

## SAEC?







**Development Programmes** 



International / National Conferences



















## 106 FUNDED PROJECTS Value of 11.65 Crores



Overall India Ranking - INDIA TODAY



Overall champion in Anna University zone-1 sports tournaments (2023-2024)





## Best Performance Award NPTEL 2024



National Level Symposiums



## 1519 SCI/SCOPUS ARTICLES Published in International Journals



86 BOOKS
Published







FDUCATION IS
THE KINDLING
OF A FLAME AND
NOT THE FILLING
OF A VESSEL

- Socrates

#### **VISION**

To aspire excellence in Education and Research, in Engineering & Management, fostering conversion of knowledge, providing technologically sustainable solutions to industry and society adhering ethical values.

#### **MISSION**

#### 1. Education:

To facilitate professional development and active learning and accelerate Engineering and Management transition to obtain admissible solutions

#### 2. Research:

To promote innovative, resourceful techniques in Industrial collaborative research utilizing cognitive skills.

#### 3. Sustainable Solutions:

To practice high standards of ethics and create a conducive atmosphere for multi-disciplinary sustainable solutions.

#### 4. Industry and Society:

To provide the core concepts of industrial values nurturing Industry Institute Collaboration for the benefit of the student community and society.

#### QUALITY **POLICY**

- We are committed to provide Quality Education to students to acquire life skills enabling them to achieve academic and professional excellence.
- We continually motivate all our educators and support service providers for enhancing professional competencies for effective implementation of Quality Management System.



## **ABOUT** THE COLLEGE

S.A. Engineering College, named in honor of Smt. Sakunthala Ammal, the matriarch of the institution, was established by the Dharma Naidu Educational & Charitable Trust in the academic year 1998-1999. The college was founded with the vision of providing quality and affordable education to aspiring students.

Located in Thiruverkadu, Chennai, the campus offers a serene and inspiring learning environment. It is easily accessible and equipped with modern infrastructure,

■ Dedicated academic blocks for each department

State-of-the-art laboratories and workshops

Spacious and well-ventilated classrooms

including:

- Smart classrooms with LCD projectors and interactive panels
- A Media Hall for recording and broadcasting YouTube videos
- An AICTE IDEA Lab to promote innovation and prototype development
- Hygienic canteen facilities
- Extensive sports grounds
- Separate hostels for boys and girls

S.A. Engineering College fosters a world-class academic atmosphere led by highly qualified and experienced faculty, many of whom are involved in cutting-edge research and innovation. This exposure enables students to engage with emerging technologies and scientific advancements during their academic journey.

The institution stands at the forefront of technical education with its distinctive approach and commitment to excellence.

- Approved by AICTE, New Delhi
- Affiliated to Anna University, Chennai
- Recognized as an Anna University Research Centre
- ISO 9001:2015 certified by TUV NORD (formerly RWTUV)
- Accredited by the National Board of Accreditation (NBA)
- NAAC 'A' Grade Accreditation for a period of five years

The college offers a wide range of academic programs including:

- 11 Undergraduate Degree Programs (B.E. / B.Tech)
- 6 Postgraduate Degrees (M.E., MBA,
- Doctoral Research Programs (Ph.D.)

With a current annual intake of 1455 students, S.A. Engineering College continues to uphold its legacy of academic excellence and innovation.

## "ABOUT trust "

The college is managed by Dharma Naidu Educational and Charitable Trust which has members drawn from various walks of life. All these members are high achievers and intellectuals who have proven themselves in life by undertaking path breaking work, be it education or social development.

Presently the Trust consists of the following members:

D. SUDHARSSANAM Founder

D. DURAISWAMY Chairman

D. PARANTHAMAN Vice Chairman

D. DHASARATHAN Secretary

S. AMARNAATH Treasurer

S. GOPINATH Joint Secretary

S. AMARNAATH Correspondent

Dr. S. SALIVAHANAN, M.E., Ph.D., Advisor

Dr. S. RAMACHANDRAN, M.E., Ph.D., **Principal** 





#### STATE - OF - THE - ART INFRASTRUCTURE

The institute provides a technology-driven learning environment with comprehensive digital infrastructure:

- A fully Wi-Fi-enabled campus with a high-speed 1 GBPS internet connection.
- Over 1400 high-end systems protected by licensed antivirus software and advanced firewalls.
- Access to an extensive library collection, including premium digital resources such as Science Direct, IEEE Xplore, and DELNET.
- Smart classrooms and laboratories equipped with audio-visual systems, interactive boards, and industry-standard Electronic Design Automation (EDA) tools.
- Dedicated departmental facilities including research incubation cells and advanced teaching spaces.
- Industry-partnered labs including:
  - Intel IoT Lab
  - AI & ML Labs (MATLAB-supported)
  - Idea Lab for Al Innovation
  - Robotics Lab with interactive panels

### HOLISTIC LEARNING & SKILL DEVELOPMENT

The academic ecosystem promotes experiential and outcome based learning:

- Innovative Pedagogy: Project-based, lab-integrated learning aligned with the Choice-Based Credit System (CBCS) and Outcome-Based Education (OBE) frameworks.
- Practical Exposure: Through in-house projects, real-time industry projects, hackathons, internships, and certified training programs

- Online Learning Platforms: Access to global platforms such as Coursera, NPTEL, AWS Academy, CISCO, MATLAB, UDEMY, and NASSCOM FutureSkills.
- Language & Communication Training: Pearson English programs and MePro Labs enhance employability.
- Student-Driven Clubs: Al Club, Data Science Club, IoT Club, Cloud Clinic, Web Forge, Coding Club, Events Club, and Presentation Club.
- Certifications & Global Exposure: International certifications (AWS, Microsoft, Web Development), and mentoring for GRE, TOEFL, GATE, etc.
- Value-Added Courses: Offered across departments to enhance core technical competencies.
- GATE Coaching: Through in-house faculty-led YouTube lectures.
- Well-Rounded Development: Encouragement of participation in sports, yoga, cultural, and co-curricular activities.

#### **CAREER & INDUSTRY INTEGRATION**

A structured approach to bridge the gap between academics and industry:

- Strong Industry Tie-ups: Internships, live projects, and MoUs with core companies in cybersecurity, AI, and related fields.
- Placement Preparation: Through platforms like AMCAT, SkillRack, FACE Prep, and Aptitude Buster.
- Custom Training Modules: Tailored technical training and mock interview sessions.
- Career Guidance Cell: Resume building, group discussions, bootcamps, and interview readiness programs.
- Industrial Visit: Regular visits to core industries to familiarize students with current practices.
- Support for Higher Studies & Innovation: Through dedicated incubation centers and student entrepreneurship initiatives.
- Global Higher Education Awareness: Events, guest lectures, and education fairs focused on international academic opportunities.

A strong emphasis is placed on quality teaching, continuous improvement, and research excellence:

- Experiential Learning: Leveraging e-learning platforms, innovative assessments, and continuous evaluation.
- Qualified Faculty: Industry-experienced professors and Professors of Practice lead students in cutting-edge technologies.
- Faculty Development: Frequent FDPs aligned with current industry and academic trends.
- Active Research Culture: Collaborative faculty-student research, industry projects, patent filings, and publications in top-tier journals (WOS, SCI, Scopus).
- Global Collaborations: Participation in international conferences and Al-based research alliances.

#### **WORKSHOPS, SEMINARS & EVENTS**

Students regularly engage in knowledge-sharing and industry interaction:

- Key Events:
  - Explainable Al
  - Industry 5.0
  - SDG Integration in Engineering
  - AI/ML Applications in Wireless & Biomedical Systems
  - Tri-Tech Nexus 24
  - Faculty Development and Professional Programs
- Regular sessions by experts from IITs, NITs, and industry leaders.
- Hosting of IEEE-sponsored International Conferences.

### CURRICULUM AND CONTINUOUS IMPROVEMENT

- The curriculum is designed to be industry-relevant, integrating faculty mentorship, hands-on learning, and club activities to develop real-world problem-solving skills.
- Courses are periodically updated based on Board of Studies recommendations and industry inputs.
- Students undertake system development projects or industrial training in their final semester to ensure practical readiness.
- The department fosters innovation and OBE, supported by MoUs and industry linkages that enhance internship and placement opportunities.

### INSTITUTIONAL ACHIEVEMENTS & COMMITMENT

- Funded by the Centre for Rural Development and Technology, Ministry of Education, under the Unnat Bharat Abhiyan.
- Dedicated to the holistic development of students academically, professionally, and personally—preparing them to become global innovators and leaders.
- AICTE Idea Lab
- Institute Level Research Centre

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#### **COURSES** OFFERED

#### **UNDER GRADUATE PROGRAMMES**

- B.E. Civil Engineering
- B.E. Computer Science and Engineering
- B.E. CSE (Artificial Intelligence and Machine Learning)
- B.E. CSE (Cyber Security)
- B.E. Electronics and Communication Engineering
- B.E. Electronics Engineering (VLSI Design and Technology)
- B.E. Electrical and Electronics Engineering
- B.E. Mechanical Engineering
- B.Tech. Information Technology
- B.Tech. Artificial Intelligence and Data Science
- B.Tech. Computer Science and Business Systems

#### POST GRADUATE PROGRAMMES

- M.E. CAD / CAM
- M.E. Computer Science and Engineering
- M.E. Communication Systems
- M.E. Embedded System Technologies
- MCA Master of Computer Applications
- MBA Master of Business Administration

#### Ph.D. / M.S. RESEARCH PROGRAMMES

Recognized as a Research Centre for doing "Collaborative Research" & "Ph.D./M.S. (by Research) Programmes" for all the Departments.



#### **ELIGIBILITY FOR ADMISSIONS**

(1) a) Eligibility for HSC (+2) Candidates for U.G. programmes (B.E. / B.Tech.)

Candidates should have passed the H.S.C. Examination of the State Board of Higher Secondary Education of Tamil Nadu or any other Equivalent examination as approved by Anna University, Chennai

Candidates should have obtained marks as prescribed below:

A. Academic Stream	ос	ВС	MBC/DNC	SC/ST/NRI
Aggregate percentage of Marks in Mathematics, Physics & Chemistry put together	45%	40%	40%	40%
B. Vocational Stream	ос	ВС	MBC/DNC	SC/ST/NRI

b) Eligibility for Diploma holders and B.Sc. Graduates for admission directly into II year of B.E. / B.Tech Programmes (Lateral Entry)

Candidates should have passed the Diploma Examinations in appropriate branches of Engineering of the State Board of Technical Education, Tamilnadu or any other equivalent examinations and B.Sc. with maths as approved by Anna University, Chennai.

Candidates should have obtained marks as prescribed below:

Aggregate percentage of Marks in	ос	ВС	MBC/DNC	SC/ST/NRI
1 to 6 Semester put together	45%	40%	40%	40%

#### (2) Eligibility for P.G. Programmes

SI.No.	P.G. Programmes Offered	Qualifications for Admission
1	M.E CAD / CAM	B.E. / B.Tech. (Mech / Automobile / Mechatronics)
2	M.E Embedded System Technologies	B.E. (EEE / ECE / CSE / I&C / E&I) B.Tech. (IT / Electronics / Instrumentation)
3	M.E Communication Systems	B.E. / B.Tech. (ECE / Electronics)
4	M.E Computer Science and Engineering	B.E/ B.Tech (CSE / IT)
5	MCA - Master of Computer Applications	Regular: Any degree with the condition that the candidate must have studied Core Mathematics either at +2 level or Mathematics / Statistics as one of the subjects at the degree level.
		Direct 2nd Year : B.Sc. (CS / IT / SE); BCA
6	MBA - Master of Business Administration	A pass in any degree from recognized University with 10+2+3/4 years pattern.

#### "AWARDS Received,

India Today has ranked our college 107 in 2024

Times Engineering has ranked our College 30 in 2024 & 4th position in Tamilnadu

Careers 360 graded our college AAA

31st Rank in Top 170 Engineering Institutions by Times Engineering 2023.

17th Rank in Southern Region Institutions by Times Engineering 2023.

Overall champion in Anna University Zone-1 sports (2022-2023).

Anna University 6th Rank Among 60 Autonomous Engineering Colleges in Tamilnadu.

No. 1 in Chennai (Affiliated Engineering College) by Times of India 2018.

INDIA TODAY - 63rd Rank - Top 100 institutes.

OUTLOOK - 81st Rank - TN Top Professional Colleges.

CAREER 360 - Ranked AAA+ - Top Engineering Institutes

We are awarded as the "Best Private Engineering College in south India 2017" from India Excellence award presented by Shri. Prakash Javadekar Minister for Human Resource Development.

We are awarded as the Best Engineering College with Excellent faculty in Tamil Nadu at the Asian Education Summit 2016 organized by WAF New Delhi. We received the award from Smt. Smritilrani, former Minister for Human Resource Development.

One Planet Research has awarded our institution as Best Private Engineering college in Chennai and the award was presented by Honorable Shri. Sharat Yadav, Member of Parliament and the President of JanataDhal.

We are awarded as the 43rd BEST ENGINEERING COLLEGE (South Zone) Survey conducted by the WEEK-HANSA research survey and 66th rank in all India level

We are ranked as the BEST ENGINEERING COLLEGE FOR THE YEAR 2017 by the renowned Outlook at 81st position all over India and we have gained the stand as second Best Engineering College in Chennai. Competition Success Review stated as outstanding engineering college of excellence and also positioned 54th in best engineering college in Tamilnadu, Civil Services Chronicle placed us in A++ and also ranked us in top 10 in intellectual capital. Times of India ranked our college number 2 in Chennai.

We are in 34th position in the All India Level Top 100 Engineering Colleges by Higher Education survey & 20th rank in High Quality Placements Survey conducted by HIGHER EDUCATION PENJEW

We are awarded as "The Best Private Self Financing Engineering College" in Chennai, by "One planet Research Foundation".

We received "TEACHING AWARDS IN ENGINEERING" for the Department of Mechanical Engineering by Staffordshire University, UK & Education Matters.

Times of India has adjudged our Chairman as Best Edupreneurfor the year 2011 and 2012 The award was presented by his Excellency Dr. K. Rosiah, Governor of TamilNadu.

Our Director Shri. P. Venkatesh Raja is awarded with Tech Visionary Award for smart deployment of Google Apps in our college.

Business India has listed our Institute as the Best 'B' School.

This year our institution is awarded as the Best Student Branch Award from IEEE.

Lion's Club has awarded the institution as The Best Donor of Blood Donation

## "SAEC Uniqueness,

- Exceptionally Proficient Faculties
- Internship In Renowned
   Companies Peerless Program
   Structure
- Industry Institution Interaction
- Emancipation of Thoughts and Action
- Pragmatism In Learning
- Real-time and Live Projects
- Aesthetic Infrastructure
- Challenging Career Excellence
- Identifying & Instigating the Real you in you
- Meticulous Academic Learning
- ISO / NBA Designed Modules
- NAAC with 'A' Grade for 5 years
- MOOC. NPTEL and Coursera
- Research Ecosystems
- Institute Innovation Council

#### "MoUs

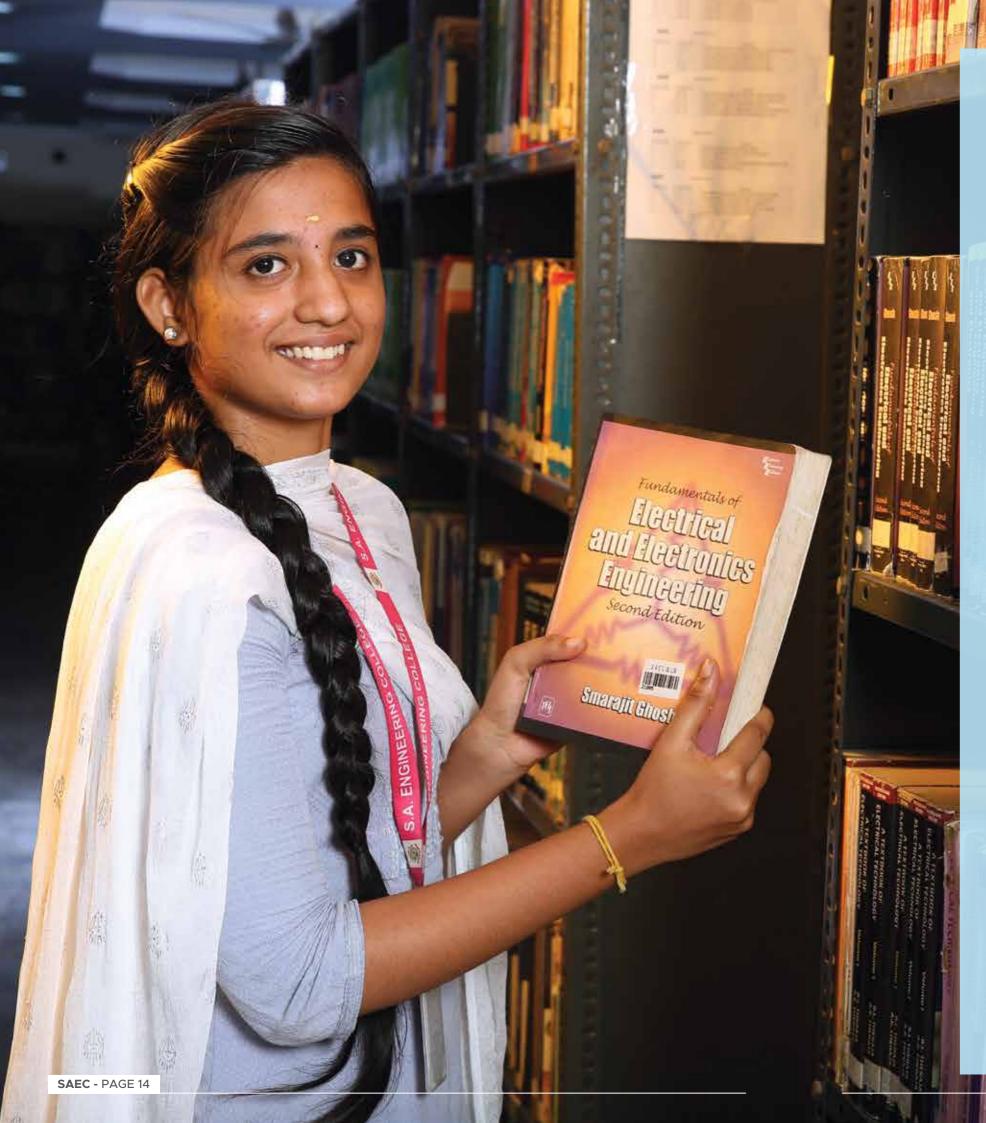
#### Signed,

- 1. SILICON S/W
- 2. IOLOGIX
- 3. ENTHU TECHNOLOGIES SOLUTIONS INDIA PVT.LTD.
- 4. IMMARTICUS LEARNING PVT LTD
- 5. GOX.AI.
- 6. SKILLACTZ
- 7. VEI TECHNOLOGIES PVT.LTD
- 8. SILICON SOFTWARE SERVICES
- 9. FIREFORT TECHNOLOGY SOLUTIONS
- 10. CELECOM SOLUTIONS GLOBAL PVT.LTD
- 11. POWER PROJECTS,
- 12. RRD CAD SOLUTIONS,
- 13. G.K.POWER EXPERTISE PVT.LTD.
- 14. COMTECH POWER SOLUTIONS
- 15. IO LOGIX AUTOMATION SOLUTIONS
- 16. SIDDHARTH FOUNDATIONS
- 17. CAPITAL MARKET SERVICES.
- 18. FINMARK TRAINERS INDIA PVT LTD
- 19. CELCOM(MCA)
- 20. V EQUAL IR
- 21. MRL TECHNOLOGIES
- 22. DIGIALTYIC TECHNOLOGIES
- 23. TRINITY SKILLWORKS
- 24. TECHGREECH CYBERLABS PRIVATE LIMITED
- 25. PEARSON INDIA EDUCATION SERVICE PVT. LTD.
- 26. PEECEE CASTLE SOFTWARE SERVICES PVT. LTD.
- 27. FOCUS 4D CARREER EDUCATION PVT. LTD.
- 28. APTITUDE BUSTER PVT. LTD
- 29. ZENARDY TECHNOLOGIES PVT. LTD
- 30. SHL(INDIA) PVT. LTD
- 31. IO LOGIX AUTOMATION SOLUTIONS
- 32. ECI SYSTEM PVT.LTD.
- 33. DYNAMIC CAD CAM CAE (MECH)
- 34. CADD CAMM SOLUTIONS

- 35. SKYRIDER AEROSOLUTIONS
- 36. CADD CENTER TRAINING SERVICE
- 37. DYNAMIC CAD CAM CAE (CIVIL)
- 38. ISTD
- 39. HOLISTIC INVESTMENT PLANNERS PVT LTD
- 40. NIDOOS (MCA)
- 41. BSNL RGMTTC
- 42. ZEUS SOLUTION
- 43. DEFSECONE CONSULTING AND TECHNOLOGIES
  PVT I TD
- 44. NATIONAL SMALL INDUSTRIES CORPORATION-TECHNICAL SERVICES CENTRE
- 45. NASSCOM / IT-ITES SECTOR SKILLS COUNCIL
- 46. NSIC NATIONAL SMALL INDUSTRIES CORPORATION LTD.
- 47. VEI TECHNOLOGIES PVT. LTD
- 48. ARJUN VISION TECH SOLUTION
- 49. MAESTRO STEEL DETAILING
- 50. JAYATHREE SOLUTIONS PVT LTD
- 51. SAKTHI TALLY ACADEMY







# LIBRARY & INFORMATION CENTRE

The Central Library is a fully automated facility powered by AutoLib Software Version 6.2 (Web-Based) – an Integrated Library Management System (ILMS). It offers a wide range of services, including e-Gate Register, Circulation, and Web OPAC, to ensure efficient access and management of resources.

The library houses a collection of 57,982 volumes and 22,452 titles, and it subscribes to 108 printed journals, 14,339 e-books, 1,934 e-journals, and 8 newspapers.

Books are classified and systematically organized following the Dewey Decimal Classification (DDC) system. The automated system enables students and staff to search for resources by Author, Title, Accession Number, Publisher, or Subject Heading, with real-time availability status.

Also, the Central Library has Digital Access and Online Facilities as follows:

- Web OPAC (Online Public Access Catalogue): Allows users to search library holdings remotely, access bibliographic details of books, journals, question papers, and e-books, and perform book renewal and reservation.
- Digital Library Section: Equipped with adequate computer systems and internet connectivity to access digital resources seamlessly.
- The library subscribes to leading digital platforms such as Elsevier (Science Direct), IEEE-ASPP online journals, DELNET, and Turnitin Originality Check.
- It is also an institutional member of the National Digital Library of India (NDLI) and provides access to NPTEL online courses.

An extensive collection of preparatory materials is available for competitive exams including TOEFL, GRE, GATE (All Branches), GMAT, JRF, CAT, Civil Services, UGC, and other Government Examinations. Printing and photocopying services are available to support academic needs.

Each academic department maintains a dedicated departmental library, well-equipped with modern documentation systems.

## TRANSPORT FACILITIES

The college has a fleet of 34 buses to transport students and staff from various parts of the city and its neighborhood areas to the college. Every student is expected to avail the transport facility to enable him/her to be punctual to the college.

Besides the regular scheduled trips, the facility is extended for occasions like special coaching classes after the college hours, visit to local Industries, NSS Camps etc.

#### "CAFETERIA"

The multi-cuisine cafeteria of the college is a two-storied building which kindles the taste sense and caters to the hunger needs of Guests, Inmates, Visitors, Staff & Students. It can accommodate 400 members to dine at a time. The cafeteria offers a wide medley of hygienic, nutritious South Indian Vegetarian and Non-vegetarian wholesome edible food. Arrangement has been made for the boys & girls to dine separately.

### "LOCATION,

The college is located on the Poonamallee – Avadi Main Road with spacious and peaceful surroundings away from the urban pollution.



### **EMPOWERING STUDENTS**



Bharat Ratna **Dr. A.P.J. Abdul Kalam,** Hon'ble former President of India

Addressed our Students on 21-08-2014







HUMANITIES & SCIENCE

With an annual intake of 1170 students in various engineering B.E. / B. Tech degree programs, the department of Humanities and Science is supported by a team of highly qualified faculty, including several Ph.D. holders, committed to delivering a well-rounded education. The department adopts an interdisciplinary approach to foster not only technical proficiency but also analytical thinking, ethical values, and effective communication skills.

Serving as the foundation of the engineering curriculum, the department plays a crucial role in identifying and nurturing the potential of first-year students, shaping them into innovative and responsible engineers.

#### LABORATORY FACILITIES

The department of Humanities and Science boasts well-established laboratories in Physics, Chemistry, and English Communication, each equipped with the latest technology and state-of-the-art infrastructure. These facilities offer hands-on learning experiences that reinforce theoretical knowledge and cultivate scientific and communication skills.

#### PHYSICS LABORATORY

- Designed to inspire curiosity and critical thinking, this lab supports both fundamental and advanced experiments in line with the curriculum.
- It encourages students to explore physical concepts through experimental investigation, fostering a deeper understanding of the subject.

#### CHEMISTRY LABORATORY

- A vibrant and well-equipped lab that enables students to apply chemical theories through modern instruments and titration techniques.
- It offers opportunities for hands-on exploration, promoting scientific inquiry and a strong grasp of chemical principles.

#### **ENGLISH LANGUAGE LABORATORY**

- This interactive lab focuses on enhancing students' communication and interpersonal skills through advanced language software, audio-visual tools, and interactive modules.
- The lab also supports aptitude training, verbal reasoning, mock interviews, and various reading and writing exercises, preparing students for career success in the global environment.





## DEPARTMENT OF MECHANICAL ENGINEERING

ESTABLISHED: 1998 | UG INTAKE: 60 | NBA ACCREDITED | RESEARCH CENTRE

The Department of Mechanical Engineering offers B.E. degree program in Mechanical Engineering, M.E. degree program in Engineering Design and Ph.D. degree program. It is supported by a team of highly qualified faculty, many of whom hold Doctorates with expertise in Friction Stir Welding, 3D Printing, Composite Materials, Electrical Discharge Machining (EDM), Tribology, and Fuel Cell Technology.

#### **HIGHLIGHTS**

- Ongoing Research Projects Funded projects worth of more than Rs. One Crore from various DST schemes.
- The Research Lab is well-equipped with Vertical Machining Center (VMC), CNC, Robot, DOBOT, 3D Printing Machines, Friction Stir Welding (FSW) machine and Coordinate Measuring Machine (CMM).

- The CAD and Mechatronics labs are set up with the latest software to enhance design and automation learning.
- The laboratories feature state-of-the-art machines such as Gear Hobbing Machine, Centreless Grinding Machine, Gear Shaping Machine, Dynamic Balancing Machine, Surface Roughness Tester, and a Steam Boiler & Turbine Test Rig.
- Faculty and students are members of professional bodies like SAE, ISTE, IEI, and ASME, fostering professional growth and networking.
- Two Centres of Excellence (CoE) for Smart Manufacturing (C-SAM) and 3D Printing.

#### **ACADEMIC LABORATORIES**

- AICTE IDEA Lab
- CAD/CAM Lab
- Metrology & Measurements Lab
- Mechatronics Lab
- Engineering Practices Lab
- Thermal Engineering Lab
- Fluid Mechanics and Machinery Lab
- Strength of Materials Lab
- Manufacturing Technology Lab
- Dynamics Lab
- Computer Aided Simulation and Analysis Lab
- Project and Research Lab

#### **VALUE ADDED COURSES**

The department offers value added courses in various domains such as Hypermesh, NX CAD, CATIA, Product development and HVAC.





DEPARTMENT OF
ELECTRONICS & COMMUNICATION
ENGINEERING

ESTABLISHED: 1998 | UG INTAKE: 180 | NBA ACCREDITED | RESEARCH CENTRE

The Department of Electronics and Communication Engineering (ECE) offers B.E. degree program in ECE, M.E. degree program in Communication Systems and Ph.D. degree program. The department is dedicated to academic excellence, innovation, and research. It is backed by highly qualified faculty, many of whom hold Doctorates in cutting-edge domains such as Signal Processing, Communication Systems, VLSI Design, RF and Electromagnetics. The curriculum integrates industry-driven learning through student-led projects, faculty mentoring, industry internships, and active participation in Technical Clubs.

#### HIGHLIGHTS

- Top Performing NPTEL Nodal Centre Excelling in online certification courses.
- Funded Research Projects Supported by ISRO, CVRDE, AICTE, TNSCST, and other prestigious organizations.
- Centre of Excellence Specializing in RF & Nano Electronics, Wireless Sensor Networks & IoT, and Product Development & Prototyping.

#### **ACADEMIC LABORATORIES**

- Analog and digital Circuits Lab
- Circuits and Simulation Integrated Lab
- Linear Integrated Circuits Lab
- Digital Lab
- Digital Signal Processing & VLSI Design Lab.
- Microprocessor & Microcontroller Lab
- Embedded system Lab
- Optical & Microwave Lab
- Communication Systems Lab
- Computer Networks Lab
- Wireless Sensor Networks and IoT Lab
- RF and Nano Electronics Lab
- Product Development and Prototyping Lab



#### **VALUE ADDED COURSES**

The department offers value added courses in various domains such as Python, RFID and NFC Technologies, Basics of C, C++ and Java, Internet of Things, LAB VIEW and PCB Design and Fabrication Technology.



ESTABLISHED: 1998 | UG INTAKE: 300 | NBA ACCREDITED | RESEARCH CENTRE

The Department of Computer Science and Engineering (CSE) offers B.E. degree program in CSE, M.E. degree program in CSE and Ph.D. degree program. The department is committed to quality education and cutting edge research, fostering innovation in technology. It has Ph.D. qualified and industry certified faculty specialized in Programming, Data Structures, Cloud Computing, Machine Learning, and Cyber security, ensuring a dynamic and industry relevant learning experience.

The flexible choice based curriculum blends industry aligned learning with hands-on projects, internships, Problem-Solving & Soft Skills empowers students with career-ready expertise to excel in today's dynamic technical landscape.

#### HIGHLIGHTS

- Accredited by the National Board of Accreditation (NBA) since 2008.
- Permanent affiliation received from Anna University, Chennai
- Recipient of the Best Accredited Student Branch Award from IEEE and CSI.
- Recognized as a top Performing NPTEL Nodal Centre, excelling in online certification courses.
- CISCO Networking Academy Recognized as a Top Performing Nodal Centre.
- Recipient of the top Performing Nodal Centre from Amrita Virtual Lab (IITs).
- Highly qualified, research-active faculty with specializations across domains and industry-certified training from Infosys, Wipro, and IBM-Kyndryl.

- Signed MoUs with government bodies like NSIC, NASSCOM, MSME and private organizations including Infosys, Movate, GoXAI, Pearson India, Hexaware, Zoho, Amazon Web Services.
- Conducted Global Certification Programs in collaboration with Zoho (Low-Code/No-Code), Kyndryl (Cloud), Infosys Springboard, Wipro, NASSCOM, AWS, NSIC, MSME, Hexaware, and Aspire Systems.
- Sponsored funded projects from reputed organizations such as DST, CVRDE, AICTE, MeitY, IEEE and CSI

#### **ACADEMIC LABORATORIES**

- Programming Lab
- Data Structures and Algorithms Lab
- Object Oriented Programming Lab
- Design and Analysis of Algorithms Lab
- Database Management Systems Lab
- Operating Systems Lab
- Internet Programming Lab

- Network and Security Lab
- Cloud Computing Lab
- Machine Learning Lab
- Professional and Career Development Lab
- Advanced Coding Skills and Value Added Course Laboratories
- Mini Project & Capstone Project Lab

#### **VALUE ADDED COURSES**

The department offers value added courses beyond the curriculum in the technologies such as Full Stack Programming, Python with MongoDB, PHP, UI/UX, Cyber Security, Mendix and Kotlin Programming.

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The Department of Civil Engineering offers B.E. degree program in Civil Engineering. The department has steadily evolved into a center of excellence, committed to delivering high-quality technical education. With a dedicated team of versatile faculty members specializing in various subfields of civil engineering, the department ensures a rich and diverse learning experience for students.

The department has state-of-the-art facilities, which include seven fully-equipped laboratories, a comprehensive department library, an exclusive seminar hall, and smart classrooms. These resources meet the rigorous standards prerequisite for undergraduate education, promote research publication, and support consultancy services.

#### HIGHLIGHTS

- Secured funding from the Department of Science and Technology (DST), Ministry of Science and Technology under the Big Data Analytics
   Hyperspectral Remote Sensing (BDA-HSRS) scheme.
- Obtained event grants from various Central and State Government organizations, along with consultancy works.
- Students are encouraged to actively participate in student chapters of professional bodies such as ISTE and ICI, fostering technical and leadership growth through guest lectures, workshops, and paper presentations.
- All faculty members are affiliated with prestigious professional organizations like ICI, ISTE, and IAENG.
- Committed to promote ethical practices, environmental consciousness, and human relations in the realm of Civil Engineering.

#### **ACADEMIC LABORATORIES**

The department is equipped with extensive, advanced laboratories that support both academic and research activities:

- Computer-Aided Designing and Drafting Lab
- Concrete & Highway Engineering Lab
- Environmental Engineering Lab
- Hydraulics Engineering Lab
- Soil Mechanics Lab
- Strength of Materials Lab
- Survey Lab

#### **VALUE ADDED COURSES**

The department offers the following value-added courses such as ETABS, 3D Modelling & BIM, Oracle Primavera, GIS, STAAD Pro and TEKLA.



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ESTABLISHED: 2021 | UG INTAKE: 120 | RESEARCH CENTRE

The department of Artificial Intelligence & Data Science offers B.Tech. Degree program in AI & DS. The department facilitates a vibrant array of activities designed to enrich the academic journey and foster Hands-on learning experience. Collaborative learning environments and peer-to-peer knowledge sharing form the foundation of pedagogy, enhancing critical thinking and problem-solving abilities. It has Ph.D. qualified and industry certified faculty specialized in Programming, Data Structures, Cloud Computing, Machine Learning, and Cyber security, ensuring a dynamic and industry-relevant learning experience.

#### **HIGHLIGHTS**

Students also undergo various Certification courses like INFOSYS SPRING BOARD, AR&VR, MATLAB, WIPRO TALENT NEXT and more.

- To gain the industrial knowledge, the students visit industries such as CDAC (Centre for Development of Advanced Computing) and STPI (Software Technology Parks of India).
- Workshops in Bootcamp on Cloud Computing Technologies- CDAC, KNIME Technology, TABLEAU and POWER BI.
- Al research labs with computing facilities (NVIDIA GPUs, High Computing Servers).
- Al and Data Science clubs for hands-on learning.
- Hackathons, AI competitions, and innovation hubs.
- Learning through Industrial Experience such as MSME Internships, L&T and various other companies.
- Al labs, supercomputing facilities, smart classrooms

#### **ACADEMIC LABORATORIES**

- Programming and Problem-Solving Lab
- Artificial Intelligence Lab
- Machine Learning Lab
- Deep Learning Lab
- Data Science and Big Data Analytics Lab
- Cloud Computing Lab
- Data Visualization and Business Intelligence Lab
- Internet of Things (IoT) and Al Integration Lab
- Research and Innovation Lab

#### **VALUE ADDED COURSES**

The department offers the value added courses in various domains like MONGO DB, Virtual Labs, MATLAB, ORACLE Academy and Kotlin Programming.







ESTABLISHED: 2023 | UG INTAKE: 60 | RESEARCH CENTRE

The Department of Computer Science and Engineering (Cyber Security) offers B.E. Degree program in CSE (Cyber Security). It is renowned for its commitment to quality education. Built on a foundation of innovation and excellence, this new stream aims to shape the next generation of cyber defenders in an increasingly digital world. The department has highly qualified faculty members with expertise in the field of Cyber Security, Software Security, Ethical Hacking, Machine Learning, Programming, and Data Structures.

The department delivers a future-focused curriculum with core strengths in Cyber Security, Software Security and Ethical Hacking. The flexible, choice-based learning model blends hands-on projects, internships, and problem-solving experiences with key soft skills, equipping students with the practical expertise and confidence to excel in today's fast-moving digital cyber world.

#### **ACADEMIC LABORATORIES**

- Data Structures Lab
- Object Oriented Programming Lab
- Database Management Systems and Security Lab
- Operating Systems and Security Lab
- Cyber Forencis Lab
- Cryptography and Information Security Lab
- Artificial Intelligence and Machine Learning Lab
- Professional and Career Development Lab
- Advanced Coding Skills and Value Added Course
   Laboratories
- Mini Project & Capstone Project Lab

#### **VALUE ADDED COURSES**

The department offers value added courses beyond the curriculum in the technologies such as Full Stack Programming, UI/UX, Operating system security, Database Security and Kotlin Programming.

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**VLSI DESIGN & TECHNOLOGY** 

ESTABLISHED: 2023 | UG INTAKE: 60 | RESEARCH CENTRE

The Department of VLSI Design & Technology offers a B.E. degree program in VLSI to prepare professionals for successful careers in the semiconductor industry. The program emphasizes the development of interdisciplinary skills, encourages research and innovation, and provides extensive hands-on experience. It fosters strong industry collaboration, opens diverse career pathways, and aims to maintain global competitiveness in the fields of technology and engineering.

The department is supported by a team of highly qualified and experienced faculty members with expertise in VLSI design, embedded systems, semiconductor technology, and related domains, ensuring quality education and mentorship.

#### HIGHLIGHTS

Software used in VLSI to meet Industry Requirements:

- Xilinx Vivado To meet design goals for performance, utilization and power.
- Candence Designing and testing of System on chip and Integrated Circuits.
- CST Designing Antenna applications.
- Edwin XP Testing and verification of Analog Circuits.

#### **ACADEMIC LABORATORIES**

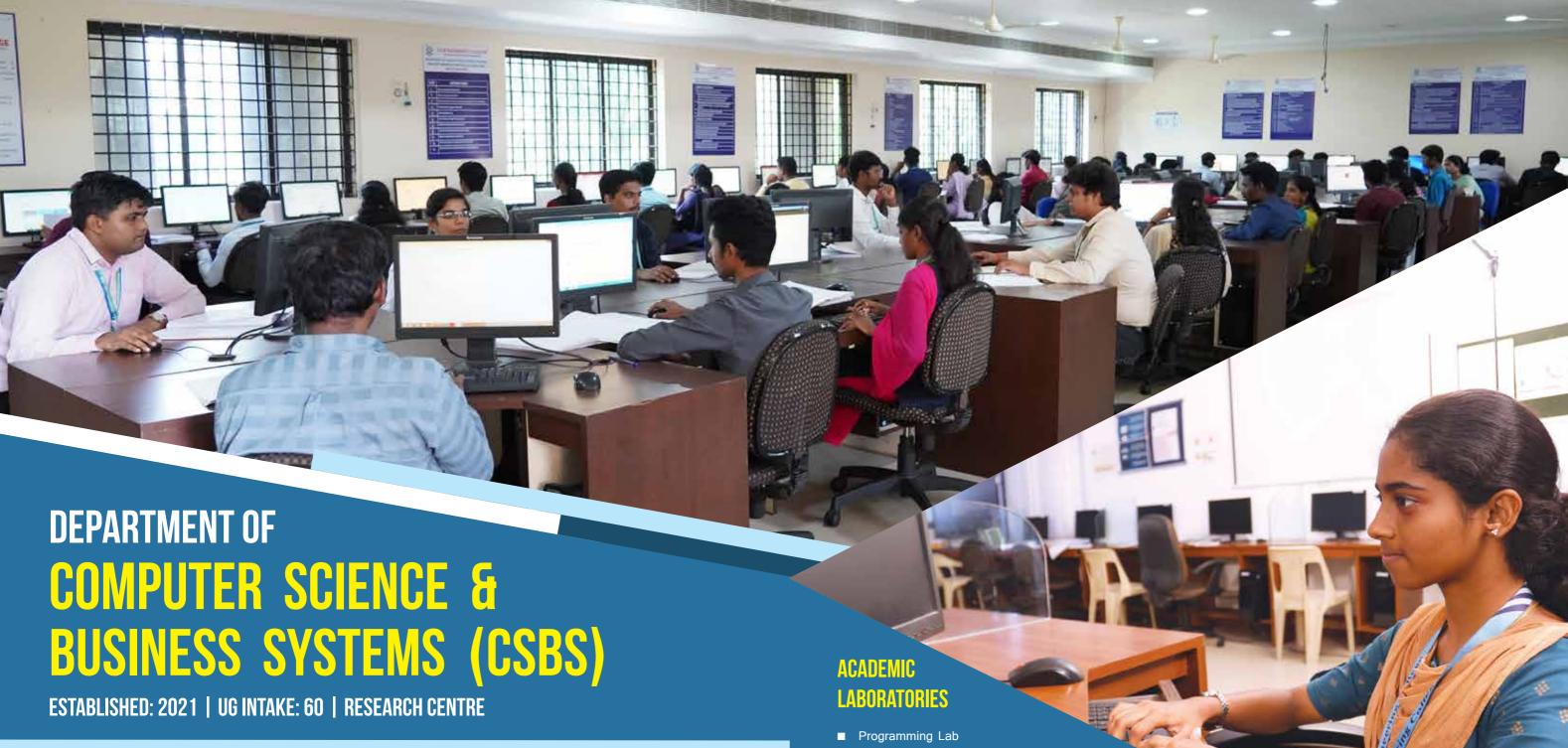
- Digital System Design Lab
- VLSI Design Lab
- Analog VLSI Design Lab
- VLSI Physical Design Lab
- FPGA-Based System Design Lab
- VLSI Verification Lab
- ASIC Design Lab
- Semiconductor Device Modeling Lab
- Embedded System and VLSI Integration Lab
- EDA Tools and Simulation Lab

#### **VALUE ADDED COURSES**

The department offers value added courses in various domains such as PCB Design and Fabrication Technology, and Python Module



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The Department of B.Tech Computer Science and Business Systems (CSBS) offers B.Tech degree program in CSBS. The department is designed to bridge the gap between cutting-edge technology and modern business practices. This unique program blends core computer science principles with business systems, ensuring graduates are industry-ready for both Tech and Business domains. The department has highly qualified and experienced faculty, and strong industry collaborations.

#### **HIGHLIGHTS**

Software used in VLSI to meet Industry Requirements:

Student involvement in Hackathons, Al competitions, innovation hubs, Al symposia and technical events. Students also undergo various Certification courses like INFOSYS SPRING BOARD, AR&VR, MATLAB, WIPRO TALENT NEXT and more.

The curriculum is structured to provide comprehensive exposure to:

- Emerging Technologies: Analytics, Deep Learning, Machine Learning, Cloud Computing, Block chain, Internet of Things (IoT), and Cyber security.
- Modern Approaches: Design Thinking, Sustainable Practices.
- Holistic Development: Emphasis on Humanities, Ethics, and Value-Added Courses.

- Operating Systems Lab
- Design and Analysis of Algorithm Lab
- Design Thinking and Innovation Lab
- Relational Database Management Lab
- Software Engineering Lab
- Business Analytics Lab
- Web Technologies Lab
- Digital Marketing Lab
- Computer Networks Lab
- Business Communication Lab

■ Machine Learning Lab

- Cloud Computing and Virtualization Lab
- Security Lab
- Enterprise Resource Planning (ERP) Lab

#### **VALUE ADDED COURSES**

The department offers value added courses in various domain Blockchain Technology, Java Full Stack, Development and Kotlin Programming.

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ESTABLISHED: 2022 | UG INTAKE: 60 | RESEARCH CENTRE

The Department of Computer Science and Engineering (Artificial Intelligence & Machine Learning) offers B.E. degree program in CSE (AIML). The department is a vibrant hub of innovation and excellence and is dedicated to shaping future-ready professionals equipped to lead the age of Al. With a curriculum that bridges theory and practice, and a focus on real-world applications in Al, ML, and Data Science, the department empowers students with the knowledge and skills needed to thrive in a rapidly evolving technological landscape.

Backed by highly qualified and experienced faculty, strong industry collaborations, and modern infrastructure, the department provides an ideal environment for learning, innovation, and research.

#### HIGHLIGHTS

- State-of-the-art smart classrooms and AI simulation tools.
- Student involvement in Hackathons, AI competitions, innovation hubs, AI symposia and technical events.
- Students also undergo various Certification courses like INFOSYS SPRING BOARD, AR&VR, MATLAB, WIPRO TALENT NEXT and more.
- Learning through Industrial Experience such as MSME Internships, L&T and various other companies.

#### **ACADEMIC LABORATORIES**

- Al & ML Simulation Lab
- Data Science & Analytics Lab
- IOT and Embedded Systems Lab
- Natural Language Processing & Generative Al Lab
- Virtual Labs & Remote Access Lab
- Computer Vision and Image Processing Lab
- Deep Learning Lab
- Reinforcement Learning Lab

#### **VALUE ADDED COURSES**

The department offers value added courses beyond the curriculum in the technologies such as Full Stack Development, and Kotlin Programming.



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ESTABLISHED: 2001 | UG INTAKE: 120 | NBA ACCREDITED | RESEARCH CENTRE

The Department of Electrical and Electronics Engineering offers B.E. degree program in EEE, M.E. degree program in Embedded System Technologies and Ph.D. degree program. The department is supported by a team of dedicated and highly qualified faculty members, with expertise across various domains of EEE. The faculty and students are actively involved in cutting edge research.

#### HIGHLIGHTS

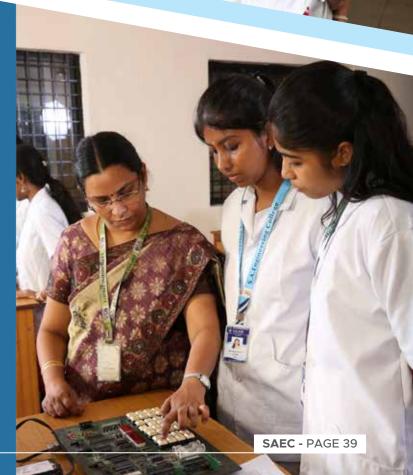
- An Industrial Automation Centre of Excellence has been functioning successfully, bridging academia and industry.
- Faculty and students actively participate in professional societies like IEEE, ISTE, and IAENG.
- Consultancy services provided using Fluke 435 S-II Power Quality Analyzer, supporting industrial and institutional power quality analysis.

#### **ACADEMIC LABORATORIES**

- Electrical Machines Lab
- Electric Circuits Lab
- Control and Instrumentation Lab
- Linear and Digital Integrated Circuits Lab
- Power System Simulations Lab
- Power Electronics and Drives Lab
- Engineering Practices Lab
- Embedded Systems Lab
- Electronics Lab
- Microprocessor and Microcontroller Lab
- Renewable Energy Sources Lab
- Research & Development Lab

#### **VALUE ADDED COURSES**

The department offers value added courses in various domains such as Industrial IOT, ETAP & PSCAD, Battery Management System and Electric Vehicle Technology.





ESTABLISHED: 1998 | UG INTAKE: 60 | NBA ACCREDITED | RESEARCH CENTRE

The Department of Information Technology offers B.Tech. Degree program in Information Technology (IT). The department is equipped with state-of-the-art laboratories and it is led by highly qualified and experienced faculty members, ensuring a dynamic and industry relevant learning experience.

The department has received prestigious recognitions from CSI, IEEE, and ACM for its professional society activities

#### **HIGHLIGHTS**

- Received funding from DST-FIST for research in emerging areas, along with additional funding from ICMR & AICTE for organizing Faculty Development Programs (FDPs), Workshops, and Seminars.
- Received funding from IEEE Computer Society & IEEE Madras Section to host IEEE Computer Society Day and conduct a 6-Day FDP.
- Professional Memberships Faculty and students actively participate in IEEE, IEI, CSI, ISTE, ACM, IAENG, ISOC, etc.
- Technical Symposium "DESPOTIX" is annually conducted, serving as a platform for students to showcase their technical expertise through various competitions and events.

#### **ACADEMIC LABORATORIES**

- Web Technology Lab
- Mobile Application Development Lab
- Operating System Lab
- Data Structures Lab
- Cloud Computing Lab
- Machine Learning Lab
- Object-Oriented Analysis and Design Lab
- Problem Solving and C Programming Lab
- Database Management Systems Lab
- Problem Solving and Python Lab
- Networks Lab
- Information Technology Essentials Lab
- Design and Analysis of Algorithms Lab
- Data Analytics Lab

#### **VALUE ADDED COURSES**

- Big Data Analytics (SQL, Hive, Hadoop, Pig, SQOOP ETL, HBase, Spark, Kafka)
- Full Stack Web Development (Client and Server-side technologies)
- Drone Technology
- Kotlin Programming
- Cyber Security
- Cloud and System Engineering (AWS, Linux)
- Software Testing (Selenium, Robot Framework on Java)

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**DEPARTMENT OF** 

## MASTER OF COMPUTER APPLICATIONS (MCA)

ESTABLISHED: 1999 | PG INTAKE: 60 | RESEARCH CENTRE

The Department of Master of Computer Applications offers a two year full time PG degree program in MCA. The department aims to provide quality education in the field of Computer Science. With a strong focus on academic excellence, practical skills, and industry relevance, it is equipped with state-of-theart infrastructure to support teaching, learning, and research.

The MCA degree program is designed to provide comprehensive knowledge and practical training in Computer Science, Mathematics, and Computer Applications.

#### **HIGHLIGHTS**

- Modern labs, computing resources, High-performance servers and workstations for computationally intensive tasks
- Access to latest tools, technologies, and platforms
- Fully equipped laboratories with advanced hardware and software
- Access to multiple operating systems (Windows, Linux) for broader exposure
- Regular hands-on sessions to support lab and project-based learning

#### **ACADEMIC LABORATORIES**

- Python Programming Lab
- Advanced data structures and Algorithms Lab
- Communication Skill Lab
- Artificial Intelligence and Machine Learning Lab
- Full Stack Development Lab
- Technical Seminar
- Data Science Lab
- Internet of Things Lab
- Project Lab

#### **VALUE ADDED COURSES**

The department offers value added courses in various domains like Kotlin Programming, React Native and Full Stack Development.





## DEPARTMENT OF MANAGEMENT STUDIES — MBA

ESTABLISHED: 2005 | PG INTAKE: 180 | NBA ACCREDITED | RESEARCH CENTRE

#### **PROGRAM ATTRIBUTES**

The Department of Management Studies offers a two-year full-time PG degree program in MBA designed with an industry-relevant curriculum to prepare students for real-world business challenges. The program emphasizes creativity, innovation, and professional development, aiming to nurture students into industry-ready professionals. The department is equipped with state-of-the-art infrastructure, including fully air conditioned smart classrooms, an exclusive conference hall, a dedicated meeting room, and a well-furnished seminar hall, providing an ideal environment for academic and professional growth.

#### **KEY FEATURES**

- Dual specialization options
- Corporate connect through incubation projects and internships
- Industry-aligned projects with real-world relevance
- Summer internship programs
- Case study-based learning methodology
- Exposure to market study, organizational study, research study and seminars.
- Value-added courses tailored to meet industry demands
- Management Development Programs (MDPs), workshops and guest lectures aligned with industry practices

■ 100+ Industry-interactive events with top MNCs

- Entrepreneurship Development Cell (EDC) offering mentorship and funding support
- Professional body memberships and institutional affiliations

#### **ELECTIVE SPECIALIZATIONS OFFERED**

- Finance
- Marketing
- Human Resource
- Operations
- Business analytics and systems
- Logistics

#### **UNIQUE SELLING PROPOSITION (USP)**

- Opportunities for International value addition
- Individual student subscriptions to Business Standard (E-paper) and Economic Times
- Management clubs for practical learning in various domains such as HR, Finance, Retail & E-Commerce, Operations, Business analytics
- Industrial visits, MDPs, Guest lectures, National conferences and International talks in collaboration with: MMA, ISTD, NIPM, IIMM, Business Standard and CII
- Exclusive placement training focusing on: Presentation skills, group discussion, interview techniques, aptitude and management skills.
- Industrial visits to top Companies such as: Lenovo, Adhani Port, Easun MR, Grundfos, Hyundai, Aavin, Infosys, TVS

- Classes are delivered using Al-enabled power point presentations, Audio-visual aids and Case study-based Instruction
- Ranked among the Best B-Schools in Business Standard Survey (2021 & 2022)

#### **AVAILABILITY OF E-LEARNING FACILITIES**

- Prowess
- Industry Outlook
- Digital CFO
- Tax Management India
- TABLEAU
- R-Language
- Traders Cockpit
- Spider
- NDLI

#### **VALUE ADDED COURSES**

- Financial Innovation and AI in Financial Market
- HR Analytics Power BI and TABLEAU
- Logistics & Supply chain Management
- Capital Market Professional in BFSI (Banking, Financial Services & Insurance) Domain.

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DEPARTMENT OF PG STUDIES

IN ENGINEERING M.E. PROGRAMME

ESTABLISHED: 1999 | PG INTAKE: 45 | RESEARCH CENTRE

- To provide every student with a strong conceptual foundation in the core areas.
- To familiarize students with the latest software and programming tools.
- To provide students with hands-on engineering experience through laboratory courses and project.
- To train the students to focus more on research work in core areas and to publish papers in International journals.

#### **ACADEMIC LABORATORIES**

- Advanced Operating Systems lab
- Network Design Lab
- Advanced Data Structures Lab
- Advanced Database Lab
- Innovative System Design Lab
- Embedded Systems Lab
- Communication Systems Lab
- Power Electronics Lab
- CAD/CAM Lab

#### **CUTTING EDGE FACILITIES**

- Separate seminar hall with Smart board and LCD projector which can accommodate 100 students.
- Full-fledged commodious classrooms.
- Eminent distinguished experts to handle the papers.
- Students are guided using the prolific software to pursue with their projects effectively.

#### M.E. DEGREE PROGRAMME

- M.E. (CAD / CAM)
- M.E. (COMMUNICATION SYSTEMS)
- M.E. (COMPUTER SCIENCE AND ENGINEERING)
- M.E. (EMBEDDED SYSTEMS TECHNOLOGIES)





DEPARTMENT OF PHYSICAL EDUCATION

The Department of Physical Education at the institute plays a vital role in promoting physical fitness, teamwork, and sportsmanship among students. The college is well equipped with excellent facilities to support a wide range of sports and physical activities.

#### **FACILITIES AVAILABLE**

OUTDOOR GAMES

Volleyball, Ball Badminton, Basketball, Tennis, Football, and Cricket

■ INDOOR GAMES

Table Tennis, Chess, and Carrom

■ FITNESS

Separate Gym facilities for Boys and Girls equipped with modern fitness equipment.

#### **ACHIEVEMENTS**

S.A. Engineering College has demonstrated exceptional performance in sports and athletics, securing the Overall Championship in Anna University Zone 1 for three consecutive years.

### PARTICIPATION IN HIGHER-LEVEL TOURNAMENTS

Our students have also showcased their talents in prestigious tournaments including

- Anna University Inter-Zonal Competitions
- All India Inter-University Championships
- Tamil Nadu Chief Minister's Trophy Tournaments
- Open Tournaments

ANNA UNIVERSITY ZONE 1 TOURNAMENTS (2024-25)					
S.No.	Event	Category	Position		
1	Chess	Women	Winner		
2	Football	Men	Runner		
3	Basketball	Men	Winner		
4	Cricket	Men	Winner		
5	Badminton	Women	Winner		
6	Ball Badminton	Men	Winner		
7	Ball Badminton	Women	Winner		
8	Basketball	Women	Third Place		
9	Handball	Men	Third Place		
10	Table Tennis	Men	Runner		
11	Table Tennis	Women	Runner		
12	Hockey	Men	Winner		
13	Tennis	Men	Winner		
14	Athletics	Women	Winner		
15	Athletics	Men	Third Place		

Their consistent participation and victories in these events highlight the department's commitment to nurturing athletic talent and promoting excellence in sports.



comprehensive placement support alongside academics. With consistently excellent placement records, SAEC is a top choice for recruiters across IT, core engineering, and multinational firms. It is ensured that the students are industry-ready through targeted technical and soft skill training, maximizing employability and ensuring no talent goes unnoticed.

Every year around 90% of the eligible students are placed through Campus interviews in the leading Multinational companies.

#### **KEY FEATURES**

- Dream & Super Dream Offers
- Top placements in IT product and services companies
- Core engineering placements
- Internship opportunities
- Expert-led training, technical sessions, and workshops

#### TRAINING METHODOLOGY

Training at SAEC is driven by a Pre Training Analysis, identifying individual needs through assessments and aligning them with industry expectations using the skillwill matrix. Key interventions include:

- Product Fit & Service Fit Training
- Company-specific training (Quant & Verbal)
- Career Counseling
- Communication & Soft Skills Development
- Resume Building

#### **BEYOND PLACEMENTS**

- Entrepreneurship Development: Motivational drives, EDPs, and institutional collaborations encourage entrepreneurial thinking.
- Higher Education: Global exposure through international programs and education fairs across
- Centre for Foreign Language: Year-round foreign language training prepares students for global careers.

SAEC offers industry-specific certifications that validate specialized skills and enhance career prospects for students and professionals.

kyndryl	Cloud Certifications	aspire 🔇	Dot Net Training For Campus Selects	
Infosys Springboard	Digital Certifications On Emerging Technologies	Pearson	Communication Skill Training With Certifications By Pearson Mepro (Mentor-mentee Model)	
wipro))	Wipro certified faculty training for our faculty members	Skill Rock	Technical Training & Programming Skill By	
HEXAWARE	Hexaware Segue Training For Campus	- Saminoca	Skill Rack. (Mentor-mentee Model)	
	Python, IoT, AIML Certifications	AB Aptitude Buston	Aptitude Training & Practising For Analytical & Logical Skills. (Mentor-mentee Model)	
DY TOTAL SERVICE OF THE SERVICE OF T	Technical Skill Certification		Low Code No Code Certification	
nasscom	Future Skill Prime Certification	aws	Global Certifications	

#### **INDUSTRY COLLABORATIONS & MOUS**





## TRAINING & PLACEMENT

#### TRAINING METHODOLOGY

#### **FIRST YEAR**

#### PERSONALITY DEVELOPMENT

- Goal Setting and Career Awareness
- Confidence Building
- Team Building & Leadership
- Self Realication

#### **SPOKEN ENGLISH**

- Sentence Construction
- Pronunciatin workshop and drills
- Applied Grammer

#### FOREIGN LANGUAGE

- Japanese
- German■ French
- Mandarin

#### **SECOND YEAR**

#### PERSONALITY DEVELOPMENT

- Interpersonal Skills
- Public SpeakingCommunication Skills
- Presentation Skills
- VERBAL ABILITY

#### VEHDAL ADILLI

- Fundamentals of Grammar
- Prart of Speech
- ArticlesTenses
- Active/Passive Voice
- Idioms & Phrasal Verbs

#### APTITUDE

- Introduction to Quantitative Aptitude
- Real Life Application of Quantitative Aptitude
- Puzzles

#### THIRD YEAR

#### PERSONALITY DEVELOPMENT

- Self Introduction
- Resume Preparation
- Group Discussion
- Organizational Communication and Etiquetters

#### TECHNICAL TRAINING

- Full Stack Development
- Power BI, Python, .NET, Java, IoT, AIML Certifications
- Low Code No Code, Embedded Systems, AWS
- Auto Cad, Embedded Systems

#### **TRAININGS**

- Product Fit Training
- Service Fit Training
- Amcat Assessment I

#### **FINAL YEAR**

#### INTERVIEW READINESS PROGRAMME

- Interview Skills
- Personal Grooming & effectiveness
- Mock Interview
- Mock Group Discussion

#### PROBLEM SOLVING SKILL DEVELOPMENT

- Exhaustive understanding of all the quantitative topics apro pos real life examples pertain ing to the subject.
- Regular Assessments
- Understanding the gaps & Action plans with respect to the same

#### **COMPANY-SPECIFIC TRANINING**

 CTS, TCS, TECH MAHINDRA, HEXAWARE, KYNDRL

### ASSESSMENT & KNOWLEDGE PARTNERS





#### **OUR PRESTIGIOUS RECRUITERS**

ZOHO	amazon	AVASOFT SHAPING NEXT DEN	<b>Kaar</b>	Capgemini	Tech Mahindra	wipro	kyndryl	Dalmia	konrad
virtusa   POLARIS	asp <u>ire</u>	NTT DATA	CONSULTANCY SERVICES	€ cognizant	Z Calibraint	WSTGlobal <sup>*</sup>	<b>EASUN</b> MR	FORBES CONSULTING	CCRAFT
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intellect*	EMERSON	REVATURE	Johnson 📤	& Weblesk	Clarium	<b></b> tevatel	ELIBOR BOUTTON BRUINGL	SHIV	<b>ETERNA</b>

# STUDENTS PROMOTIONAL & ENRICHMENT CENTRES

## STUDENT EMPOWERMENT WING

- Centre for Placement & Training.
- Centre for Career Development
- Centre for Industry Institute Interaction
- Centre for Learning Excellence (CLx)
- Advisory Bureau for Higher Studies





#### PROFESSIONAL EMPOWERMENT WING

■ Centre for Professional Societies



#### STUDENT ACTIVITY CENTRES

- Centre for Innovation,
  - Promotion & Entrepreneurship Development
- Centre for Intellectual Property
- Legal Cell
- Centre for Human Rights
- Centre for Social Services
- Centre for Consumer Affairs
- Centre for Environmental Awareness

- Centre for Professional Counseling
- Centre for Women Empowerment
- Centre for Health Care
- Yoga Centre
- Alumni Association
- Department of Physical Education
- Student Co-operative Stores
- Centre for Skill Development

#### **QUALITY IMPROVEMENT WING**

- Centre for Research
- Approval, Affiliation, Accreditation and Quality Assurance Cell
- Central Computing Centre
- Department of Library and Information Centre



#### **CLUB ASSOCIATION**

- Aptitude & Language Enhancement Club
- Literary Club
- Entrepreneurship Club
- Women Empowerment Club
- Quiz Club
- Competitive Exam Preparation
- Al Club
- loT Club

- Web Designing Club
- Association of Electrical & Electronics Engineering
- App Club
- Robotics Club
- Presentation Club
- Association of Electronics & Communication Engineering

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## COLLEGE RULES & REGULATIONS

- College timings are from 8.30 a.m. to 04.05 p.m.
- Students should be regular and punctual to the
- Students should be seated in the lecture halls five minutes before the commencement of classes.
- Students should maintain perfect order and strict silence inside the lecture halls, laboratories and workshops.
- Observation notebooks should be brought to the laboratory classes. Record of experiments done in a particular class should be submitted in the next laboratory / workshop class.
- Assignments given to the students should be submitted before the due date for consideration of Internal assessment marks.

- A minimum of 85% attendance in each semester is insisted.
- Students should get prior written permission before availing leave. Failure in this respect will be informed to the parents.
- All boys should wear only formal dresses with shoes. All girls should wear salwar or sarees.
- Each student should wear Identity Card inside the college campus.
- The students should attend the laboratory/workshop classes with the specified uniforms.
- The student will be attached to a class counselor and the counselor will advise the students on academic, cocurricular and extra curricular activities.

The following tests are conducted in each semester and the results are communicated to the parents.

S.No.	Test / Exam	Portions
1	Internal Assessment - 1	Unit I, II & III (First half)
2	Internal Assessment - 2	Unit III (2nd half), IV & V

The internal assessment marks will be calculated strictly based on the percentage of marks scored by the students in the above tests/examinations.

- Students should attend all tests and show good academic progress. Regularity in writing the tests / exams and satisfactory performance of students in tests/exams are essential to enable the students to earn satisfactory conduct certificate at the end of the programme.
- Usage of mobile phones is strictly prohibited inside the College Campus.
- Any student found indulging in malpractice in the tests/exams would be debarred for the rest of the tests/examinations. Any case of malpractice in the University examinations will be reported to the University.
- Ragging and eve-teasing in the college campus and hostel premises are banned as per the order of Govt. of Tamil Nadu. Indulging in ragging and eveteasing will attract punishment as stipulated by the Govt. of Tamil Nadu / Anna University.

#### **HOSTEL FACILITIES**

A full fledged hostel facility including STD/ISD and indoor games have been established inside the campus. The newly constructed hostel provides common computer center with internet facilities, spacious dining hall, water treatment plant and recreation facilities etc.

#### DINING

The college hostel has hygienic steam cooking kitchen facilities to provide healthy and nutritive vegetarian and non-vegetarian food. The hostel has a large dining hall to accommodate more than 300 students at a time.

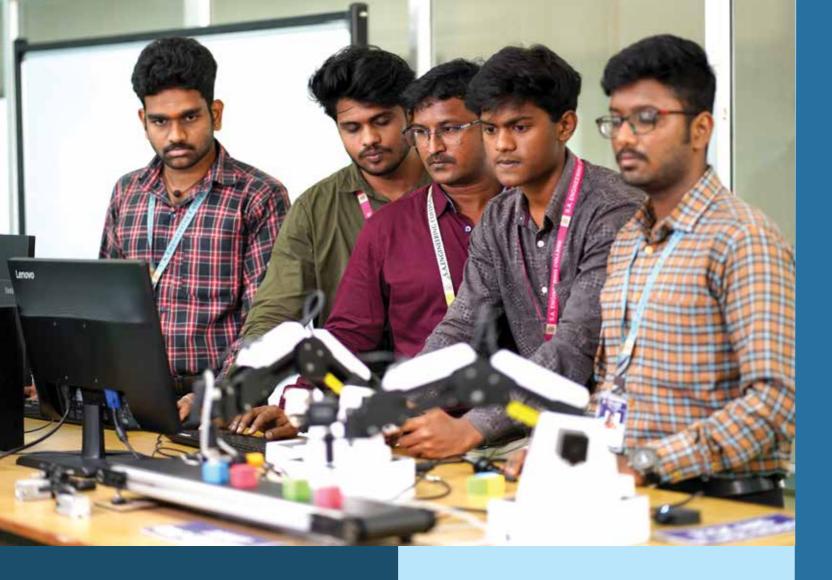
#### **HEALTH CARE**

A 10 bed clinic with doctor & nurse facility for 24 hours to take care of the health requirements of the day scholars & hostel students.

#### **GYMNASIUM**

The college has indoor & outdoor gymnasium and equipped with a number of latest single and multistation machines, weight training accessories, treadmills etc.





## RESEARCH & DEVELOPMENT

#### @ SAEC

The stature of the institution can be traced from the intensification of the faculty and students. SAEC focuses on quality education through new knowledge, innovation and discoveries by state-of-the-art infrastructure and research facilities. A superior collaborative and research experience for faculty and students is provided through our research centre, that offers Ph.D/M.S. (By Research) programme recognized by Anna university, Chennai. The R&D cell affords a new platform and acts as a concrete knowledge supplement by providing distinctive and innovative aspirations for the researchers. Expert committee members of R&D cell have proposed more than 200 research projects to various national organization and laboratories.

### STUDENTS RESEARCH

The following student's projects have received funding from external organization :

- 1. Handheld Crop Management Device with Smart Vivasayam app to aid the Farmers
- 2. Harvesting Energy From Piezo-Electric Pavement
- 3. Generation and Testing of Bio oil from prospisjuliflora
- 4. An IoT Based Expert System For Smart Agriculture
- 5. IoT enabled smart mirror for physically challenged
- Traffic Simulation Modelling and automated road for unmanned railway crossings
- 7. Modernized wheelchair for physically challenged with height adjustment mechanism
- 8. Design and development of Robo Hydro jetter cum cutter for replacement of Manual scavenging
- Development of robotic arm withsuction and grinding mechanism forsewage cleaning

#### RESEARCH GRANTS

S.A. Engineering College received a total grant of more than Rs.80 Lakhs for the conduct of Faculty Development Programmes, Workshops and Seminars, and **Rs.3.6 Crore** from various funding agencies for the conduct of 24 major diversified research projects as listed below.

#### RESEARCH PROJECTS COMPLETED

- Dr.M.Subramaniam and Dr.S.Suyambazhagan received a grant of Rs.40,00,000 from DST-FIST for the Research and Development Infrastructure
- Dr.P.Sevvel and Dr.S.Mahadevan received a grant of Rs.27,81,778 from DST for the research project titled Design & Development of cognition based Intelligent Mobility device for physically challenged and elderly people
- Dr.G.Kavya received a grant of Rs.27,44,000 from ISRO for the research project titled Design of 0.18µm CMOS Dual Band Low Noise Amplifier (LNA) for IRNSS Applications
- Dr.M.Thanikachalam was granted a fund of Rs.26,58,700 from DST for the research project titled National Network Project on Detection and Discrimination of Coral Reefs using Hyperspectral Data
- Dr.P.K.Nagarajan was granted a fund of Rs.19,38,000 from DST for the research project titled Performance Analysis of Micro Finned Heat Exchanger with Nano Fluids
- Dr. J.M. Madhana and Dr.C.Arunachalaperumal received a grant of Rs.14,90,000 from CVRDE for the research project titled Study of Sensors and Signals for Health and usage monitoring System (HUMS) for ECJB of ARJUN MRT MKI
- 7. Dr.C.Arunachalaperumal received a grant of Rs.14,78,000 from ISRO for the research project titled VHDL Implementation of Efficient Trellis Code Spatial Modulation Scheme of MIMO Communication
- 8. Dr.S.Mahadevan received a grant of Rs.13,05,000 from AICTE for the project titled Centre for SC/ST students in S.A.Engg. College
- Dr.V.Jaiganesh received a grant of Rs.13,00,000 from AICTE for the research project titled Development of Eco friendly high strength friction stir welding.
- Dr.S.Suyambazhagan, received a grant of Rs.12,00,000 from AICTE for the research project titled, Fabricating and Experimentally Analyzing the Performance of GAX Absorption System for Cooling Applications
- Dr.E.A.Mary Anitha and Dr.S.Mahadevan received a grant of Rs.11,55,000 from CVRDE for the research project titled Design and Development of Offline Analysis Software for Analyzing Automotive Trial Data
- 12. Dr.P.Sevvel and Dr.S.Mahadevan received a grant of Rs.11,43,039 from DST for the research project titled GSM - GPS based Intelligent Safety and Navigational Aid for Women Security and Smooth travel to unfamiliar destination

- Dr.G.Kavya received a grant of Rs.11,00,000 from AICTE under the scheme MODROB for the titled Advan ced Embedded System and IoT Lab - A Product Development Lab
- Dr.C.V.MadhusuhanaRao and Dr.S.Suyambazhagan, received a grant of Rs.8,82,662 from DST for the research project titled Simulation, fabrication and characterization of PZT-PVFD Piezocomposites for ultrasonic Transducers
- Dr.M.Thanikachalam received a grant of Rs.8,67,950 from DST for the research project titled Detection and Discrimination of Coral Reefs Using Hyper Spectral Data
- 16. Dr.C.Arunachalaperumal received a grant of Rs.7,61,373 from AICTE for the research project titled Novel Suspended Nodes Communication Network using Wi-Fi Disaster Prone Areas
- Mr.B.Madhu, received a grant of Rs. 6,30,000 from AICTE for the research project titled Mist Machining of Metals using FEM
- 18. Dr.P.Sevvel and Dr.S.Mahadevan received a grant of Rs.4,12,900 from TNSCST for the research project titled Fabrication of Dissimilar high strength AA7075 A1& AZ80A Mg alloy joints using underwater Friction Stir Welding (UFSW) technique
- Dr.A.Suresh received a grant of Rs.1,90,657 from Universiti Tenanga Nasional, Malaysia for the research project titled Study encompass Load flow Fault studies, Transients and critical clearing type

#### RESEARCH PROJECTS ONGOING

- 1. Dr.P.Sevvel (PI) & Dr.R.Geetha (Co-PI) received a grant of Rs.48,29,934 lakhs from DST for the research project titled, Science Technology and Innovation Hub for enhancing employability and livelihood of SC Community Population through technology development of Coir based Products for application in Construction Manufacturing Sector
- Dr.P.Sevvel (PI) & Dr.R.Geetha (Co-PI) received a grant of Rs.14,83,420 lakhs from DST/TDT/SHRI Department of Science & Technology, New Delhi for the research project titled, An ontology based 3D digital documentation of Masilamaniswara temple integrating techniques of terrestrial laser scanning and unmanned aerial vehicle digital photogrammetry.
- 3. Dr. Ahmed Mudassar Ali received a grant of Rs.9,74,314 lakh from AlCTE under MODROB scheme entitled "Artificial Intelligence Based IoT Product Development Lab".
- Dr.M.Meganathan got a grant of Rs.2,71,500 lakhs from National Board of Higher Mathematics for Studying the dynamics of COVID-19 using fractional difference operators
- Dr.D.Hemanand, Dr.M.Anuradha received a grant of US \$ 3000 for Quantum machine learning algorithms for traffic management in big cities from MEITY- Quantum Computing Applications Lab (QCAL).

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#### S.A. ENGINEERING COLLEGE

**Autonomous-Institute Level Research Centre** Affiliated to Anna University, Chennai.

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