalli	M.E., Ph. D.,	Professor
Dr.T.S.Arun Samuel	M.E., Ph. D.,	Professor
Dr.N.Arumugam	M.E. Ph.D.,	Associate Professor
Dr.V.Suresh	M.E., Ph. D.,	Associate Professor
Dr. K.J.Prasanna Venkatesan	M.E. Ph.D.,	Associate Professor
Dr.C.Balamurugan	M.E. Ph.D.,	Associate Professor
Dr.A.Saravana Selvan	M.E. Ph.D.,	Associate Professor
Mr.T.Devakumar	M.E.,	Assistant Professor (SG)
Mr.S.Cammillus	M.E.,	Assistant Professor (SG)
Mr.K.Subramanian	M.E.,	Assistant Professor (SG)
Dr.R.Manjula Devi	M.E. Ph.D.,	Assistant Professor (SG)
Dr.I.Vivek Anand	M.E. Ph.D.,	Assistant Professor (SG)
Mr.M.Sathishkumar	M.E.,	Assistant Professor (SG)
Mr.B.Ganapathy Ram	M.E.,	Assistant Professor (SG)
Mrs.S.Karthika	M.E.,	Assistant Professor

Teaching		
Name of the Faculty	Qualification	Designation
Ms.J.E.Jeyanthi	M.E.,	Assistant Professor
Mrs.S.Malathi	M.E.,	Assistant Professor
Mrs.C.Kalieswari	M.E.,	Assistant Professor
Ms.A.Apsara	M.E.,	Assistant Professor
Ms.P.Arishenbagam	M.E.,	Assistant Professor
Dr.S.Lavanya	M.E., Ph.D	Assistant Professor
Ms.R.Geeta	M.E.,	Assistant Professor
Mrs.S.Sulochana	M.E.,	Assistant Professor
Ms.C.K.Balasundari	M.E.,	Assistant Professor
Mrs.S.Mugunthamala	M.E.,	Assistant Professor
Mrs.J.Swapna Sujitha Mary	M.E.,	Assistant Professor
Dr.S.Subaselvi	M.E., Ph.D	Assistant Professor
Mr.V.Arun Janarthanan	M.E.,	Adjunct faculty

Non – Teaching		
Name of the Faculty	Qualification	Designation
Gangadhara T Venkadesh. S	Msc., MPhil.,	Instructor
Mr.M.Boominathan	B.E.,	Lab Technician
Mr.G.Rathinavel Pandian	B.Sc.,	Lab Technician
Mrs.K.Kalavathi	B.E.,	Sr.Lab Technician
Mr.S.Nikesh Satya	DECE	Lab Technician
Mrs.S.Bairavi	B.B.M	Department Assistant
Mr.K.Balamurugan		Attendar

The logo features a central red circle containing the text 'DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING' in white, bold, uppercase letters. This circle is surrounded by two thick, curved lines: a yellow one on the left and a blue one on the right. The background is white with a pattern of small grey dots. Two thick diagonal lines, one yellow and one blue, cross the scene from the bottom-left to the top-right, passing behind the central circle.

**DEPARTMENT OF
ELECTRICAL AND
ELECTRONICS
ENGINEERING**

Department of Electrical and Electronics Engineering

The department infrastructure and laboratory are being upgraded to facilitate students' learning skills like problem solving, creative thinking and experiencing integrated design of the systems, open ended experiments, mini projects and course projects.

VISION

Promoting active learning, critical thinking coupled with ethical values to meet the global challenges.

MISSION

- ▶ To instill state-of-the-art technical knowledge and research capability that will prepare our graduates for professionalism and life-long learning.
- ▶ To update knowledge to meet industrial and real world challenges.
- ▶ To inculcate social and ethical values.

Electrical Workshop

This is the most basic and essential laboratory which is used by first-year students of all branches of engineering and technology. This laboratory is well equipped with all kinds of electrical accessories to practice single-phase and three-phase house wiring, electrical terminals, soldering iron, earth resistance tester, winding machine, working and assembling of the fan, and iron box to perform the whole gamut of experiments as per the prescribed syllabus of the course on basic electrical and electronics engineering.

Electrical Machines Laboratory

The laboratory has DC machines, Induction Motor and Generator, Synchronous Motor, Salient and Non-Salient Alternators, Switched Reluctance Motor and their simulated models, DC Rectifiers, Programmable Variable Frequency Drive (VFD), Indoor Type Transformer, Electrical Machine Tutor, Phase shifting Transformer, Winding Study Motor and DC Drive Control Panel.

Electronics Laboratory

This laboratory is well equipped with apparatus related to Network Theorems, Electronic Devices and Circuits, Linear and Digital Integrated Circuits, Power Measurement, Power Supplies, Digital Storage Oscilloscopes, Signal Generators etc. The laboratory is used for the development of different applications with the help of various hardware prototypes and models in the area of analog and digital electronics. This laboratory is being used by the under-graduate students of all branches of Engineering and technology. This laboratory is equipped with 8085/8086 Microprocessor, 8051 Microcontrollers, PIC, Arduino, Raspberry-Pi Microcontrollers and various interface cards such as traffic light controller, stepper motor interfacing, ADC & DAC Interfacing Cards, keyboard and digital controllers, DSP kit, FPGA based motor controller.

Control and Instrumentation Lab

In the Workbench, students work with instrumentation, control and calibration of Sensors, Transducers, AC & DC Servomotors, PID Controller Unit, AC & DC Position control systems, three-phase energy meters and Multifunction meters. In the simulation section, MATLAB, Lab VIEW simulation platform helps in the analysis and design of compensators and controllers using time domain and frequency domain specification. In the PC interfacing section, Hardware interfacing using ELVIS II+ interfaces with LABVIEW for rapid prototype development and rotary inverted pendulum. It has Twin Rotor Motor System (TRMS) MIMO helicopter model established from an AICTE funded project. It also has the latest robotic models like Quanser QBOT 2e with MATLAB interface, Lego Mindstorm Robot development module, IOT based sensor interface for signal processing.

Project Laboratory

The laboratory is equipped with various sensor modules, microcontroller development boards, robotics-based components and consumables. The student can make use of components, sensors, learning kits and equipment from the forum for practicing their real-time projects. MINI PROJECT forum is actively functioning in the Laboratory to develop the practical skills of the students in the Project Laboratory. The objective of the forum is to create practical knowledge about the fundamentals of analog and digital electronics and to motivate the students to practice some real-time application-oriented projects. The lab is equipped with an 8S2P LiFe PO4 battery configuration, featuring a 25.6V and 12Ah specification, as well as a single-cell analyzer kit with a 3.2V and 6Ah specification. These tools, along with their charging and discharging characteristics, facilitate the basic study of batteries, which are a recent trend in the electric vehicle (EV) sector.

Power Electronics and Drives Laboratory

Complete Power Electronics experimentation and analysis related to AC & DC drives, AC to DC Converter, DC to AC Converter, Drive control, Choppers and FPGA based Inverter fed AC Drive, FPGA based buck-boost converter fed drive and SRM drive can be done in this laboratory. This laboratory is used by the undergraduate students of all branches of Engineering and technology. This lab is also equipped with computers for transient and simulation studies for power electronics.

Smart Protection & Control Lab

The State-of-the-art switch gear and Protection lab is equipped with modern tools like advanced Numeric Relay protection schemes like Overcurrent Protection, Transformer Protection, Distance Protection, Motor protection, conventional electromagnetic relays three-phase and single-phase relay test kit and SCADA-based substation automation and also ETAP software package, for the overall worth of Rs.17 Lakhs. Switch gear and Protection Laboratory of the Electrical Engineering Department is unique whereby using the latest numeric Relays, various faults occurring in the Power system are simulated & protection against various faults is demonstrated using the demonstration models which are obtained from the Manufacturer like GE (T&D) to students.

High Voltage Laboratory

This laboratory is an active centre for research in Dielectric Materials, Insulation Systems, High Voltage and

related phenomenon. This laboratory also offers commercial testing and consultancy services. It has the state-of-the-art facilities like 100kV AC, 140kV DC and 280kV Impulse Generation, Measurement and Testing, Partial Discharge Detector Interfacing with DSO, Loss Tangent Measurement and Measurement of Breakdown strength of Solid/Liquid/Gaseous dielectrics and Power Quality Analyzer. This laboratory is equipped with DST-FIST Funded Partial Discharge meter and ANSYS software package (Research license).

Liquid Dielectrics Laboratory

This laboratory is established under the Department of Science and Technology. This lab has the facility of UV Spectrometer for characterization of the optical changes that occur on ageing, Viscometer, Flash and Fire point apparatus, Digital Denso Meter, Pour Point Apparatus, Thermal Ageing Chamber, Magnetic Stirrer and Ultrasonic bath along with heater for condition monitoring of liquid dielectrics, Field test kit, pH meter, Conductivity meter, Hot air oven, Acidity testing kit, Automatic Moisture Karl Fischer Titrator for the analysis of liquid insulating medium used in the high voltage power apparatus.

Computer Centre

This laboratory holds current configuration systems with high-speed internet facility. Computer centre is a multipurpose laboratory with advanced software such as ETAP POWER STATION, PSCAD/EMTDC, MATHCAD & VISSIM PE, MATLAB. The laboratory is equipped with 40 computer systems supported by HP-Intel Xeon E5-2407 server and provisions are made for 100 systems with networking. It has internet facility at the speed of 161 Mbps (LAN & WIFI) with leased line. The lab has 20 KVA UPS facility to afford an uninterrupted power supply facility. The undergraduate students utilize internet and the advanced software tool facilities with their laptops and computers available in the computer centre.

Industrial Automation Laboratory

This lab deals with industrial process control demonstration models and experimental setup for engaging students with real industrial environment. It consists of PLCs of top brands like Siemens S7 1200, GE Versa-pro available for real-time ladder program development and process parameter control mechanism involves temperature, pressure, level and flow variations. It also has a SCADA interface using Simatic Win CC platform with an HMI interface to experience the real industrial process monitoring and control application.

Active Classroom

Newly established Active classroom in the department of EEE to enhance the learning through Group activities with reconfigurable seating arrangements. Audio-video facility with smart board, 65 "SENSES LITE INTERACTIVE INTELLIGENT PANEL-4K

Class Room Facilities

The classrooms are facilitated with 49 inches smart televisions apart from regular classroom tools.


Seminar Hall

The department is facilitated by a seminar hall with a smart board and multimedia system. The seminar hall has a seating capacity of 150 students. It is used as a smart classroom for seminar presentations and placement activities.

FACULTY LIST

Teaching		
Name of the Faculty	Qualification	Designation
Dr.M. Willjuice Iruthayarajan	M.E., Ph.D.,	Professor & Head
Dr.L. Kalaivani	M.E., Ph.D.,	Professor
Dr. R.V. Maheswari	M.E., Ph.D.,	Professor
Dr.N.B. Prakash	M.E., Ph.D.,	Professor
Dr.S. Sankarakumar	M.E., Ph.D.,	Assistant Professor(SG)
Dr.B. Vigneshwaran	M.E., Ph.D.,	Assistant Professor(SG)
Dr.B. Venkatasamy	M.E., Ph.D.,	Assistant Professor(SG)
Dr.M. Gengaraj	M.E., Ph.D.,	Assistant Professor(SG)
Dr.P. Samuel Pakianathan	M.E., Ph.D.,	Assistant Professor(SG)
Mr.M. Sivapalanirajan	M.E.,	Assistant Professor
Mr.K. Kumar	M.E.,	Assistant Professor
Mr.F. Antony Jeffrey Vaz	M.E.,	Assistant Professor
Mr.K. Karthik Kumar	M.E.,	Assistant Professor
Dr.F.X. Edwin Deepak	M.E., Ph.D.,	Assistant Professor
Mr.J. Thangaraj	M.E.,	Assistant Professor
Mrs.C. Dhanalakshmi	M.E.,	Assistant Professor
Dr.S. Dharmalingam	M.E., Ph.D.,	Adjunct Faculty

Non – Teaching		
Name of the Faculty	Qualification	Designation
Mr.S. Alagesan	DEEE	Lab Technician
Mr.S. Ponmariappan	DECE	Lab Technician
Ms.S. Subha Revathi	DEEE	Lab Technician
Ms.M. Suwetha	B.Sc.,	Department Assistant
Mr.S. Kesavaprasath	SSLC	Attendar

The logo features a central red circle containing the text 'DEPARTMENT OF INFORMATION TECHNOLOGY' in white, bold, uppercase letters. This circle is framed by two thick, curved lines: a yellow one on the left and a blue one on the right. The background is white with a pattern of small grey dots. Two thick diagonal lines, one yellow and one blue, cross the scene from the bottom-left to the top-right, passing behind the central elements.

**DEPARTMENT OF
INFORMATION
TECHNOLOGY**

Department of Information Technology

The Department of Information Technology was established in the year 2001. It offers an undergraduate programme “B.Tech., Information Technology” and a PG programme “M.Tech., Information and Cyber Warfare”. It offers an excellent ambience for the students to learn and acquire industry ready skills. The department is well equipped with state-of-the-art laboratories to empower the students with the recent technical trends. The department is augmented with qualified faculty with rich teaching experience and a research center to promote research. The students are trained in emerging topics such as Analytics, Machine Learning, Cloud Computing, Cyber security, Internet of Things etc., to make them industry ready.

VISION

To produce technically competent and value based IT Professionals to meet the current challenges of the modern IT industry.

MISSION

- ▶ Imparting quality education with innovative components in teaching learning process.
- ▶ Conducting student centric programme to enhance communication, team spirit, leadership skills and self learning.
- ▶ Motivating the students to realize the need of ethics and human values.
- ▶ Developing a conducive environment for collaborative research.

Salient Features of the Department

- ▶ AICTE approved an intake of 60 students per year for B.Tech., Information Technology and 6 for M.Tech., Information and Cyber Warfare.
- ▶ The department is conferred with autonomous status by UGC.
- ▶ Accredited by the National Board of Accreditation (NBA).
- ▶ The department is recognized as the Research Centre of Anna University, Chennai.
- ▶ Supported by 14 qualified and dedicated faculty members. Among them, 5 faculty members are Ph.D., degree holders and 4 faculty members are pursuing their research.
- ▶ The department is having 3 Special Interest Groups (SIGs) in the area of Data Analytics, Cyber Security and Intelligent Information Systems to work on the recent advancements in the domain.
- ▶ A well-defined curriculum that ensures students acquire essential knowledge in various subject areas by integrating project-based learning and other experiential learning opportunities.
- ▶ A Memorandum of Understanding (MoU) has been signed with BS Teknology Pvt. Ltd., Coderzbot and Alpha Business Solutions to help the students learn aligned with industry needs.
- ▶ Consistent placement record for more than 90% every year.

- ▶ Students undergoing internships in reputed MNCs.
- ▶ IT Association is a technical forum functioning in the department to conduct various technical activities to enrich the students' leadership skills and teamwork.
- ▶ Students are encouraged to participate in various product development activities. The department has developed around 11 products funded by NewGen IEDC, TNSCST and 4 patents were published.
- ▶ Through ICT Academy, training programs are conducted for the faculty members and the students.
- ▶ Students are encouraged to do NPTEL courses to induce a culture of lifelong learning, encouraging them to continuously seek knowledge.

Laboratory Facilities

The department laboratories are designed to support students and faculties in their academic and research. The laboratories are equipped with 170 high-performance computers loaded with the latest software's (NetBeans, Eclipse, Android Studio, MATLAB and R) necessary for developing various applications including programming, web development, network simulation and cyber security. In most of the laboratory courses, the students are insisted to develop projects that enhance critical thinking and problem-solving skills, which are crucial in real-world scenarios. Some of the laboratory courses are listed below:

- ◆ **JAVA Programming Laboratory**
- ◆ **Cryptography and Network Security Laboratory**
- ◆ **Internet and Web Technology Laboratory**
- ◆ **Big Data Analytics Laboratory**
- ◆ **Mobile Technologies Laboratory**
- ◆ **Data Engineering Laboratory**
- ◆ **Advanced Data Structures Laboratory**
- ◆ **Data Structures Laboratory**
- ◆ **Object Oriented Programming Laboratory**
- ◆ **Operating Systems Laboratory**
- ◆ **Networking Laboratory**
- ◆ **Database Management Systems Laboratory**
- ◆ **Cloud Computing Technologies Laboratory**

The laboratory supports both individual and group projects that offer collaborative spaces and tools that facilitate teamwork and innovative problem-solving. Technical support is readily available to assist software installation and to provide guidance on using the lab's resources effectively. The lab operates from 9.15 AM to 5.30 PM from every Monday to Saturday for ensuring effective access time for all users.

FACULTY LIST

Teaching		
Name of the Faculty	Qualification	Designation
Dr.K.G.Srinivasagan	M.E., Ph. D.,	Professor & Head
Dr.R.Muthukkumar	M.E., Ph. D.,	Professor
Dr.S.Chidambaram	M.E., Ph. D.,	Associate Professor
Dr.V.Manimaran	M.E., Ph. D.,	Assistant Professor
Dr.S.Rajagopal	M.E., Ph. D.,	Assistant Professor (SG)
Ms.V.Anitha	M.E.,	Assistant Professor
Ms.N.Gowthami	M.E.,	Assistant Professor
Ms.M.Manimegalai	M.E.,	Assistant Professor
Ms.S.Santhi	M.E.,	Assistant Professor
Ms.G.Ramya	M.Tech.,	Assistant Professor
Ms.R.Suguna	M.E.,	Assistant Professor
Ms.M.Malathi	M.E.,	Assistant Professor
Ms.C.Ajitha	M.E.,	Assistant Professor
Mr.S.Rajendran	M.Tech.,	Adjunct Faculty

Non – Teaching		
Name of the Faculty	Qualification	Designation
Mrs.A.Shunmugam	D.C.Tech.,	Lab Technician
Ms.M.Jayanthi	B.Sc.,	Lab Technician
Ms.A.Selvalakshmi	B.Com.,	Department Assistant

Recognized Supervisors in yhe Department		
Name of the Faculty	Designation	Supervisor Reference No
Dr.K.G.Srinivasagan	Professor & Head	2340362
Dr.R.Muthukkumar	Professor	3340019
Dr.S.Chidambaram	Associate Professor	4240033

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**DEPARTMENT OF
ARTIFICIAL INTELLIGENCE
AND DATA SCIENCE
ENGINEERING**

Department of Artificial Intelligence and Data Science Engineering

The Department of Artificial Intelligence and Data Science was established in the year 2022. The goal of the department is to ensure academic excellence in students with wide exposure of research and career opportunities. The unique undergraduate program, B.Tech. Artificial Intelligence and Data Science (AI&DS), aims the students to acquire technical skills to perform data analytics, develop robotics automation systems and visualization in emerging real-time applications. The Program envisions equipping students with the ability to identify and assess societal, health, safety and cultural issues with an emphasize on identifying their consequent responsibilities as engineers of offering optimal and effective solutions. The department is well equipped with state-of-the-art infrastructure to empower the students with the state of art technologies.

VISION

To produce globally competent, innovative, computing professionals to meet current challenges in the field of Artificial intelligence and Data Science with social responsibilities.

MISSION

- ▶ Offering well-balanced curriculum with state of the art technologies to impart professional competencies and transferable skills.
- ▶ Bringing innovations in Teaching-Learning process through experienced learning and project/product based learning.
- ▶ Collaborating National and International Industries and Academia to develop foresight technologies in Artificial intelligence and Data Science.

Salient Features of the Department

- ▶ AICTE approved intake is 60 students per year for B.Tech - AI & DS in specialization with Artificial Intelligence and Data Science.
- ▶ Experienced Faculty members in the field of data analytics and AI have published their research works in more than 20 SCI and Scopus journals.
- ▶ Well-equipped laboratories with high end systems are established to develop innovative projects and research works.
- ▶ Two faculty members have Ph.D. degree and 4 faculty members are pursuing Ph.D., degree and doing research in latest AI and DS domain.
- ▶ Three funded research projects are ongoing from NewGen IEDC and MSME, New Delhi.
- ▶ Students are encouraged to attend Hackathons, workshops, seminars, international conferences and symposiums in various IITs, NITs and leading institutions.
- ▶ AI &DS Association is functioning well and various technical and non-technical activities are conducted for the up-gradation of students' skills.

- ▶ Industry-Institute collaboration programmes are arranged by inviting Industrial experts in the field of AI and Data Science.
- ▶ AI & DS Association is functioning well and various technical and non-technical activities are conducted for the up-gradation of students' skills.
- ▶ Industry-Institute collaboration programmes are arranged by inviting Industrial experts in the field of AI and Data Science.
- ▶ Consultancy work is carried out from M/s Embris Global Solutions, Chennai for Robotic Automation for Solid Propellant Mixer Cleaning Project, during 2022.
- ▶ Automated Robotic weed eradication system was developed and funded by IE(I), Kolkatta.
- ▶ The department has a conference hall with a multimedia PA system with a total seating capacity of 70. It can be used as a smart-classroom for teaching learning activities.

Laboratory Facilities

The department has the following well-equipped laboratories with the latest configurations of computer systems.

Data Analytics Laboratory

Data Analytics lab is well-equipped with the high-end workstations with GPU processors with the configuration of Core-i7 systems and high-end graphics cards for conducting data analytics lab and computer vision lab with large data sets. This lab is used to study, process and analyze the data using Python, Numpy, Scipy, Matplotlib, Pandas, statsmodels, seaborn, plotly, bokeh. The students perform various experiments in mathematical functions, random number generators, linear algebra routines, Fourier transforms operations, optimization, integration, interpolation, eigenvalue problems, algebraic equations, differential equations, statistics, data processing, data prediction, decision making, and animated and interactive visualizations. Students can work with large data sets and visualize interactive statistical models and random distributions with recent visualization tools.

Artificial Intelligence Laboratory

AI lab is well equipped with high-end workstations with GPU processors with the configuration of Core-i7 systems and NVIDIA Graphics cards for conducting Artificial Intelligence lab, Machine learning lab, and deep learning lab and this lab has developed with the aim of learning about the latest technologies of the field like Deep Learning, Machine Learning, and Robotics, it has latest software tools and platforms to our students not only learn but also to work with them to build automation systems.


Thrust areas of Research

- ◆ Data Analytics
- ◆ Medical Image Analytics
- ◆ Artificial Intelligence
- ◆ Machine Vision
- ◆ Data Security
- ◆ Agricultural automation systems

Students are encouraged to design smart AI tools and to develop automated systems to imitate the traits of the human mind with the help of reasoning, sensory applications, optimal decision making and problem-solving techniques.

FACULTY LIST

Teaching		
Name of the Faculty	Qualification	Designation
Dr.V.Kalaivani	M.E., Ph. D.,	Professor & Head
Dr.B.Paramasivan	M.E., Ph. D.,	Professor
Mrs.V.Veera Anusuya	M.E.,	Assistant Professor
Mrs.K.Poorani	M.E.,	Assistant Professor
Mrs.P.Rampriya	M.E.,	Assistant Professor
Mrs.G.Dhivya	M.E.,	Assistant Professor
Mrs.K.R.Indira	M.E.,	Assistant Professor
Ms.P.Swarna Gowsalya	M.E.,	Assistant Professor
Ms.M.Saranya	M.E.,	Assistant Professor
Non – Teaching		
Name of the Faculty	Qualification	Designation
Ms.R. Prema Rajalakshmi	B.Sc.,	Lab Technician
Ms.P.Ramya	M.Com	Department Assistant
Mr.S.Kesava Prasath	SSLC	Attender

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**DEPARTMENT OF
CIVIL
ENGINEERING**

Department of Civil Engineering

Salient features :

- ▶ The Department was started in the year 2012 with a sanctioned intake of 60 students per year approved by AICTE for the UG Course BE civil engineering.
- ▶ Supported by 14 qualified, dedicated faculty members, among them 3 are doctorates, 2 are pursuing doctoral degrees and 9 are post graduates from reputed institutes.
- ▶ The department operates in an exclusive Separate building with total area of 3500 Sqm (GF -1750 Sqm, FF – 1750 Sqm) with excellent infrastructure facilities.
- ▶ The Department of Civil Engineering is recognized by Anna University Chennai as Research Centre for to offer PhD Programmes.
- ▶ Fund worth of 12.5 lakhs was sanctioned by New Gen IDC for product development activities .
- ▶ Fund worth of 1lakh was sanctioned by Unnat bharaoh Abhiyan (SEG) to bring transformational change in rural development processes
- ▶ Fund worth of fifteen thousand was sanctioned by TNSCST for Student Project scheme
- ▶ Consistent Placement Record of 100% for the past 3 years
- ▶ Testing and Consultancy worth of 9.4 lakhs was done by faculty members
- ▶ The Department is recognized by Rural development and Panchyat raj of Govt of Tamil Nadu to do the Testing , design and consultancy activities
- ▶ The Department of Civil Engineering is a recognized remote nodal Centre of IIRS for conducting online courses and outreach programmes.
- ▶ 120 students from Civil engineering have pursued higher studies from premiere Institutions like IIT, NIT, NICMAR, Anna University and abroad Universities like University of Windsor, Canada, University of Strathclyde , Glasgow, Scotland over the past 12 years

VISION

Producing outstanding Civil Engineering Professionals with human Values to face future challenges

MISSION

- ▶ To provide with excellent teaching and research ambience
- ▶ To prepare student for leadership roles in Civil Engineering
- ▶ To facilitate student with lifetime skills and human values
- ▶ To collaborate with industries to meet the ever-challenging Environment.

Research Areas

Our faculty members are working in the following research domain and their works has been published in peer reviewed journals

- ◆ Smart Materials
- ◆ 3d Printing of concrete
- ◆ Supplementary Cementitious Materials
- ◆ High Performance concrete
- ◆ Fibre Reinforced Composites
- ◆ Structural Health Monitoring
- ◆ Repair and Rehabilitation of structures
- ◆ Solid Waste Management
- ◆ Waste water Treatment
- ◆ Ground Improvement Techniques
- ◆ Geo Physical Exploration
- ◆ Sustainable Materials and Technologies

Major SIG groups of the department which supports the education curricula and bring the innovation among the student community are

- ◆ Structural
- ◆ Environmental
- ◆ Geotechnical
- ◆ Transportation
- ◆ Construction Management

Laboratory Facilities

The Civil Engineering laboratory infrastructure serves as the backbone of practical education, fostering skills essential for engineering practice and innovation. The Civil engineering laboratories has the state-of-the-art facilities, maintaining high standards of safety and functionality, and aligning with achieving the vision of the department. The various laboratories are as follows

Surveying Laboratory

Surveying laboratory of Civil Engineering was established during the academic year 2013-2014 and is equipped with latest equipment. The asset value of surveying laboratory is 19.76 Lakhs and the area is 854.29 Sq.ft. The equipment at survey laboratory was supplied by M/s Lawrence and Mayo (India) Pvt. Ltd. The laboratory consists of instruments for distance measurements and for measuring heights and angles of the objects. It aims with the purpose of enabling the opportunity to practice Plane and Geodetic surveying using instruments like, Sokkia Total Station Reflector less which is the advanced level surveying instrument used for all types of surveying. Garmin GPS is used for finding the position of the objects. Standard Vernier Theodolite is used for measuring horizontal and vertical angles. Pentax Auto level, Dumpy level is mainly used in road surveying. Plane table, Subtense bar, Parallax bar, Mirror stereoscope, Prismatic compass, Leveling staff, Chain, Ranging rod, Cross staff, Tape and Pocket stereoscope are the minor instruments.

Soil Mechanics Laboratory

Established in the academic year 2013–2014, the Soil Mechanics Laboratory is equipped with all the equipment necessary for conducting the undergraduate laboratory. The asset value of soil mechanics laboratory is Rs.12.11 Lakhs and the area is 1730.29 Square feet. Major equipment was supplied by M/s Lawrence & Mayo (India) Pvt. Ltd. Major equipment for characterizing the engineering properties of soil is available in the laboratory, which includes the Triaxial apparatus, Direct Shear Test apparatus, Consolidation Test apparatus, Laboratory Permeability Test, Laboratory Vane Shear Test, Unconfined

Compression Test, and Compaction equipment like the Standard Proctor apparatus and Modified Proctor apparatus and CBR apparatus. In order to determine the index property and classify the Soil according to Indian Standard Classification the lab is equipped with Pycnometer, Hot air oven to determine water content, Set of Sieves, Hydrometer, Atterberg limits apparatus, Field density apparatus like Core cutter and Sand Pouring Cylinder. In addition to the aforementioned, the lab is furnished with standard penetration test equipment and a split spoon sampler to determine the safe bearing capacity for private construction firms and government organizations as a part of soil consultancy works.. Students receive practical training for conducting Standard Penetration Tests in the field during their course of study.

CADD Laboratory

The Department of Civil Engineering Computer laboratory was established in the year 2012-2013. To provide adequate knowledge on computer based analysis, design and drafting to students. It has a well-equipped and centralized air-conditioned computational centre with all advanced facilities including 40 systems. Latest licensed STADD pro Software used for analysis and design of Structural components. Various value added courses such as Revit Architecture, Tekla, Naviswork and BIM are conducted in the laboratory.

Environmental Engineering Laboratory

The Environmental Engineering laboratory of Civil Engineering was established during the academic year 2013-2014 and is equipped with the latest equipment. The laboratory houses the major equipment like BOD incubator, COD digester, Air quality Analyser, Noise level meter, centrifuge and Autoclave. The instruments available in Environmental Engineering Laboratory are adequate for the undergraduate program of Civil Engineering Department to check the quality of drinking water, as well as solid and liquid waste.

Concrete and Highway Engineering laboratory

The Concrete and Highway Engineering laboratory was established in the academic year 2013-2014. The laboratory has both structural and Highway material testing facilities. It is equipped with almost all major equipment needed to analyze the properties of construction and pavement materials with high precision. The equipment is calibrated periodically and has an NABL certificate.

The various equipments available in the lab are,

- ◆ Analog Compression testing Machine (2000KN Capacity)
- ◆ Aggregate Impact testing machine
- ◆ Projectile Impact Testing machine
- ◆ Shrinkage and Moisture movement apparatus
- ◆ CBR Apparatus
- ◆ Compaction Factor Apparatus
- ◆ Vee Bee Consistometer
- ◆ Centrifuge Bitumen extractor
- ◆ Marshall specimen compactor
- ◆ Marshall testing machine
- ◆ Standard Tar Viscometer
- ◆ Ductility Apparatus
- ◆ Standard Penetrometer
- ◆ Ring & Ball Apparatus
- ◆ Flow table
- ◆ Vibrator (Needle and Pan type)
- ◆ Density Basket
- ◆ Concrete Mixer
- ◆ Rebound Hammer
- ◆ Accelerated Curing tank

FACULTY LIST

Teaching		
Name of the Faculty	Qualification	Designation
Dr. I. Padmanaban	M.Tech., Ph.D,	Professor & Head
Dr. V. Kannan	M.E., Ph.D,	Associate Professor
Dr. C. Chella Gifta	M.E., Ph.D,	Associate Professor
Mrs.M. Balamaheswari	M.E.,	Assistant Professor
Mr. V. Arulpandian	M.E.,	Assistant Professor
Mr. B. Gowtham	M.E.,	Assistant Professor
Mr. S. Kannan	M.E.,	Assistant Professor
Mr. A. Darral Alfred	M.E.,	Assistant Professor
Mr. P. Kasirajan	M.E.,	Assistant Professor
Mr. K. Marimuthu	M.E.,	Assistant Professor
Mr. M. Ashokpandiyan	M.E.,	Assistant Professor
Mr. R. Harshani	M.E.,	Assistant Professor
Mr. G. Balamurali	M.E.,	Assistant Professor

Non – Teaching		
Name of the Faculty	Qualification	Designation
Mr. A. Murugan	D.C.E.,	Lab Technician
Mr. M. Kaliraj	D.C.E.,	Lab Technician
Ms. S. Maheshwari	B.A.,	Office Assistant

The logo features a central red circle containing the text 'DEPARTMENT OF SCIENCE AND HUMANITIES' in white, bold, uppercase letters. This circle is surrounded by two thick, curved lines: a yellow one on the left and a blue one on the right. A thick blue line extends from the top right, and a thick yellow line extends from the bottom left, both curving towards the central circle. The background is white with a pattern of small grey dots.

**DEPARTMENT OF
SCIENCE
AND
HUMANITIES**

Department of Science and Humanities

About Department:

The Department of Science and Humanities is a primal department comprising Chemistry, Physics, Mathematics, and English disciplines. All the disciplines in the department exist as separate divisions and maintain individual identities. The varied disciplines provide the fundamentals of Engineering and effective interpersonal communication skills to the students. Developing moral behaviour among the students, utilizing human resources, and coordinating academic responsibilities are the exclusive potentials of the department. The department accomplishes transforming young aspiring minds into determined freshman engineers through Outcome Based Education. Besides, the department teaches students a positive ethos through Value-Based Education. The department regularly organizes workshops, symposia, and conferences in new emerging areas for the benefit of the students, researchers, faculty members, and industrialists, which instills an ever-ending desire to seek knowledge.

VISION

Producing potentially competent freshman engineers with leadership qualities and human values

MISSION

- ▶ To impart engineering fundamentals by providing Basic Science and Mathematics
- ▶ To stimulate reading, listening and writing skills
- ▶ To promote innovative culture among the students

Salient Features

- ▶ Highly equipped laboratories to uplift the students' practical knowledge
- ▶ ICT tool enabled smart classroom for interactive learning
- ▶ Enhancing students' creativity through Project Based Learning
- ▶ Facilitating the students to win accolades in IELTS, Linguaskill and GATE by providing special training sessions
- ▶ Providing ample resources and a serene ambiance for the readers
- ▶ Conducting social-related extension activities like State level Quiz competitions, and motivational programmes for Higher Secondary school students
- ▶ Creating placement awareness through alumni interactions and participation in technical events and competitions.

Academic Laboratories:

Chemistry Research Centre:

The Chemistry Research Centre (CRC) was established in 2007 to develop the Research activities in the department. The infrastructural and equipment facilities have been supported by various funded projects (BRNS, DST – SERB and CSIR) worth Rs.1.75 Crore. A group of well – recognized faculty members with expertise in spectroscopy, electrochemistry, crystal growth, biological activities and computational chemistry has maintained the centre. Workshops, Seminars and Conferences are conducted regularly to explain the functioning and applications of the instruments to the students of various institutions. Anna University, Chennai has approved the Department of Chemistry as a recognized Research Centre for Ph.D.

EQUIPMENT FACILITIES

FTIR Spectrophotometer – 8400S (SHIMADZU)

High Performance Liquid Chromatography – LC- 2010 CHT (SHIMADZU)

UV- Visible Spectrophotometer – 2450 (SHIMADZU) with water circulation Bath

Fluorescence Spectrofluorometer – FP – 8300 (JASCO) with Peltier Thermostat system

Spectroelectro Chemical Work Station (CHI620E) with UV-VIS-NIR Spectrophotometer

VAB4000-UV-VIS

Electromagnet 11k Gauss and power supply for Guoy method (39PS)

LED Fluorimeter S1177

Potentiometer Titrator HI902C1-02

Gel documentation unit LARK

Double Distillation unit BOROSIL

LED Binocular Compound Microscope

Server workstation for Computational studies

Rotary Vacuum Evaporator

SOFTWARE

Amsterdam Density Functional Modeling Suite Powerful computational chemistry Software for Chemistry & materials

Hyperquad & Hyspec software

Gaussian 09 Software solutions

Chemistry Laboratory

The Chemistry lab has cutting-edge experimental and computational facilities that give students interested in the intersection of chemistry, engineering, and environmental sciences access to research opportunities, tools, and technical support. For first-year students, there are courses in the engineering chemistry and environmental science lab that encompass evaluating water quality parameters and using instruments to analyze contaminants. BOD, residual chlorine analysis, metal ion analysis and other investigations on water quality monitoring have been conducted in the chemistry lab. The laboratory complies with all standards for chemical safety. Third-year and final-year students use the laboratory for their project works.

Major instrumental equipment includes:

- ◆ Water analysis kit
- ◆ pH meter
- ◆ Conductivity meter
- ◆ Turbidity meter
- ◆ BOD incubator
- ◆ Flame Photometer
- ◆ Spectrophotometer
- ◆ Digital Ultrasonic Cleaner
- ◆ Digital Orbital Shaker
- ◆ LCD Digital Hot Plate with Stirrer
- ◆ Electrical Hot-air Oven

Physics Laboratory

Our physics laboratory provides hands-on learning experiences for students to explore and apply fundamental concepts in physics. Our lab allows students to engage in real-world experiments and research projects. Our dedicated faculty and staff are committed to fostering a collaborative and stimulating learning environment where students can develop critical thinking and problem-solving skills. The laboratory environment facilitates the students to engage in project-based learning, which induces a culture of innovation. Anna University, Chennai has approved the Department of Physics as a recognized Research Centre for Ph.D.

Equipment Facilities

- ◆ Ultrasonic Sonicator Bath
- ◆ Planks Constant Kit
- ◆ Ultrasonic Interferometer
- ◆ Lee's Disc Apparatus
- ◆ Spectrometer
- ◆ Travelling Microscope
- ◆ Torsion Pendulum
- ◆ Compound Pendulum
- ◆ He-Ne Laser
- ◆ Logic gate verification kit

English Laboratory

The English language lab facilitates students in enhancing their English language skills. Our lab is equipped with air-conditioned, high-performance systems. We use software recommended by Anna University, such as Globarena, Orel Talk, and Clarity, which includes audio and video lectures for professionals. The language lab helps professionals prepare for the Linguaskill examination, IELTS, and TOEFL with the assistance of qualified faculty members. Our dedicated faculty members prepare professionals for placement and incorporate soft skills through soft skill trainer. We are also an authorized center for conducting the Linguaskill examination offered by Cambridge University.

FACULTY LIST

Teaching [Chemistry]		
Name of the Faculty	Qualification	Designation
Dr.M.A.Neelakantan	M.Sc.,M.Phil.,B.Ed.,Ph.D.,	Professor & Head
Dr.S. Thalamuthu	M.Sc.,M.Phil.,Ph.D.,	Associate Professor
Dr.E.Ramachandran	M.Sc., Ph.D.,	Assistant Professor(SG)

Dr.S. Chithirai Kumar	M.Sc.,M.Phil.,Ph.D.,	Assistant Professor(SG)
Dr.B.Annaraj	M.Sc.,M.Phil.,Ph.D.,	Assistant Professor(SG)
Mr.J. Thamba	M.Sc.,M.Phil.,	Assistant Professor
Dr.B.Rajkumar	M.Sc.,M.Phil.,Ph.D.,	Assistant Professor

Teaching [Mathematics]

Dr.S.Rammurthy	M.Sc.,M.Phil.,Ph.D.,	Professor
Dr.M.A.Perumal	M.Sc.,M.Phil.,Ph.D.,	Associate Professor (SG)
Dr.S. Geetha	M.Sc.,M.Phil.,B.Ed.,Ph.D.,	Associate Professor
Dr.M.Annapoopathi	M.Sc.,M.Phil.,Ph.D.,	Assistant Professor (SG)
Ms.S.S.Basitha Parveen	M.Sc.,M.Phil.,	Assistant Professor
Mr.S.Sivabalan	M.Sc.,M.Phil.,SET	Assistant Professor
Mr.P.Ganapathy	M.Sc.,M.Phil.,	Assistant Professor
Ms.R.Premalatha	M.Sc., B.Ed.,	Assistant Professor
Ms.P.Dharani	M.Sc.,M.Phil.,	Assistant Professor
Ms.T.Kalaiselvi	M.Sc.,M.Phil.,	Assistant Professor
Dr.R.Vanalakshmi	M.Sc. M.Phil.,B.Ed.,Ph.D.,	Assistant Professor
Ms.S.Sindhumathy	M.Sc.,M.Phil.,SET	Assistant Professor
Ms.N.Angel	M.Sc.,M.Phil.,SET	Assistant Professor

Teaching [Physics]

Dr.A.Nichelson	M.Sc.,M.Phil.,Ph.D.,	Assistant Professor (SG)
Dr.A.Panimaya Valan Rakkini	M.Sc.,M.Phil.,Ph.D.,	Assistant Professor (SG)
Dr.V.Ramasubbu	M.Sc.,M.Phil.,Ph.D.,	Assistant Professor
Dr.M.Aravind	M.Sc.,Ph.D.,	Assistant Professor
Dr.M.Prabhu	M.Sc.,Ph.D.,	Assistant Professor

Teaching [English]

Ms.S.Gopiga Devi	M.A.,	Assistant Professor
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Dr.Sathish Balakumaran S.N.I	M.A.,M.Phil, Ph.D	Assistant Professor
Ms.C.Dhanshree	M.A.,NET	Assistant Professor
Dr.K.Latha	M.A., M.Phil, B.Ed.,Ph.D	Assistant Professor
Ms.B.Revathe	M.A.,NET	Assistant Professor
Mr.S.Karthik	M.A.,	Assistant Professor

Teaching [Tamil]

Dr.S.Chithra	M.A.,M.Phil,SET, Ph.D	Assistant Professor
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Soft Skill Trainer

Ms Jeba S	M.A.,MBA.,	Soft Skill Trainer
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Adjunct Faculty

Mr.R.Murali Dharan		Adjunct Faculty
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Non Teaching Staff

Mr.C.Maharaja	B.Sc.,	Lab Technician
Ms.S.Renukadevi	B.Com.,	Lab Assistant
Ms.A.Vijayarani	B.Com.,	Department Assistant
Ms.J.Kala	H.Sc.,,	Office Assistant



**K.R
INNOVATION
CENTRE**

K.R. Innovation Centre:

The K.R. Innovation Centre, established under Section 8 of the Companies Act, 2013, operates as a Special Purpose Vehicle (SPV) affiliated with National Engineering College, Kovilpatti. It serves as an overarching entity that integrates the Entrepreneurship Development Cell, NewGen Innovation and Entrepreneurship Development Centre, MSME approved Business Incubator, and Institution Innovation Cell. This integration aims to foster a culture of innovation and entrepreneurship among young individuals. Recently, with funding support from the Nidhi Scheme of the Department of Science and Technology (DST), Government of India, the center proudly launched a dedicated Inclusive Technology Business Incubator (iTBI). This incubator aims to foster the growth of innovative startups focused on the Circular Economy.

Our incubation and pre-incubation units are meticulously crafted to support startups by providing cutting-edge technical facilities. These resources facilitate the transformation of technological and business innovations into commercially viable products, preparing them for a successful market launch.

Convener:	Dr.K.Manisekar, Dean (I&E)
Chief Executive Officer:	Dr.G.Vinoth
Coordinator:	Dr.I.Sankar, Asso. Prof/Mech
Co-coordinator:	Dr.T.Sakthi, Asst. Prof.(SG)/Humn.

Members:

Dr. A. SaravanaSelvan, Asso. Prof./ECE

Dr. Raja Kumari, AP(SG)/CSE

Mr. Pradeep Raj, AP/Mech

Mr. A. Kumar, AP/EEE

Mr. P. G. Siva Sharma Karthick, AP/IT

Mr. V. Ashok Pandian, AP/Civil

Mr.S.Sivabalan, AP/Maths

Ms. Divya, AP/AIDS

Mr.Y.Jerold Jaikins, Software Engineer/KRIC

Websites:

www.necincubator.org

www.necitbi.org

Highlight of Achievements:

- ◆ NEC is ranked in the band of 101-151 among higher educational institutions in NIRF – Innovation Ranking 2023 (ARIIA)
- ◆ Innovation Cell, Ministry of Education, Govt. of India has rated Institute Innovation Council (IIC), of National Engineering College with 4 Star rating for undertaking various activities.
- ◆ K.R. Innovation Centre has been recognized as one of the Scaleup incubators of StartupTN by the StartupTN, Tamilnadu with the funding support of Rs. 5 Lakhs

Fund Sanctioned by Government Agencies:

- ◆ National Engineering College has been recommended by National Expert Advisory Committee (NEAC) to establish i-TBI, under NIDHI i-TBI program by DST, with the funding support of Rs. 488.16/- lakhs
- ◆ Received funding of ₹9 lakhs in the MSME Idea Hackathon 1.0, ₹31.75 lakhs in the MSME Idea Hackathon 2.0, and ₹39.2 lakhs in the MSME Idea Hackathon 3.0 for product development.
- ◆ Received fund of Rs.5 lakhs from Ministry of Education's Innovation Cell for product development.
- ◆ organized a four-week Technology Based Entrepreneurship Development Online Programme on Internet of Things for Healthcare, Agriculture, Smart City, Smart Home, Supply Chain and Smart Vehicle Applications from June 5th, 2023 to June 30th, 2023 with the funding support of Rs.1.6 lakhs by Department of Science and Technology, New Delhi.



**ALUMNI
ASSOCIATION**

ALUMNI ASSOCIATION

Coordinator : Dr.K.G.Srinivasagan, Dean (TCP) & HOD/ IT

Co Coordinator : Dr.D.Vigneshkumar, Associate Professor/Mechanical

Members:

Ms.J.E.Jeyanthi, AP/ECE

Ms.M.Kanthimathi, AP/CSE

Dr.P.Samuel Pakianathan, AP (SG)/EEE

Ms.V.Anitha, AP/IT

Ms..R.Harshani, AP/CIVIL

Ms.P.Rampriya AP/AI&DS


Alumni office support

Ms.P.Sugunadevi

System.Programmer

Highlights:

- ◆ The alumni chamber has been established on the campus, featuring a state-of-the-art audio / video conference facility that can accommodate 200 people. Alumni have the ability to interact with current students and faculty members and share their experiences.
- ◆ Students can access cutting edge technology through seminars, webinars, technical clubs, mentorships, and the latest developments in the industry.
- ◆ Silver Jubilee Reunion is organized every year.
- ◆ Providing financial support for creative projects and scholarships to deserving students.
- ◆ Offering employment prospects via our alumni.
- ◆ All members can access the web portal to learn about job openings and registrations made on behalf of the Alumni Association.



**CENTRAL
LIBRARY**

Central Library

The Central Library acts as the knowledge hub for all academic activities of our institution, aiming to provide a gateway to knowledge through state-of-the-art technologies. The web-based Library Integrated Automation System ensures a fully automated library, encompassing services such as e-Gate, circulation, and a web-based Online Public Access Catalog (OPAC).

The Central Library provides outstanding facilities to students and faculty members, including a vast collection of books, ample seating and reading areas, and well-organized and classified materials. The library is housed in an attractive, fully air-conditioned modern building with high-speed Wi-Fi connectivity. We follow an Open Access System to facilitate easy access to Library resources.

In addition to the well-stocked Central Library, each department has its library to facilitate easy access for faculty members, students, and research scholars.

The Central Library is dedicated to support the academic and research needs of our user community by offering top-tier facilities and resources.

The Central Library has a rich collection of 63,005 volumes of books and 25,306 titles, 1,106 reference books, 3,319 book-bank books, 6,053 Project reports, 3,476 Back volumes, 3,372 CDs and 19 Newspapers (both English & Tamil), 38 National Journals and Technical Magazines, 538 IEEE (ASPP) & Science Direct (Elsevier) online journals, 7,220 EBSCO Engineering e-Books, 77 Pearson e-Books and Institutional members of DELNET, NDLI Club, N-LIST and e-Shodh Sindhu etc. The users can have remote access in multiple e-resources within a federated single sign-on framework. The e-resources are available at <http://idp.nec.edu.in/>

About Central Library:

- ◆ The book stocking section contains a collection of textbooks and reference books as prescribed in the syllabus, along with other relevant titles.
- ◆ The periodical section, peer reviewed National Journals and Technical Magazines, available in printed form.
- ◆ The circulation section is fully computerized, providing bar-coded circulation services for issuing, returning, and renewing library documents.
- ◆ The reference section includes reference books, dictionaries, encyclopedias, directories, exam guides, standards, manuals, handbooks, proceedings, and collections of university and autonomous question paper booklets.
- ◆ Back issues of journals are bound annually and kept in the back volume section for reference purposes. These back volumes can also be borrowed by users.
- ◆ The Web OPAC (Web Online Public Access Catalogue) facilitates online search queries related to the availability of library resources, such as books, journals, CDs/DVDs, back volumes, and project reports.
[URL – <https://erp.nec.edu.in/opac/>]
- ◆ An A.V.Hall (Audio & Video Section) is available for organizing NPTEL programme, Spoken Tutorial Workshops, Seminars, Conference, Viva Voce exams and Readers Park activities.

- ◆ Reprography and printing facilities are provided for users.
- ◆ Book Bank Section caters to the needs of students who avail the post-matric scholarship offered by the Government of India. The eligible students can avail six books at a time. The books are issued for a period of one semester and to be returned at the end of the semester.
- ◆ A sufficient number of systems are available in the e-Library section with internet access to e-resources.

E - Learning Management System (e-LMS):

E-Learning encompasses research, learning, and teaching in a digital environment, offering students access to online courses complete with instructional materials, instructors' notes, course topics, and discussion forums.

The E-Learning Management System (E-LMS) provides federated search for Science Direct and IEEE online journals, NPTEL videos, open-source e-books, e-question banks, and more. Additionally, the E-LMS offers NPTEL GATE materials for ECE and CSE. Access the E-LMS.

E-Journals:

- ▶ Science Direct (Elsevier) for Engineering and Computer Science online journals: <https://www.sciencedirect.com/browse/journals-and-books>
- ▶ IEEE (ASPP) core collection of Engineering, Electronics, and Computer Science online journals: <https://ieeexplore.ieee.org>

E-Books:

- ▶ EBSCO Engineering core collections of e-books: <https://search.ebscohost.com/>
- ▶ Pearson e-books: <https://elibrary.in.pearson.com/>

Institutional Memberships:

- ▶ Institutional memberships with DELNET, NDLI Club, e-Shodh Sindhu, and N-LIST

Self-Learning & Extension Services:

Self-learning can be challenging, even for the brightest and most motivated students. It requires the development of various skills and techniques to succeed in independent study. The Central Library supports self-learning by providing access to a wide range of e-resources, study materials, and digital tools.

Additionally, our extension services include workshops, seminars, and tutorial sessions designed to enhance students' research and learning abilities through the Central Library Readers Park. The Readers Park aims to foster an environment of continuous learning and personal growth, ensuring students have the resources and support they need to excel independently.

Readers Park:

With the motive of encouraging our readers (users) and inculcating reading habits to our student's community and also in embarking the personality skills, the Central Library has established a "NEC Readers Park" in the year 2016. The main objective of this park is to encourage the users to read for pleasure, develop positive attitudes, skill and also to promote library usage.

Quality Improvement Cell (QIC):

NEC Central Library has established a Quality Improvement Cell (QIC) under the guidelines of Anna University, Chennai. Since 2014, through Quality Improvement Cell (QIC), the faculty members and students are exposed to various resources such as SWAYAM NPTEL, IIT Madras, FOSS Courses, Spoken Tutorial, IIT Bombay and other video courses etc. for the continuous improvement in Teaching and Learning processes.

SWAYAM NPTEL Local Chapter, IIT Madras:

NEC SWAYAM NPTEL Local Chapter promotes and encourages students and faculty members to attend online certification courses conducted by IITs and IISc through NPTEL. NEC associated with NPTEL IIT Madras and to take this initiative forward and to encourage more students and faculty members across the colleges to participate in the SWAYAM NPTEL online certification courses. <https://nptel.ac.in/LocalChapter/>

Academic Partner of IIT Bombay Spoken Tutorial:

NEC is an Academic Partner of IIT Bombay Spoken Tutorial. The Spoken Tutorial is an initiative of the National Mission on Education through ICT (NMEICT), Ministry of Education (formerly MHRD), Government of India, developed at IIT Bombay and to promote IT literacy through Free Open Source Software (FOSS) through audio-visual tutorials namely 'Spoken Tutorial' at <http://spoken-tutorial.org>.

Central Library General Rules:

- ▶ All the Staff and Students of NEC are members of our Library.
- ▶ Users must scan their ID card in the Gate Entry system to register their entry and exit time.
- ▶ The books should be returned on or before the due date.
- ▶ If a member lost a book, he/she should replace the book with the latest edition along with overdue charges.
- ▶ If the book is not returned by the member, then triple the cost of the book will be collected from the concerned member.
- ▶ Members are required to deposit their bags / belongings at the property counter.
- ▶ Members are required to produce their smart and Bar-Coded Membership ID Cards to the Security and Staff when asked for.
- ▶ Other than Library Books, Personal books and belongings are not permitted inside the Library.
- ▶ Silence is to be strictly observed in the library.
- ▶ The books have to be left on the reading table and not to be replaced on the shelves after reading or reference.
- ▶ Books will be lent to students only for a period of 15 days (Including Holidays).
- ▶ The (final year) students should return all the books to the library for obtaining a No dues Certificate.
- ▶ Books returned after the due date will be charged an overdue charge of Rs. 1/- per day.
- ▶ Books may be returned on all working days. Absence shall not be an excuse for any delay in returning the books.

- ▶ Library books are to be used with utmost care and to be returned without any damage.
- ▶ Damaged books shall not be accepted and it has to be properly replaced with a new book.
- ▶ The Library is under surveillance with the aid of CCTV cameras.
- ▶ Laptops are allowed inside the library for reference work.
- ▶ Underlining, scribbling and/or tearing of pages or any other type of mishandling of books and Journals etc., or misuse of computers are punishable.
- ▶ Book / Journal is brought out of the Library without proper entry, serious action will be taken.
- ▶ The competent authority will take necessary action against the users who violate the Library rules and regulations.

Working Hours:

The Central Library is kept open throughout the year except for Government Holidays:

Weekdays	08.30 a.m. to 07.30 p.m.
Sundays	09.30 a.m. to 01.00 p.m.

Borrowing Facilities:

UG Students	6 Books + 1 CD - 15 days
PG Students	6 Books + 2 CD - 15 days
Research Scholars	6 Books + 2 CD - 15 days
H.O.Ds.	10 Books + 2 CD - 15 days
Teaching Staff	6 Books + 2 CD - 15 days
Non-Teaching Staff	2 Books - 15 days

Central Library Team Members:

Name of the Faculty	Qualification	Designation
Dr. K. Karunai Raghavan	M.Com., M.L.I.Sc., M.Phil.(LIS), PGDCA., Ph.D.,	Librarian
Mr. T. Rajan	B.A., M.L.I.Sc., M.Phil.,	Assistant Librarian
Mr. S. Venkadesh Kumar	B.Sc., M.L.I.Sc.,	Library Assistant
Mr. E. Pon Antony Joseph	M.Sc., B.L.I.Sc.,	Library Assistant
Mr. L. Pathirakaliappan	B.Com.,	Assistant
Ms. M. Gurupriya	B.Sc.,	Assistant
Ms. S. Pandi Rani	B.Com.,	Assistant

Central Library


Convener

Dr.K.Karunai Raghavan

Reading is a creative, mind expanding, adventurous and exciting activity. Through reading we can experience what it is like to be somebody in a different age, culture, in a different society, another part of the world, in another time of history. Readers embark on a journey every time they open a book.

In view of encouraging our readers (users) and inculcating reading habits to our student's community and also in embarking the personality skills, the Central Library has established a "NEC Readers Park" in the year 2016. The main objective of this park is to encourage the users to read for pleasure, develop positive attitudes, skill and also to promote library usage.

Page of In order to promote reading skills of students, activities related to Readers Park are considered and incorporated as One Credit Non-CGPA Course under the allied skills category in NCG21 Co / Extra-curricular activities in current Regulations.

A stylized graphic of an electrical plug. The plug's body is a red circle with the text 'ELECTRICAL MAINTENANCE' inside. The prongs are represented by a yellow shape on the left and a blue shape on the right, both with pointed ends. The background is white with a grey dot pattern.

**ELECTRICAL
MAINTENANCE**

Electrical Maintenance

All the circuitry related tasks are integrated and brought under one umbrella to innovate, improve and maintain quality service to the academic and other day to day activities of the group of institutions. Under this scenario, the Electrical Maintenance Department has been established to maintain the Electrical systems, Networking Servers, Internet, Intranet, and Networking systems, Computer Systems (hardware & software) & Peripherals, Online UPS system, EPABX, Intercom, CCTV system, Air conditioning system and purchase of equipment and other materials related to all the above works.

Electrical System

- ◆ To provide uninterrupted and quality electrical power supply
- ◆ Erection, testing, commissioning and maintenance of electrical distribution network, cable network and equipments etc.
- ◆ Maintaining of electrical system confirming to the statutory rules of CEIG. Operation & maintenance Captive generation system.
- ◆ Energy saving & energy audit management work.

Server and Networking

Continual firewall policies configuration and maintenance of server to meet the day to day requirements of all departments 199 nos. of Wireless access point configuration and maintenance with wireless controller (Zone Director 3000). Web Server, Domain Server, Moodle Server, Storage Server & ERP Server support and maintenance. Microsoft campus agreement renewals. Network administration and maintenance through Centralized Domain Server.

Computer Systems & Peripherals and UPS system

- ◆ Adoption of innovative methods to maintain computer hardware & System software for the computers and peripherals like Printers, Scanners, Photocopy machines etc.
- ◆ Introduction of innovative methods to maintain quality online UPS and its hardware.
- ◆ Plan, coordinate, and implement computer security measures to protect data, software and hardware.

Air-conditioning system

- ◆ Design and erection of new Air conditioning arrangements.
- ◆ Operation and maintenance of all types of ACs in the entire campus.

Intercom, PA System and CC TV Maintenance

- ◆ Establishment and maintenance of EPABX exchange, intercom network, PA system, and CCTV network.

Internet Facility

24 hour internet facility has been provided to both students' hostels and college premises. ICTS centre is supported with 7 nos of HP and IBM Rack servers, 50 TB HP storage server, Sophos firewall with gateway antivirus, anti spyware, Intrusion Prevention and analyzer for monitoring, Ruckus wireless controller (Zone Director 3000), Dual band Ruckus wireless access points, Cisco 2900 series Router, 802.11b/g/n access points (Cisco, Engenius, Ubnt and Unify), HP 5510 Layer 3 manageable switch, 3 Com Layer 3 Manageable Switch and Cisco SG 300 & 350 Gigabit Switches for internet bandwidth distribution to entire campus.

The details of the internet facility on our campus are

- ◆ **310 Mbps Airtel (1:1) leased line internet connectivity**
- ◆ **155 Mbps Reliance (1:1) leased line internet connectivity**

This inexhaustible internet service is provided all the way through 2 No. of 5 KVA UPS system with 12 hours backup. The Traffic monitoring system is also instigated in ICTS round the clock. All the terminals in the college campus are connected by campus networking which has been established through fiber optic connectivity.

Wi-Fi Campus

The entire campus is Wi-Fi enabled by 199 numbers of dual band Ruckus access points with Ruckus wireless controller (Zone Director 3000) along with 465 Mbps internet connectivity to allow the students and staff to access the internet where they are. The coverage of Wi-Fi is not only restricted to class rooms, it also extends to all areas including libraries and hostels. The websites browsed by students are regularly monitored.

FACULTY LIST

Electrical		
Name of the Faculty	Qualification	Designation
Mr.R.Purushothaman	B.E., M.I.E.,	Sr. Executive
Electrical - Power System		
Mr.M.Ramesh	D.E.E.E.,	Electrician
Mr.K.Subburaj	ITI	Lab. Assistant
Mr.M.Ayyasamy	ITI	Electrician
Mr.P.Muthukkumar	ITI	Electrician
Mr.M.Petchiappan @ Babu	D.E.E.E.,	Electrician
Mr.V.Udhayakumar	D.E.E.E.,	Electrician
Mr.B.Vaigundaraja	D.E.E.E.,	Electrician

Internet, Servers, Computer Systems, Peripherals & UPS

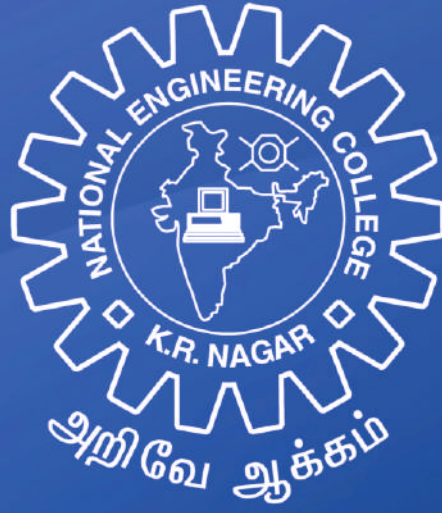
Mr.G.Mariappan	M.C.A., M.Tech.,	System Analyst
Mr.G.Ganapathy	B.E.,	Technician

Intercom, PA Systems & CCTV

Mr.C.Velayutharajan	ITI	Tradesman
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AC Systems

Mr.C.Thangamari	ITI	AC Mechanic
Mr.P.Madhukumar	ITI	AC Mechanic



Estd : 1984



4 Star



**INNOVATION BAND
101-150**



Tier - 1



'A' Grade



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