Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD [now MoE]
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

SCHOOL OF ENGINEERING

(Estd. in 1996 and Approved by AICTE)

**Satellite Campus, Ayya Avinashilingam Nagar,
Varapalayam, Thadagam (Po),
Coimbatore - 641 108**

**E-mail: registrar@avinuty.ac.in /
dean_engineering@avinuty.ac.in /
admission_engg@avinuty.ac.in
Website: www.avinuty.ac.in**

**Contact Phone: 0422 – 2980145/ 2988997
Mobile No: 9566537509, 9994929423, 9952805179**

An Institution with a Difference for Girls only

**No Donation
No Hidden Charges and affordable fee**

PROSPECTUS 2026-2027

VISIONARIES

Founder Chancellor
Padma Bhushan
Dr. T.S. Avinashilingam
Renowned Educationist

Founder Vice Chancellor
Padma Sri
Dr. Rajammal P. Devadas
Renowned Educationist

VISION

Self-development and empowerment of women through modern, scientific and value based education to enable them to lead a purposeful life filled with moral and spiritual values.

MISSION

To provide quality education of global standards on a strong foundation of Indian values and traditions to women students based on current advances inscience, technology and societal demands with emphasis on commitment to social progress, peace,harmony and national integration.

CORE VALUES

- Academic Excellence
- Social Relevance & Women Empowerment
- Accountability & Transparency
- Diversity and Inclusion
- Vitality of Culture & Values

VISION AND MISSION OF THE SCHOOL OF ENGINEERING

VISION

Develop and create women technocrats who can meet the challenges of the corporate world and emerge as leaders contributing to industry and society.

MISSION

- To produce global women technologists by imparting quality education through pursuit of excellence that simulates the intellect and the heart.
- Inculcate in all the staff and students scientific temper and research attitude.

BEACONS OF LIGHT

Dr. T.S.K. Meenakshisundaram
Chancellor and Managing Trustee

Dr. (Mrs) V. Bharathi Harishankar
Vice Chancellor

Dr. (Mrs) H.Indu
Registrar (i/c)

Dr. (Mrs) S.Sivakumari
Dean-Engineering

GROWTH AND TRAJECTORY OF THE UNIVERSITY

- Established in 1957 as an Aided College exclusively for women
- Attained Deemed University status and Autonomy in 1988
- Received A++ grade by NAAC
- Renowned for empowering rural and economically vulnerable girls through higher education
- Trendsetter in welfare programmes, community rehabilitation and research activities
- Blazing a trail in inculcating values and culture in students and moulding them as good human beings and citizens
- Progressive Institution committed to the pursuit of excellence
- To provide inclusive growth of women and thereby promoting exclusive societal development

Women's Education Imparted through

Formal Education
Research Activities
Non-formal Education

Formal Education to

First generation learners
Learners from conservative communities
Economically and socially disadvantaged

Non-formal Education to

Adolescent girls and home makers
Rural and farm women
Transgenders
Self Help Group (SHG)

SCHOOL OF ENGINEERING

The School of Engineering, one of the arms of Avinashilingam Institute for Home Science and Higher Education for Women, a Deemed to be University, was started in the year 1996 with the approval of All India Council for Technical Education (AICTE), New Delhi. The school is spread over an area of 30.7 acres and is situated 6 km off Mettupalayam Road at Varapalayam.

The Vision of the School of Engineering is to produce industry-ready women engineers who can compete in today's world through innovation, enterprise and technical excellence. Well qualified faculty members encourage and mentor the students to achieve technical expertise. The School's curriculum is based on Outcome Based Education (OBE) syllabus which is updated annually with the guidance of experts from academia, industry, and research organisations as well as our own successful alumni, who have achieved high places in their professional career.

In order to keep students abreast with changing technologies, guest lectures are organized on regular basis, on topics within and beyond the curriculum. On the co-curricular and extra-curricular front, several activities are conducted that assists in holistic development of students' personality with critical thinking ability. The scenic and serene campus away from noise pollution of the city, set amidst a variety of flora and fauna creates an ideal ambience for learning.

PROGRAMMES OFFERED AT SCHOOL OF ENGINEERING

Bachelor of Engineering (B.E.)

1. Artificial Intelligence and Data Science
2. Biomedical Instrumentation Engineering
3. Civil Engineering with Computer Application
4. Computer Science and Engineering NBA Accredited
5. Computer Science and Engineering (Artificial Intelligence & Machine Learning)
6. Computer Science and Engineering (Internet of Things and Cyber Security including Block Chain Technology)
7. Electronics and Communication Engineering NBA Accredited
8. Food Technology
9. Printing and Packaging Technology

Duration: Four Years

Master of Engineering (M.E.)

1. Artificial Intelligence and Data Science
2. Food Technology
3. Medical Electronics
4. Embedded System and VLSI

Duration: Two Years

Doctor of Philosophy (Ph.D.)

1. Biomedical Instrumentation Engineering
2. Civil Engineering
3. Computer Science and Engineering
4. Electronics and Communication Engineering
5. Food Technology
6. Printing Technology

Duration: Minimum Three Years for full time scholars

Bachelor of Vocation (B.Voc.)

1. Food Processing and Engineering
2. Medical Equipment Technology

Duration: Three Years

DEPARTMENT OF BIOMEDICAL INSTRUMENTATION ENGINEERING

The department of Biomedical Instrumentation Engineering was established in 1996 and offers B.E. in Biomedical Instrumentation Engineering, M.E. in Medical Electronics and Ph.D programmes. It also runs UGC funded B.Voc. Medical Equipment Technology program. The department has benefitted from linkages with multi-specialty hospitals in the region. MoUs have been signed with leading hospitals and industries to help the students in gaining practical knowledge.

Salient Features of the Programme

The undergraduate program is based on Choice Based Credit System (CBCS) pattern. Programme Educational Objectives (PEOs) of this programme are to imbibe the following abilities to succeed in profession:

- To define, establish, and lead the emerging discipline of biological Engineering, to address the societal challenges and opportunities.
- To develop skills such as innovation, creativity, adaptability, and critical thinking ability to solve problems in the biomedical industry, medicine, academia, and consulting.
- To develop ability and passion to work wisely, creatively and effectively for the betterment of humankind and rural community and engage lifelong learning opportunities throughout their careers.
- To inculcate leadership skills in their chosen fields so that they will function effectively in mutli- disciplinary team environments and communicative to a variety of audiences, and enhance theirability to make decision that is socially and ethically responsible.

Diagnostic & Therapeutic Equipment Laboratory

Scope for Employment Opportunities

Our Biomedical instrumentation engineers can work in a variety of roles that involve the following skills and applications:

- As a personnel in the state and central government sectors.
- As a scientist in Research and Development institutes, as part of a multidisciplinary research team and to come up with innovative solutions in Healthcare.
- As a Biomedical Instrumentation Engineer in industry, to test, design and update various medical instruments that are to be used for diagnosis or treatment.
- As a rehabilitation engineer to design assistive aids for differently abled persons.
- As a medical software professional to support new generation medical imaging systems.
- As a medical coder for medical insurance service providers.
- As teaching professionals in a higher education Institutions and skill sectors
- As a design engineer to develop an advanced coding/simulation system for different implants/3D printed organs.
- As an entrepreneur to design and manufacture healthcare devices.

Industry Linkages

- KG Hospital
- Kongunad Hospital
- CADD Centre many more

Our Recruiters

Category	Companies
Core Biomedical & Healthcare Recruiters	Zifo, Avantor, CHC Healthwatch, Omega Healthcare, Visionary RCM, Cotiviti, CorroHealth, Nunes Instrumentation, Aficionado Technologies
IT & Technical Recruiters for BMIE	Cognizant, Infosys, Capgemini, KGISL, Deloitte, Sutherland, iAspire, Thoughtbees, IntouchCX
Non-Core / EdTech / Service Recruiters	Zoho, Focus Edumatics, FACE Prep, Intellipaat
Premium / High-End Recruiters	BNY Mellon, Deloitte (Consulting & Risk Advisory), Zoho (Developer Track)

Faculty

The strength of the department lies with its well qualified and dedicated faculty, skilled supporting staff well established laboratories, excellent infrastructure and disciplined & hardworking students. Majority of the senior faculty are Ph.D holders with vast experience in academia and research. The faculty are specialized in the domains like Biomedical Instrumentation, Digital Image Processing, Signal Processing, Embedded system, Microprocessors, Microcontrollers and Nanotechnology.

The faculty adopt modern teaching methodologies and take care of students individually to bring about a holistic development.

STUDENT ACTIVITIES

Professional Societies

The department is associated with Biomedical Engineering Society of India (BMESI) and Indian Society for Technical Education (ISTE) for organising Activities, Technical lectures and Quiz programmes to develop technical competency.

Skill Development

Focus is on enhancing skill sets for students so that they become industry-ready. Hands on training programmes organised by industries on-campus, helps skill development. Troubleshooting and Calibration of Medical Equipment, PCB design,3D Modelling and Printing of human organs, Artificial Intelligence and Machine Learning are imparted. Honing skills on tool usages like, MATLAB, Simulink, Python, Multisim and Or CAD, helps in the overall development ofstudents.

Association activities and Special Lectures by Doctors, Industrialists, Physiotherapists, Biomedical Engineers and Application Specialist from industries and Entrepreneurs, facilitate enrichment of knowledge acrossvarious domains.

Students are encouraged to participate in hackathons and competitions at national level and supported to work on innovative projects. Hand-holding is done to publish their research in Conferences and Journals. This has led to the award of students' projects fromTamil Nadu State Council for Science and Technology and recognition at the National Level for Innovative Projects. Apart from this, students are involved in live projects that the faculty are workingwith.

Industry linkages

Capacity building is enabled through linkages with more than 30 industries and multispecialty hospitals.

Centre for Artificial Intelligence and Robotics

The department has established a 'Centre for Artificial Intelligence and Robotics' with funds from the Department of Science and Technology (DST- CURIE) for setting up an AI facility. Its objective is to impart skills relevant to AI and Robotics, to conduct intensive hands-on-training programmes associated with industries, to nurture the creativity of students in Artificial Intelligence through AI club. This helps to develop innovative AI/ Robotics related projects and prototypes leading to innovation and medical devices.

Research Activities

The faculty are actively involved in research in the thrust areas of funding agencies. Faculty have obtained research funds from Indian Council of Medical Research (ICMR), DST and AICTE. The department has one patent awarded to its credit.

Bridging academia and healthcare through expert interaction

Hands-on active learning session enhancing technical skills

Active learning methodologies for deeper conceptual understanding

Real-world perspectives through alumni interaction

Students discovering startup pathways through entrepreneurial learning

Health awareness session promoting preventive and holistic wellbeing

Engaging health talk encouraging student wellness

Industry–academia interaction during the department's industrial visit

Student–mentor interaction fostering confidence and clarity

Excellence showcased at the National Project Competition

Faculty Excellence Awards—recognizing commitment to student success

Active participation of BMIE students in the Smart India Hackathon (SIH)

BMIE team contributing creative solutions at the Smart India Hackathon

Promoting creativity and entrepreneurship through IIC initiatives

National platform highlighting technical excellence and creativity

BMIE students mentoring school students at the Techno Science Fair

DEPARTMENT OF CIVIL ENGINEERING

The department of Civil Engineering was established in 2012 and offers B.E. in Civil Engineering with Computer Application and also Ph.D. programme. The department is actively involved in research activities in the field of Structural Engineering, Construction Management, Green Buildings, Energy and Environmental Engineering. The department has a CSIR sponsored Research Laboratory catering to the needs of researchers and undergraduate students. Our faculty members are at the forefront of innovation, as evidenced by the successful awarded with patents. Civil Engineers play a pivotal role in the current and future landscape of infrastructure development, with numerous projects underway in both the public and private sectors. Recognizing this demand, our department is dedicated to nurturing the Nextgen Engineers equipped with a profound understanding of new technologies and modern tools.

Salient Features of Programme

The undergraduate programme in Civil Engineering, following the Choice Based Credit System (CBCS) and Outcome Based Education (OBE) pattern, is designed to equip students with a comprehensive skill set and knowledge base. Upon completion of the B.E. Civil Engineering curriculum, students will have the following competencies:

- **Professional Skills and Technical Competence:** Students will be adept at applying their technical knowledge to solve a wide array of challenging problems encountered in Civil Engineering.
- **Effective Communication and Leadership:** Through engagement with multidisciplinary teams, students will develop strong communication skills essential for collaborating on infrastructure projects. They will also be capable of leading project teams, driving innovation, and fostering effective teamwork.
- **Continuous Learning and Professional Development:** The curriculum encourages students to pursue higher studies and engage in lifelong learning to stay abreast of advancements in the field. Graduates will be prepared to embark on successful careers as Civil Engineers and pursue further specialization if desired.
- **Excellence, Ethics, and Social Responsibility:** The programme instills values of excellence, leadership, entrepreneurship, and ethical responsibility in students, preparing them to contribute positively to society.
- **Exposure to Emerging Technologies:** Students will be exposed to cutting-edge technologies such as 3D Printing and virtual reality, providing them with a glimpse into the future of Civil Engineering. This exposure enhances their adaptability and prepares them for the evolving demands of the industry.
- **Industry Readiness:** Through technical training programs conducted by professionals and professional bodies, software skill training, and hands-on experience with various projects, students are equipped with the practical skills needed to excel in the industry. Moreover, the department organizes National and International conferences, seminars, and workshops regularly, providing students with opportunities for networking, knowledge exchange, and exposure to the latest developments in the field, thus enriching their learning experience and preparing them for successful careers in Civil Engineering.

Scope of Employment and Placement Opportunities

The department ensures that the students are meticulously trained to face interviews and succeed. Many alumni are occupying leading positions in construction, design and academia in various private and government organizations.

Career Avenues

A career as a civil engineer offers several lucrative job avenues in Government public & private sectors.

- Assistant Engineer
- Site Engineer
- Project Engineer
- Design Engineer
- Consulting Engineer
- Quality Control Engineer

Industry Linkages

The Department has signed MoUs with pioneering construction industries and training centre. They cater opportunities for the students to gain practical knowledge in planning, analysis and design through guest lectures, hands on training, seminars, Stipend internship, industrial visit and placement training. Also associated with Coimbatore Builders and Contractors Association (CEBACA), Dimensions, VLAND BEST HUB Pvt., Ltd., Shree Poorna Construction, India Cements Pvt., Ltd., and others.

Faculty

The strength of the department lies with its well qualified and dedicated faculty. The faculty have come from diverse and prestigious institutions. Most of the faculty members are members in professional bodies in various fields of Civil Engineering. They continuously update their knowledge by attending training programmes at IITs, NITs and through Massive open online courses. They are actively involved in testing, consultancy services and sponsored Research projects that help students in getting involved and interact with industries and infrastructure giants as well as government agencies.

Research Activities

Faculty are involved in consultancy and research, thus providing students to participate in live projects. Some of the projects undertaken in recent years are:

1. Reduction of Heavy Metals Accumulation in Cement using Bioremediation Technique
2. Performance Evaluation of Transparent Cement Mortar Cubes using End Glow Plastic Optical Fibre

Student Activities

The Department has an active student association with local Civil Engineers Association, Indian Society for Technical Education and Ultra Tech. Students are encouraged to organize various activities and arrange Special lectures, Quiz programmes, workshops etc. under the guidance of faculty members, create a conducive environment for students to thrive academically, professionally and personally.

Infrastructure

The Department has well-equipped laboratories namely Strength of Materials Laboratory, Concrete and Highway Laboratory, Survey Laboratory, Fluid Mechanics Laboratory, Environmental Engineering Laboratory, Soil Mechanics Laboratory, Computer Aided Design and Drawing Laboratory, Engineering Practices Laboratory. Through these well-equipped laboratories, students receive comprehensive training and hands-on experience in various aspects of civil engineering, preparing them for successful careers in the Civil Engineering field.

Computer Aided Design and Drawing Laboratory

Environmental Engineering Laboratory

Fluid Mechanics Laboratory

Survey Laboratory

Soil Mechanics Laboratory

Ms. S. Nishanthini, Final B.E. Civil Engineering won 2nd Prize in Assessment Test conducted by Coimbatore Builders and Contractors Association

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering was established in the year 1996. In nearly two decades, it has grown into one of the major departments in the Institute, with a dedicated team of experienced and qualified faculty members demonstrating excellence in teaching and research. The department offers the following programs:

Bachelor of Engineering

- Artificial Intelligence and Data Science
- Computer Science and Engineering
- Computer Science and Engineering (Artificial Intelligence and Machine Learning)
- Computer Science and Engineering (Internet of Things and Cyber Security including Block Chain Technology)

Master of Engineering

- Artificial Intelligence and Data Science

The department has attracted the best engineering aspirants and research scholars across the country. The focus of the department is not only to impart theoretical knowledge but also to provide hands-on training, exposure to present day developments and a platform for overall development of individual's personality. Looking at the global perspective, the department has identified the thrust areas for research and development: Computational Intelligence and Information Systems, Artificial Intelligence, Data Science, Cloud Computing and Internet of Things (IoT).

B.E Artificial Intelligence and Data Science

The B.E. program in Artificial Intelligence and Data Science is a four year undergraduate program. It prepares students with the skills to perform intelligent data analysis which is a key component in numerous real-world applications. During the past ten years, data science has emerged as one of the most high-growth, dynamic, and lucrative careers in technology. The curriculum covers the core principles of Artificial Intelligence and Data Science.

The students will gain cross-disciplinary skills across fields such as Statistics, Artificial Intelligence, Data Analysis and have career opportunities in healthcare, business, e-commerce, social networking companies, climatology, biotechnology, genetics, and other important areas. Students engage in coding assignments, programming projects, and lab work to develop proficiency in programming languages like Python, C, R and Object Oriented Programming. They also gain experience with popular frameworks and tools such as Tensor Flow, Tableau and scikit-learn. Graduates of this program can pursue careers as data scientists, business analysts, researchers, and more. They are well-equipped to work in a variety of industries and organizations that rely on data-driven decision making and advanced analytical techniques.

B.E Computer Science and Engineering

Computer Science and Engineering (CSE) is one of the most sought program in the engineering discipline. It is a multidisciplinary field that deals with the study, design, and development of computer systems and technology. CSE is also the backbone of the most booming fields like Artificial Intelligence, Machine Learning, Big Data, Internet of Things (IoT), Quantum Computing, Block Chain, Industry 4.0 Revolution etc. It encompasses a wide range of subjects, including Computer Programming, Data Structures, Algorithms, Operating Systems, Computer Networks, Database Management, Software Engineering, Artificial Intelligence, Cloud Computing, Machine Learning and more.

This program gives its graduates a competitive edge through robust curriculum and hands-on learning in niche technologies to develop competence which caters to the requirements of the industry. B.E Computer Science and Engineering is accredited by National Board of Accreditation (NBA). Graduates get good opportunities to join the top brands and corporate houses across multiple industries such as IT/software companies, sales and marketing companies, academic institutions, journalism, content industry, engineering firms, etc.

B.E. Computer Science and Engineering (Artificial Intelligence and Machine Learning)

B.E in Computer Science and Engineering (Artificial Intelligence and Machine Learning) program seeks to produce competent engineers in the field of Artificial Intelligence who can contribute to the field by developing Data Analytics, Scientific Computation, Numerical & Statistical Analysis and other Machine Learning capabilities. Artificial Intelligence and Machine Learning specialization is currently the high-demand discipline in both industry and academics. It offers various booming technologies to meet industry requirements. The main focus is to impart innovative education and enhance technical skills to prepare and empower students in the Artificial Intelligence and Machine Learning era.

This program covers wide range of technologies such as Machine Learning, Deep Learning, Big Data Analytics, Robotics, Internet of Things, Block Chain Technology and Programming in C, Java, Python, R and Hadoop to provide better career to the students. With a huge explosion in data and its applications, a career in the field of AI&ML can be very promising as Big Data Engineer, Business Intelligence Developer, Data Scientist, Machine Learning Engineer, Research Scientist, AI Data Analyst, AI Engineer, Robotics Scientist, etc. by reputed industries like Microsoft, Amazon, Oracle GBU, Cisco, Dell Technologies, Accenture, among others. The graduates of the program can pursue higher education and research at premier national or international universities with a great future in research.

B.E. Computer Science and Engineering (Internet of Things and Cyber Security including Blockchain Technology)

B.E in Computer Science and Engineering (Internet of Things and Cyber security including Blockchain Technology) program familiarizes the students with the functional and operational aspects of IoT, Cyber Security and Block chain Technology. The curriculum is designed to drive students towards the corpus of knowledge to develop IoT applications, Cyber Security and Blockchain Technologies.

The convergence of Internet of Things, Cyber Security and Blockchain is on the agenda for many companies and there are existing implementations, solutions and initiatives in several areas. Therefore, this program has a fantastic future in different sectors such as supply chain management, digital advertising, forecasting, cyber security, networking etc. It is penetrating in every booming industry and witnessing demands in major sectors including IT with ITES, Banking, Insurance, Logistics, Healthcare, and Public Administration. The aspiring students can learn about the technological standpoint and develop a firm grasp on various Blockchain enabled IoT platforms, Cyber security and its applications to enhance their career. Potential jobs include information security analyst, chief information security officer, security architect, and security engineer.

M.E. Artificial Intelligence and Data Science

M.E Artificial Intelligence and Data Science is an educational milieu that creates a foreground for students to acquire knowledge in futuristic areas like Artificial Intelligence, Machine Learning, Big Data Analytics and Artificial Neural Networks. This specialization is designed to enable students to build intelligent solutions to problems in a variety of domains and business applications and fields such as Natural Language Processing, Text Mining, Robotics, Reasoning and Problem-solving. Graduates have career opportunities as Data Engineers/Scientists, Machine Learning Engineers, Data Analysts, Interactive Visualizers/Graphic Designers, Big Data Engineers/Architects, Database Developers, Statisticians and Machine Learning Intelligent System Researchers.

Salient Features of the Programs

The department offers a curriculum based on Choice Based Credit System and Outcome Based Education for both undergraduate and postgraduate programs. Graduates completing the UG programs are equipped with the skills to:

- To design and find solution to social and technical problems through teamwork and technical knowledge.
- Address and solve the ethical, cultural and environmental issues through technical knowledge they have gained.
- Adapt to the rapidly changing technological environment by learning and applying new skills and technologies.
- Use the fundamental and advanced knowledge in Computer Science and Engineering to pursue higher education and other professional degrees.

Scope of Employment and Placement Opportunities

An active Placement Training cell is functioning with full enthusiasm with the aim of placing the students in top-notch companies. Our students are given training from the second year of their study in the institution by conducting training programs according to the company needs. This will result in placement in many areas not limited to:

- Programming and coding
- Designing processes and systems
- Handling databases and managing them
- Hardware development for IoT
- Designing algorithms for Artificial intelligence based applications

Alumni of the department have been placed all over the globe in various companies like Apple International, Infosys, Robert Bosch, Tata Consultancy Services, Accenture, Cognizant Technology Solutions, IBM etc. Some of our top rankers from under graduates also qualify for master's and PhD program in Computer Science and Engineering related specializations at leading universities both in India and abroad.

Industry Linkages

The department has MoUs with ICT Academy, CADD Centre, Gateway Software Solutions, Yardstick Digital Solutions and many more to have a closer linkage and promote research suited to industry needs, and consultancy. The department provides internship, industrial training programs for the students to acquaint them beforehand with the demands of the corporate atmosphere by these linkages.

Prominent Recruiters

Tata Consultancy Services, Cognizant Technologies, WIPRO, Bosch, IBM, Hexaware, Capegemini, Infosys, Sutherland, CGI, Accenture, Zoho, Renault Nissan Tech, KGISL etc.,

Faculty Strength

The department has adequate faculty members with Ph.D and Master's degree. The average experience of faculty is more than 10 years in their respective areas of specialization like Data Mining, Computer Networks, Information Security, Cloud Computing etc. The faculty members constantly update their knowledge through training programs in industry and certified courses from Infosys, WIPRO, Redhat Linux, AWS and NPTEL.

Infrastructure

The Department of Computer Science and Engineering is equipped with the state of the art laboratories having high end computers loaded with licensed and open source softwares covering a wide spectrum of applications. The department has well ventilated classrooms with multimedia projectors. The students are trained and given hands on experience in Data Structures, Operating Systems, Python Programming, Distributed Computing, Web Technologies, Data Mining etc. The department also conducts laboratory sessions by using virtual labs developed by IIT Bombay, IIIT Hyderabad and other MOOC resources.

Database Systems Laboratory

Operating Systems Laboratory

Database Management Systems Laboratory

Cloud Computing Laboratory

Object Technologies Laboratory

Computer Laboratory

Student Activities

The Department of Computer Science and Engineering Students Association conducts guest lectures and workshops to improve the students' progress. Industrial visits and Internships are being organized for the students every year to expose them to the current technological advancements in industries. The students are actively participating in the events organized by ICT academy and Computer Society of India to improve their technical, soft skills and communication skills. In addition, the students undergo internships at leading industries for horning their skills. The students are encouraged to apply for project funding from Tamil Nadu State Council for Science and Technology, DST CURIE etc. The students are encouraged to participate and present technical papers in International and National conferences to enhance their skills.

III Year Students won the National Level Smart India Hackathon 2022(Software Edition) under the theme of Transportation of Logistics with the cash prize of Rs.One Lakh held at JKLakshmipat University, Jaipur, Rajasthan on 25.08.2022 and 26.08.2022

Ms. Siva Sankari I, III CSE student won 1st Prize in Poster Presentation Competition conducted by Computer Society of India (CSI) Coimbatore Chapter on the topic Robowaves crafting India held on 6.3.2023

IV year CSE students won Kovai Innovate Hackathon under the theme of Road Restoration and infrastructure Development with the cash prize of Rs.25,000/- held at Coimbatore City Municipal Corporation organized by SUEZ Private Limited on 04.03.2024.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

The department of Electronics and Communication Engineering was established in the year 2000 with B.E. programme in Electronics and Communication Engineering. Master of Engineering programme in VLSI Design was started from the year 2010 and the nomenclature has changed to Embedded System and VLSI to match the recent technology. The department offers a Ph.D. programme in Electronics and Communication Engineering from 2015 onwards. The department provides quality and contemporary education through effective teaching- learning process that equips the students with adequate knowledge and skills. It also develops in students an ability to identify, formulate and apply appropriate techniques, resources to solve complex engineering problems through electronics & communication. The key research domains of the department include Digital Image Processing, VLSI Design, Wireless Sensor Networks, Optical Networks, IoT and Artificial Intelligence.

Salient Features of UG Programme

Electronics and Communication is the back bone of all modern gadgets, Automotive, Aerospace, Industrial controls etc. The undergraduate program is based on CBCS and OBE pattern. A student who undergoes the B.E. Electronics and Communication Engineering curriculum will have the ability to:

- Design and implement electronic systems for real time applications that include communication systems, signal processing, VLSI and Embedded systems.
- Both Hardware and Software knowledge help them to solve complex Engineering problems through innovation and modern tool usage.
- To work independently or in a team for Agile solutions.

In addition, students are trained to face the challenges of professional career through technical training programmes by industry experts, Software Skill training and exposure to various projects equips them to meet the current needs of the industry. The department regularly organizes conferences,seminars and workshops for the benefit of the students.

Scope of Employment and Placement Opportunities

Placement training on aptitude and logical reasoning is continuously provided to help them gear up to take up interviews, aptitude tests and group discussions to succeed. Also, communication skill training is provided to the students. Students of ECE have wide opportunities in the core companies and software companies. The graduates are preferred in domains like but not limited to:

- Automotive companies
- Aerospace
- Consumer Electronics
- Internet of things and Industry 4.0
- Embedded system design
- Defence establishments
- Software design
- Network Engineer
- IC Design

The students have been placed in companies such as Robert Bosch, IBM, TCS, CTS, Accenture, Infosys, CGI, Smart DV and many more. Also, electronics and communication engineers are offered several lucrative job avenues in both public & private sector. Students interested to take up higher studies are also assisted and guided.

Faculty

The department has well-qualified and dedicated faculty members with specialization in various fields such as VLSI Design, Wireless Networks, Optical Communication, Digital Image Processing and Embedded Systems. The faculty members serve as Doctoral Committee members, Academic Auditors of other Universities and also as Board of Studies members for our University and other Universities. Faculty members continuously update their knowledge by attending training programme at IITs, NITs and other premium institutions as well as through Massive Open Online Courses (MOOCs) like NPTEL, SWAYAM etc.

Infrastructure

The department has six well equipped laboratories with necessary hardware equipment and software tools.

- Digital Signal Processing Laboratory
- Embedded Systems Laboratory
- Microwave and Fiber Optics Laboratory
- Electronics Laboratory
- IC & Communication Laboratory
- VLSI Design Laboratory

The department has ICT enabled smart Classrooms that enables better teaching learning process.

IC and Communication Laboratory

Electronics Laboratory

Microwave and Fibre Optics Laboratory

Embedded Systems Lab

DSP Laboratory

VLSI Design Laboratory

Student Activities

To encourage and expose the students to professionalism, a Students' Forum (ISF) of IETE (Institution of Electronics and Telecommunication Engineers) has been started by the department. ISF was set up in School of Engineering in the year 2009. ISF organizes technical programmes and activities regularly to exchange ideas and information on the topics of emerging trends and new development to nurture the professional development of student members. ISF encourages teamwork and leadership through expert lectures, Quiz club, Toastmaster club and Electronics Hobby club. Guest Lectures are arranged regularly through ECE Association also. IEEE student branch has been started in the year 2024. IEEE is the largest technical professional society in the World. The IEEE student branch of Avinashilingam Institute has organized various technical events for the benefit of students in the field of Engineering, Science and topics of current interest.

Riti Achammal. S, Prashanthi. S from Electronics and Communication Engineering (ECE) and Harshitha. J from Integrated M. Tech. ECE (IoT) along with AI and DS students mentored by Dr. R. Sudarmani, Professor, Department of Electronics and Communication Engineering developed an Automatic Drug Dispenser to simplify the medical management of elderly people. This idea won a first prize of Rs. 1 lakh under Smart India Hackathon (SIH) Hardware Edition organised by the Innovation Cell of the Union Ministry of Education and AICTE.

Centre of Excellence and Research

The department provides plenty of opportunities for the students and faculty to know the latest industry practices and upgrade their knowledge through industry relevant projects using laboratory facilities of the department. The department has signed a MoU with M/S EdGate Technologies and hasset up a "Texas Instruments Innovation Centre" to work in the emerging area of research Internet of Things (IoT). Faculty members have a good number of publications in conferences and Journals. They act as reviewers for Journals to review research articles. Students are also motivated to take upthe industrial/societal related projects.

DEPARTMENT OF FOOD PROCESSING AND PRESERVATION TECHNOLOGY

Avinashilingam Institute has been a pioneer in the field of Food Technology. Department of Food Processing and Preservation Technology was established in the year 1996 and offers B.E., M.E., Ph.D. in Food Technology, programmes and UGC funded B.Voc. (Food Processing and Engineering). The department has highly qualified and committed faculty members.The Department has well established laboratories to provide training for students and faculty and caters to needs of research and academics. The department has benefitted from linkages with various food industries. Patents have also been filed and published by the faculty.

Scope of Employment and Placement Opportunities

Department of Food Technology provides a vast spectra of job opportunities. Students have been prominently placed in reputed firms under various high positions. Major designations and roles include Flavour Analyst, New Product Development Executive, Food Analyst, Food Microbiologist, Food Standard Officer, Food Safety Officer, Quality Control Executive, R&D Executive, Quality Analysts etc.

The job opportunities for the graduates are available in the following domains and not limited to

- Food Processing industries
- Automization in Food Production
- Quality Control
- Food Safety
- Preservation of perishable and non-perishable food products
- MSME
- Dairy Plants
- Banking Sector and Agriculture

Students are also sent for Internships to food Industries in India and abroad.

Salient Features of the Programme

The undergraduate is based on Choice Based Credit System (CBCS) pattern. The programme aims to offer

- A strong theoretical foundation complemented by hands-on practical exposure, equipping students with best – in-class professional competencies in food technology.
- To draw the best expertise in technology, skill development and professional management so as to equip students with appropriate skills to visualize synthesize and implement projects in these fields.
- To imbibe an innovation, creativity, and entrepreneurial thinking by fostering an environment that supports idea generation, product development, and start-up initiatives.

The department is committed to undertaking sponsored research projects and offering consultancy services in collaboration with industries, government agencies and research organizations.

Faculty Strength

The department is strengthened by a team of highly qualified faculty and skilled supporting staff, with most senior faculty holding Ph.D degrees and an average of 10 years of experience, the department offers expertise in Food Processing, Food Safety and Quality, Thermal Engineering, Refrigeration and Air Conditioning, New Product development, and Food Processing Machinery, Faculty members also contribute their expertise as resource person and committee members across institutions an universities.

Infrastructure

The department has well-established laboratories like Food Engineering Lab, Cereal and Pulses Processing Lab, Food Analysis Lab, Quality Control Lab, Bakery and Confectionary Lab, Heat Transfer Lab, Computing Laboratory, Engineering Practices Lab etc., All classrooms in the department are ICT enabled to enhance the learning process and better understanding by the students. Laboratories are highly equipped as per the curriculum and students acquire practical and hands on knowledge with all equipment in the laboratory.

Heat & Mass Transfer Laboratory

Food Engineering Laboratory

Student activities

Students are encouraged to participate and conduct various activities to develop leadership quality and teamwork. The students under the aegis of FPPT conduct activitiesin association with Research Institutions like DFRL, CFTRI and other Food Processing Industries. Students are encouraged to participate in National and International level competitions, thereby making them ready for future profession. They are motivated to take up entrepreneurship as career through Entrepreneurship training and to participate in National and International Forum..

Title winners of Smart India Hackathon (2018) – Team Whistling Cookers was awarded cash Prize of Rs.1Lakh in the Hardware Edition: Non-Destructive Estimation of Sugar Content in Fruits and 1st Runner up – Team Buddies won cash prize of Rs.75,000/- for the hardware: Development of Portable E-nose to Prevent the Post-Harvest Losses in Fruits.

Title winners of **Smart India Hackathon (2020) won** a cash reward of Rupees 1 Lakh for their innovation on the topic **Waste management system**, Swachh Bharat mission (Garmeen), Department of Drinking Water and Sanitation, Ministry of Jal Shakti**.** The team comprised of Harini Sree K, Nivetha A, Chinthana G, Harshini R P, Ganishka S, led by Varna D and mentored by Mrs.K. Pooja. The Instant Fertilizer Machine (IFM) is a simple and compact machine that can be used for treating solid food waste and converting it into rich fertilizer.

Cash Prize of Rs. 1 Lakh being received for The Instant Fertilizer Machine.

Cash Prize of Rs.1 Lakh being received Nondestructive simulation of sugar content in fruits

Cash Prize of Rs. 75,000/- being received for the development of portable E-nose to prevent the postharvest loses in fruits.

Setting up of Dr. Kalam Library & Guinness Record for Seed Ball Making

Centre of Excellence and Research opportunities

The Department is aiming to become a Centre of Excellence in food processing by establishing consultancy and research activities. The department focuses on the core and Inter-disciplinary research works such as Food processing, Food Packaging, Minimal Processing, Nanotechnology, New Product development, Thermal Processing, Design of Prototypes, Food Waste Management, Quality Control etc…

DEPARTMENT OF PRINTING TECHNOLOGY

The Department of Printing Technology is one of the four departments, formed during the inception of the Faculty of Engineering in 1996, with AICTE approval. The Department offers bachelor's degree in Engineering & Technology – B.E (Printing and Packaging Technology) with an annual sanctioned intake of 20 students. Our Institute is one of the very few Institutes in India offering a bachelor's degree in Printing and Packaging Technology and is the only institute offering it exclusively for women.

Salient Features of the Programmes

The students are given hands-on training in the well-established laboratories of the department and in the Printing Presses available in both Campus I and Campus II. The Curriculum is based on industry demands and latest developments in this field, along with a flavour of practical training. The core areas cover the state-of-the-art technology such as security printing techniques, nanomaterials and sensors in packaging, green ink technologies and eco-friendly paper-making approaches.

A graduate coming out of the department will be able to

- Identify and analyze engineering problems in Print and allied sectors which will enable them to enter any vertical of Print-Pack Industry
- Use of mathematical and simulation techniques and tools so as to enable them to easily adapt to new environments and emerging technologies.
- Inculcate humanitarian concerns and ethics in students integrated with capacity building skills to apply the acquired knowledge for the environment, society and under-privileged community.
- The alumni of the department are more-than-willing to stay connected with the department and they readily come forward to support the students beyond-curriculum assignments, mini-projects, case-studies and placement preparation and recruitment drives.

Scope and Placement Opportunities

Printing industry and packaging industries are expanding quickly, hence there are many opportunities for the graduates in the following fields.

- Graphic Designers
- Security Printing
- Print Consultants
- Packaging Experts
- Textile and Apparel industries
- Pre-media Companies

The department has a record of 100% placement every year since inception apart from the 10% who opt for higher education. Our alumni today are holding good positions in press, packaging industries and publishing companies across the globe.

Industry Linkages

The strong connect that the department has with the printers associations at all-India-level, the department is able to prepare the students for the industry during the four-year course, through industrial visits, internships, mentored projects and final year projects, in association with the leading printers in the country.

The department works closely with the Print and allied industries such as paper mills, ink industry, plate-making industry and printing machine manufacturers, to impart state-of-the-art education. Educational resources like printing equipment, accessories, exclusive print samples, technical books, catalogues, etc. are sponsored by the printers.

Meritorious students are appreciated with awards by printer associations. Our students win awards in print symposiums conducted by other printing institutes also.

Due to the shortage of B.E. graduates for high end job roles in the printing industries, the printers across India are conducting a 'We Support Print Education' campaign this year.

Faculty

The Faculty members are well-qualified in their domain and are experts in skill-based engineering education. They interact closely with the print and allied industries for periodical updation. They sculpt the students as employees, employers and entrepreneurs by giving individual attention to the students and steering them along the right direction. The faculty members network with all other printing institutes in India both in diploma and in degree levels forknowledge sharing.

Infrastructure

The classrooms are available with ICT facilities; laboratories are highly equipped as per the curriculum requirement and students get practical and real time knowledge using the fully equipped printing press units. Students are also trained for application based /product based assignments and lab works are provided using high-end press units.

Single Colour Offset Machine – A4 Size

Screen Printing Machine

Print Finishing Laboratory

Four Colour Offset Machine – Medium Size

Student Activities

Students are encouraged to conduct seminars, conferences and workshops to build leadership spirit. They are encouraged to visit industries and field trips. They conduct several programs under the aegis of the department association.

Field Visit to flex printing unit

Research Activities

The department focuses on the core and Inter-disciplinary research works such as Printed Electronics, 3D Printing, Smart Textiles, Printing Plate Corrosion, Augment Reality FMCG Packaging Designing, Publishing and Paper Coating. Social issue projects like Paper Recycling, Biopolymer, Press Wastage control and Quality Control are carried-out.

DEPARTMENT OF SCIENCE AND HUMANITIES

The Department of Science and Humanities initiates and prepares the students to achieve critical thinking, the ability to innovate, work in multicultural environments, and adapt to the multidimensional roles expected of engineers.

In this era of STEM, science, and mathematics have a major role in engineering education. Courses such as mathematics, physics, chemistry, and English are taught by the Department of Science and Humanities during the first year, which provides the foundation in STEM for engineering graduates. It facilitates the students for a better understanding of the courses in their specialization. The Science and Humanity courses impart essential skills like innovative thinking, effective communication, leadership skills, and team spirit in the first year of engineering.

Salient Features of courses offered by the Department

- In addition to offering theoretical subject knowledge, hands-on training on SciLab for Mathematics and EWL Software for English Language skill acquisition are provided througha variety of activities.
- Practical training is given in basic engineering subjects like Civil, Mechanical, Electrical and Electronics as well as AUTOCAD and Graphics.
- The special feature of this department is conducting “Bridge Courses” for fresh students at the beginning of the first semester, which help them for a smooth transition from school education to meet the requirements and challenges of University education.
- Comprehensive remedial classes are conducted for slow learners.
- Domain specific conferences, seminars, workshops and field visits are organized for enhancement of knowledge in the relevant field.

Faculty

All the faculty members are Ph.D. holders with vast experience and positive approach to handle first year students in a professional course. It is essential that freshers are given moral support as they enter portals of higher education which is provided by the faculty of Department of Science and Humanity. Counselling support is provided by the staff to students while they adjust to higher education environment.

Staff members update their knowledge constantly by doing online courses, attending conferences, seminars, Workshops and FDPs.

Infrastructure

The Physics and Chemistry laboratories are well-equipped. A state-of-the-art Language Laboratory provides interactive learning to enhance the oral and aural fluency of students. All classrooms are ICT enabled and Smart board is extensively used for teaching learning process.

Language Laboratory

Chemistry Laboratory

Physics Laboratory

Student Activities

Students are taken for field visits to places like Gass museum, GD museum, Salim Ali Centre for Ornithology, Biosphere Nature Park and other places for experiential learning. Department association meets are conducted every week to hone the communication, public speaking skills of students, update their scientific and technical knowledge and build team spirit and leadership skills. Design layout, editing, collecting and organizing material are done by students for Institute's magazine and e newsletter under the tutelage of a staff member.

DEPARTMENT of B.VOC. DEGREE PROGRAMME

The **Bachelor of Vocation (B.Voc.)** degree programme was introduced by the **Ministry of Human Resource Development (MHRD), Government of India**, in the **academic year 2014-15** to enhance skill-based education and improve employability.

Programmes offered

- **B.Voc. Medical Equipment Technology**
- **B.Voc. Food Processing and Preservation Engineering**

Duration: 3 Years

Eligibility: 10+2 pass in any stream

This program integrates industry-relevant training with academic knowledge, ensuring graduates are well-prepared for careers in their respective fields.

Salient Features

The B.Voc. Programme is designed to equip students with industry-relevant skills and academic knowledge.

1. Industry-Oriented Curriculum

Designed as per National Skills Qualifications Framework (NSQF). Focuses on practical training and hands-on experience in collaboration with industries and hospitals.

2. Multiple Exit Options

Certificate (after 6 months)/Diploma (after 1 year)/Advanced Diploma (after 2 years)/B.Voc. Degree (after 3 years).

3. Skill-Based Training

The B.Voc. Programme integrates extensive On-the-Job Training (OJT), internships, and industry projects to enhance practical skills. Students train in modern laboratories, hospitals, and industries, gaining hands-on experience through real-time case studies and industry collaborations.

Structured OJT programme with progressive industry exposure - 30 days in 1st year, 60 days in 2nd year, and 90 days in 3rd year—ensuring job readiness.

4. Placement and Career Opportunities

Collaboration with hospitals, medical equipment companies, and food processing industries for employment opportunities. Training in entrepreneurship and self-employment skills.

5. NSQF-Aligned Certification

Multi-level assessment and certification conducted by Sector Skill Councils (SSC) under the National Skill Development Corporation (NSDC), New Delhi, Govt. of India.

Scope

The B.Voc. Programme in Medical Equipment Technology and Food Processing & Preservation Engineering offers extensive career opportunities in both healthcare and industrial sectors through skill-based education.

Prepares students for jobs in healthcare, food industries, and R&D, supports entrepreneurship, and provides pathways for higher education in specialized fields.

1. Employment Opportunities
    I. Medical Equipment Technology:
        - Biomedical Equipment Technician/Engineer
        - Hospital Equipment Maintenance Officer
        - Medical Device Sales & Service Specialist
        - Calibration & Testing Engineer
        - Research & Development Technician in Medical Devices

    II. Food Processing & Preservation Engineering:
        - Food Safety & Quality Control Officer
        - Production Supervisor in Food Industries
        - Research Associate in Food Technology
        - Cold Storage & Supply Chain Manager
2. Entrepreneurship & Self-Employment
    - Starting a medical equipment service center
    - Establishing a food processing unit
    - Consultancy services in hospital equipment maintenance
3. Higher Education & Certifications
    - Can pursue M.Voc., MBA (Hospital/Healthcare Management), or specialized PG Diploma programs.
    - Certification courses in biomedical instrumentation, food safety, and industrial automation.

Hands on working practice on Biomedical Equipment by the students of B.Voc Medical Equipment Technology

Hands on working practice on Food preservation Equipment by the students of B.Voc Food Processing and Engineering

Prepares students for jobs in healthcare, food industries, and R&D, supports entrepreneurship, and provides pathways for higher education in specialized fields.

This program ensures students are job-ready and industry-competent, making them valuable assets in their respective fields.

LIBRARY

The School of Engineering Library is dedicated to providing a wide range of resources and services to support the academic and informational needs of its community. The emphasis on both print and electronic resources, combined with modern technological facilities, ensures that users have easy access to up-to-date materials.

1. Extensive Resource Collection

Print Collection:

- Books: 43,476
- Print Journals (International & National): 96
- Periodicals: 42

2. Access to a Wealth of Resources:

- ONOS (One Nation One Subscription): Over 13,000 full-text journals from 30 global publishers, made available through INFLIBNET, benefiting the academic community.
- Knimbus: A federated search platform that integrates access to all online resources, including ONOS.
- e-ShodhSindhu Consortium and subscribed resources: Provides access to over 4,17,567 e books,30,423 e-journals and 11 databases from 20 renowned publishers.

3.Modern Digital Library Facilities:

- Air-conditioned digital library with sufficient systems, internet, and Wi-Fi for seamless access to e-resources.
- Remote access to subscribed content and UGC's e-ShodhSindhu Consortium and other online platforms.

4. Institutional Repository:

- Hosted via D-Space, this repository includes valuable academic materials such as question banks, answer keys, e-books, laboratory manuals, and newspaper clippings.

5. Innovative Initiatives:

- **Reader's Book Corner:** A unique space where users can donate or access books that are no longer required, promoting resource sharing.

- **NDLI Club:** All students and faculty are enrolled, gaining access to the National Digital Library of India, which provides further learning resources.

The library is a well-equipped hub for knowledge, collaboration, and research, offering a broad spectrum of educational tools to its users.

Open Book Stack for Ready Reference

Digital Library

Ample Seating Capacity

PROFESSIONAL BODIES FOR HOLISTIC DEVELOPMENT

There are several student chapters associated with various Professional societies to enable students to know what is happening in their respective streams. The students are encouraged to hold various activities under these societies which bring them into contact with industry giants. Different student chapters are:

- **Biomedical Engineering Society of India (BMESI):** BMESI is to stimulate and aid research and development in all aspects of Biomedical Engineering, the department possesses Institutional membership. It provides a forum for discussing innovative ideas leading to creative inventions.
- **Coimbatore Productivity Council (CPC):** School of Engineering, Avinashilingam Deemed University is a life member of Coimbatore Productivity Council (CPC) affiliated to National Productivity Council (NPC), New Delhi since June 2011. CPC unit in School of Engineering conducts awareness, guest lectures and training programs to the students on the various management techniques adopted in industries.
- **ICT Academy:** Avinashilingam Institute for Home Science and Higher Education for women has signed an MoU with Information Communication Technology Academy. As per this MoU, University has become the Associate Nodal Institute of ICT Academy. The purpose of this MoU is to interact with industry.
- **Computer Society of India (CSI):** The Computer Society of India (CSI) is a non-profit professional meet to exchange views and information learn and share ideas. CSI Student Branch was started in School of Engineering in the year 2005 to facilitate education and knowledge exchange among the student community. The student branch organizes various events like guest lectures, workshops, quiz and competitions for CSI student members. Our Institution has CSI Educational Institution Membership from 2008.
- **Institution of Electronics and Telecommunication Engineers (IETE):** IETE is the national Apex Professional body of Electronics & Telecommunication, Computer Science and Information Technology Professionals. IETE (Institution of Electronics and Telecommunication Engineers) Students' Forum (ISF) of our Institution has been set up in our School of Engineering in the year 2009. Various activities are carried out for the ISF members regularly by Quiz club, Toast-Masters club and Electronics Hobby club of ISF.
- **Indian Society for Technical Education (ISTE):** ISTE is a national, professional, non-profit society in the field of Engineering and Technology. The ISTE staff and student chapters were started in the year 2003 to bring efficient linkage between technical institutions, industry and society. Our students bagged the best student award from ISTE students' chapter, Tamil Nadu and Puducherry Section for three consecutive years 2014,2015 and 2016. Many activities are conducted for the students to train them as global leaders.
- **Institution of Electrical and Electronics Engineers (IEEE):** IEEE is the world's largest technical professional organisation. The core purpose of IEEE is to foster technological innovation and excellence for the benefit of humanity. It is a global network of over 4,86,000 Engineering and STEM professionals. Technologists around the world share knowledge and collaborate through IEEE's conferences, communities, publications and initiatives. The IEEE students branch is started in the year 2024 in School of Engineering and coordinated by the department of Electronics and communication Engineering. Various technical activities are organised by the IEEE students branch to foster the knowledge of recent technology among the students.
- **Indian Concrete Institute (ICI):** The Indian Concrete Institute (ICI), a leading professional body in concrete technology and construction. This association started in the year 2018. Through this professional collaboration, the department benefits from expert lectures, technical workshops, conferences, and interactions with industry specialists. The association with ICI helps faculty and students stay updated on the latest develoments in concrete materials, structural design and sustainable construction technologies.

ADMISSION PROCEDURE 2026-27

I. BACHELOR OF ENGINEERING (B.E.)

a. Eligibility Norms

Candidates must be either 17 years of age or attained the age at the time of admission. The candidate should have studied in regular, full-time, formal stream in the school. Candidates who have appeared for the 12th standard examinations in May/ June 2026 and awaiting results can also apply.

- Passed 10+2 examination Subjects Studied (As per AICTE norms)
- Obtained at least 45% marks (40% in case of candidates belonging to reserved category)

Course	Duration	Eligibility Criteria
CSE / CSE (AI&ML)/ CSE (Cyber Security)/ AI&DS / ECE	4 Years	• Mandatory course -Physics, Maths at 10 +2 level • For remaining single course select any courses out of 14 # # Chemistry /Computer Science / Electronics / Information Technology / Biology / Informatics Practices / Bio Technology/ Technical Vocational subject / Agriculture / Engineering Graphics / Business studies / Entrepreneurship
Biomedical Instrumentation Engineering (BMIE)	4 Years	• Mandatory Courses - Physics at 10 + 2 level • For remaining two courses select any courses out of 14 # # Mathematics / Chemistry / Computer Science / Electronics / Information Technology / Biology / Informatics Practices / Biotechnology / Technical Vocational subject / Agriculture / Engineering Graphics /Business Studies/Entrepreneurship
Civil Engineering with Computer Application	4 Years	• 10+2- Mathematics, Physics, Chemistry /Vocational
Food Technology	4 Years	• Mandatory Courses – Chemistry at 10 + 2 level • For remaining two course select any courses out of 14 # # Physics / Mathematics / Computer Science / Electronics / Information Technology / Biology / Informatics Practices / Biotechnology / Technical Vocational subject / Agriculture / Engineering Graphics / Business Studies / Entrepreneurship
Printing and Packaging Technology	4 Years	• Mandatory Courses – Physics & Chemistry at 10 + 2 level • For remaining two course select any courses out of 14 # # Mathematics / Computer Science / Electronics / Information Technology / Biology / Informatics Practices / Biotechnology / Technical Vocational subject / Agriculture / Engineering Graphics / Business Studies / Entrepreneurship

.

b. Entrance Exam

Avinashilingam Engineering Entrance Examination (AEEE) - 2026.

Candidates will have to appear for Avinashilingam Engineering Entrance Examination (AEEE)-2025. Please look at the website for dates.

II. B.E. (Lateral Entry)

Eligibility Norms

A. Passed Diploma examination from an AICTE approved Institution; with at least 45% marks (40% in case of candidates belonging to reserved category) in appropriate branch of Engineering / Technology.

B. The candidates who have passed Diploma in Engineering & Technology from an AICTE approved Institution shall also be eligible for admission to the first year Engineering Degree courses subject to vacancies in the first year class in case the vacancies at lateral entry are exhausted. However, theadmission shall be based strictly on the eligibility criteria as mentioned above.

III. MASTER OF ENGINEERING (M.E.)

Eligibility Norms

Bachelors' degree or equivalent in the relevant field with at least 50% marks (45% in case of candidate belonging to reserved category) at the qualifying Examination. Those who are awaiting the resultsof their qualifying examinations will also be eligible to apply.

IV. ADMISSION PROCEDURE

The application form and the prospectus for admission to Engineering Programmes is available at www.avinuty.ac.in.

Candidates need to register in the admission portal by filling the required information, attach thenecessary documents and pay an amount of Rs.200/- (for SC/ST candidates Rs.100/- only) as registration fee.

For admission to M.E. Programmes, selection will be based on marks in B.E./ B.Tech equivalent,entrance examination marks and a personal interview. Candidates need to qualify in the Entrance Examination conducted by the competent authority/ School of Engineering, Avinashilingam Institute for Home Science and Higher Education for Women. The candidates should compulsory produce their marksheets at the time of interview.

FEE STRUCTURE FOR B.E PROGRAMMES
(for candidates admitted in 2026-2027)

S.No	B.E. Programmes	First Semester Fee
1	Computer Science and Engineering	63,800/-
2	Computer Science and Engineering (AI & ML)	63,800/-
3	Computer Science and Engineering (Cyber Security)	63,800/-
4	Artificial Intelligence and Data Science	63,800/-
5	Electronics and Communication Engineering	56,150/-
6	Biomedical Instrumentation Engineering	53,750/-
7	Food Technology	53,750/-
8	Civil Engineering with Computer Application	23,775/-
9	Printing and Packaging Technology	23,775/-

SCHOLARSHIP FOR MERITORIOUS STUDENTS

	Percentage in QualifyingSubjects	Fee Concession (For I Semester and II Semester)
STATE BOA RD	95% Marks and above	100% Tuition Fee Waiver
	85% Marks and above	50% Tuition Fee Waiver
CBSE	90% Marks and above	100% Tuition Fee Waiver
	80% Marks and above	50% Tuition Fee Waiver

Fee Structure for Vocational Programmes
(for candidates admitted in 2026-2027)

S.No	B.Voc Programmes	First Year Fee
1	Medical Equipment Technology	23,445/-
2	Food Processing and Engineering	23,455/-

FEE STRUCTURE FOR M.E. PROGRAMMES
(for candidates admitted in 2026-2027)

S.No	M.E. Programmes	First Semester Fee
1	Artificial Intelligence and Data Science	27,325/-
2	VLSI	27,325/-
3	Medical Electronics	27,325/-
4	Food Technology	27,325/-

PLACEMENT and TRAINING

The Placement and Training cell prepares students for a professional life. Encourages and motivates students to cope up with the continuously changing technological scenario according to the prevailing demands in the job market. It guides and counsel's students based on their interest towards their career by giving awareness on industry expectations. It closely networks with various professionals from different industrial sectors and engages with them to enhance the employability skills of the students by means of orientation, seminar, workshop, and training for recruitment. The important initiatives that the centre takes are:

- The Department of placement and training is a nodal centre for providing inputs to students on career opportunities for job seekers and students opting for higher studies. It will also train students to crack Civil Services examinations.
- The Placement cell interacts with various industries, understand their requirements and use them for training.
- It invites international Universities to visit the campus and conducts orientation and counselling on higher education opportunities as well as linkages.
- The cell facilitates signing MoUs with industries for training, placement, student scholarships/awards and other CSR programs.

Activities

- Industry relationship
- Internship
- Technical Training
- Aptitude Training
- Corporate Training
- Alumnae talk
- Women Diversity Drive
- Campus Interviews
- Personality Development Programmes
- Communication skill training
- Career Guidance & Learning resources
- Any time Accessible Labs

SEMESTER WISE ACTIVITIES CONDUCTED BY PLACEMENT AND TRAINING CENTRE ARE:

I SEMESTER

- English Language WRSL
- Teamwork

II SEMESTER

- Basic Communication Skills
- Organizing Skills

III SEMESTER

- Advanced Communication Skills
- Verbal Analogies
- Positive Attitude
- Self-Analysis And Self-Management
- Attitude And Behaviour

IV SEMESTER

- Communicating with Confidence & Clarity (Assertive Communication)
- Stress Management
- Group Discussion & Presentation Skills
- Motivation
- Sharpening coding Skills

V SEMESTER

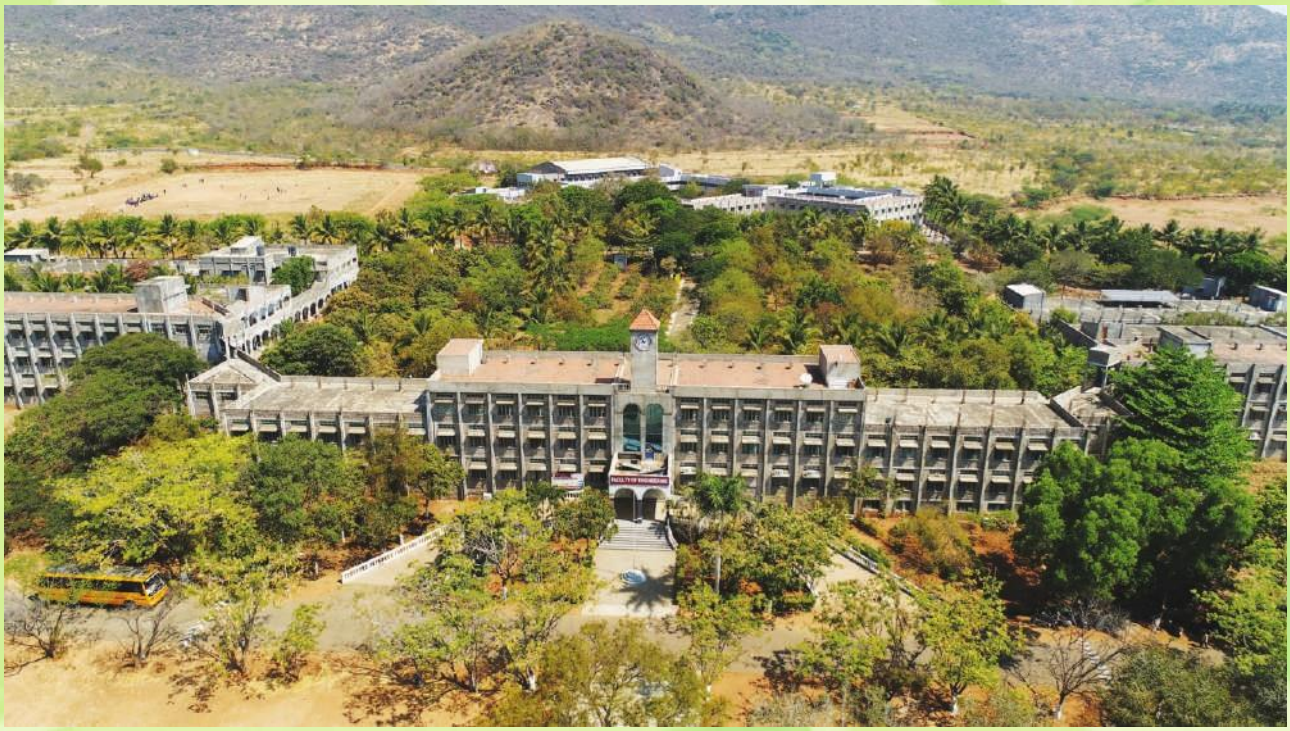
- Body Language & Proxemics
- Interview Skills And Group Discussions
- Group Discussion
- Aptitude Test Preparation
- Balancing Personal & Professional Life
- Review Of Program Related Aptitude

VI SEMESTER

- Individual Counseling & Guidance
- Career Orientation
- Work Ethics
- Interpersonal Relations
- Adapting to the Corporate Culture
- Program related aptitude

MAJOR RECRUITERS

BNY · ZOHO · accenture · cognizant · TCS TATA CONSULTANCY SERVICES
Capgemini · AVASOFT · Auriseg · BOSCH · Infosys
HEXAWARE · slb · RENAULT NISSAN MITSUBISHI · CLARUS · SUTHERLAND
KGiS · Plumeria · Zifo · COTIVITI · avantor
movate · Objectways · SREE Annapoorna SREE Gowrishankar · frog brandservices
SUN · Indian Security Press · CGI · Healthwatch · efi
HATSUN · LUMINA DATAMATICS · Omega Healthcare · SmartDV · SGK
Tech Mahindra · episource · ITC Limited · palm printz · VVDN TECHNOLOGIES
SIX PHRASE · wipro · namecheap · PENTAGON SPACE · BAKERS



NATIONAL SERVICE SCHEME

NSS is a compulsory component in the curriculum at the UG level that brings the students out of the cocoon of 'I, Me, Myself' and make them conscientious citizens.

"Contributing back to the society" is the pivot and motto of NSS activity.

This instills in students a sense of service to the community

- Students adopt villages and conduct awareness programmes, seminars and workshops to the rural and economically vulnerable sections of society
- Cultivates team spirit, leadership qualities in learners
- NCC and CSS are also offered to students in addition to regular academic programmes.

World Record event on Pollution Free World

Each One Donate One drive- Ayya's Rural Library

Rally on Violation against Women


Avinashilingam University sets world record in community servive

The National Service Scheme (NSS) of Avinashilingam University set a world record by completing 100 different community outreach activities in just 12 hours. This initiative, titled '100 Acts, One Mission – Unite, Serve, Inspire', was achieved with the participation of 2,000 NSS volunteers, making an impact on rural communities. This has been officially recognised and registered in the Elite World Records, United States of America.

100 Acts, One Mission

ENTREPRENEURSHIP DEVELOPMENT CELL AND INCUBATION CENTRE

"Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage the change that is inevitable."

- William Pollard

Entrepreneurship Development Cell (EDC) was established under AICTE/RIFD/EDC scheme 2010-11, with an outlay of Rs.7.05 lakhs. The aim of the cell is to create innovative technology entrepreneurs of high order in Higher Education Institutions and to include Entrepreneurship as well as Innovation as part of the Science and Technology Programmes.

As per the MHRD mandate the youngsters should become job providers rather than job seekers through their innovative ideas. The EDC provides ample opportunities to learn by doing through skill development programmes and understand the concept of Entrepreneurship in all programmes through Awareness camps. Faculty members from every department are trained in Entrepreneurship by NSTEDB, Department of Science and Technology, Government of India.

Activities of the Cell

The EDC Cell encourages the students to be aware, ideate, innovate, prototype and create marketable solutions which can solve societal problems in a cost effective manner. More than 20 technology student startup ideas have emerged from our campus and are ready to become incubates of our Avinashilingam Technology Innovation and Incubation Centre (ATIBIC) after their graduation.

Since 2011-12, various programmes like Entrepreneurship Awareness Camps (EACs) Women Entrepreneurship Development Programme (WEDP), Technology based Entrepreneurship Development Programme (TEDP) and Faculty Development Programmes (FDP)were conducted regularly for the benefit of students to motivate them to think beyond placement opportunities.

Achievements

The EDC has collaborations with Confederation of Indian Industries (CII), National Entrepreneurship (NEN), PSG-Science and Technology Entrepreneurial Park (STEP), KCT FORGE, CODISSIA, WOBEDA and MSME Development Institute, IIT Madras and many more..

The EDC also has linkages with Government Institutions like Entrepreneurship Development Institute of India, Gujarat, RGNIYD, Sriperumpudur, Tamil Nadu, EDII, Government of Tamil Nadu asour Programme sponsors.

EDC has created awareness among students and faculty about importance of entrepreneurship as one of the avenues after graduation and instill hope among students that they can convert their ideas into products.

- Students have developed an innovative attitude and have student innovators in the campuswho have exhibited their products in Agri Expo, Kovai Vizha etc.
- Our successful alumni include Ms. B. Sruthi (Founder and CEO, Dhanwantari Biomedicals Pvt. Ltd) & Ms.Yuvarni -Social Innovators of KIIT (Kalinga Institute of Industrial Technology, TBI (Technology Business Incubators) Odisha. Incubation

Product Launching ceremony- "Sahayatha- Wheel chair with smart defecation cleansing assistive device for immobile population" by Mrs. Sruthi B (BMIE), Alumni Entrepreneur (Dhanwantri Biomedical Pvt. Ltd., Coimbatore)

"Horticultural therapy garden with assistive Technology structures for differently abled children-An Innovative idea for Social Entrepreneurship" by Dr. G .K.Beela, Professor and Head, Department of Community Science, Kerala Agricultural University , and Former Director, Centre for Disability studies Thiruvananthapuram, Kerala.

CENTRE for MANUFACTURING and EMERGING TECHNOLOGIES (CMET)

Front View of CMET

The Centre for Manufacturing and Emerging Technologies (CMET) facility is created in Campus II (Ayya Avinashilingam Nagar, Varapalyam, Coimbatore - 641108) with around 2500 square feet. The center has contemporary equipment, machinery, design software and testing facilities. The center will cater to carry out research activities, consultancy and product development in the emerging areas.

Objectives

- Technology Generation
- Partnership with Academia / Institutions and Industries
- Providing Consultancy and Support
- Applying for Research Funding preferably for Product Development

Areas of Research

- Advanced Robotics and controls
- Material Processing and Modeling including Nano fluids
- Big data analytics
- Preservation through natural resources like spices and herbs
- Thick film Technology
- Additive Manufacturing
- Energy Conversion and storage
- Cyber security and Forensic
- Food Processing and Packaging
- Reuse of building demolished waste

Facilities Available

a. **Design and Analysis facility** consists of Simulation and design software tools, prototyping hardware, analytic instruments for various applications.

b. **Fabrication and Synthesis facility** consists of chemical synthesis, food analysis and screen-printing facility.

Activities at CMET

The centre conducts workshops and training programmes along with the departments of School of Engineering and industry experts regularly.

Hands-on session – Screen Printing on Textiles

The Department of Printing Technology and Center for Manufacturing and Emerging Technologies, School of Engineering organised one-day workshop on "Screen Printing on Textiles" along with Sardar Vallabai Patel International School of Textiles & Management on 07.11.2022. II, III, and IV B.E. PT students (22 nos.) and 90 participant from Sardar Vallabai Patel International School of Textiles & Management participated in this Workshop.. Screen Printing concepts were demonstrated and hands-on training on screen printing on textiles was given to students. The participants learnt how to screen print on textile clothing.

Webinar on "Engineering Aspects of 3D Printing"

A webinar on "Engineering Aspects of 3D Printing" was conducted on February 3rd, 2023 in association with Skill-Lync, Bangalore, Department of Biomedical Instrumentation Engineering and Centre for Manufacturing and Emerging Technologies, for the students of all departments. The concepts of 3D printing techniques, namely Stereo Lithography (SLA), Fused Deposition Modeling (FDH), and Multi Jet Fusion (MJF) was demonstrated using videos. In the workshop participated 200 students learnt the basics of 3D printing.

In continuation of the webinar workshop on "3D Printing for Medical and Robotics Applications" was conducted during March 14thand 15th, 2023 at Center for Manufacturing and Emerging Technologies in association with Meds by Healthcare and Engineering Solutions, Coimbatore, Department of Biomedical instrumentation Engineering. About 60 students from School of Engineering participated. The workshop aimed at exploring the features of 3D printer, its applications in various field and process of designing models. Organ printing and production of human organs integrated with biocompatible microfluidics to create complex structures were discussed in detail. Hands on session on designing models using Ultimaker Cura software, 3D Slicer and Mesh Mixer was given to students. As an outcome of the workshop students actively created CMET keychain, a supportmodel for the finger using software and printed it using the 3D printer URU MAX.

Ammaiyappan Auditorium

Cafeteria

Indian Bank Ext. Counter

Reprographic Facility

Transportation Facility

Stationery Stores

FACILITIES ON THE CAMPUS

- Bank and ATM
- Stationery shop and Reprographic centre to cater to all the requirements of the students
- Delicious and nutritious menu with fresh fruit juices in the Cafeteria!
- Transport facilities for day scholars living in and around the city.
- The orchard can be plundered by students relishing the mangoes, guavas, almonds,gooseberries, etc.!
- Natchathira Vanam a scenic place where learners can relax and enjoy with their friends.
- Solar heaters to supply power to the hostel kitchen.
- The Computer Infrastructure and Maintenance Cell of School of Engineering Manages the computer facilities, networking infrastructure and e-surveillance facility.
- A well-designed Ammaiyappan Auditorium to accommodate very large gatherings and events.
- A spacious Gym equipped with a comprehensive range of equipment and machines toimprove the physical stamina of the students.

Gymnasium to keep Fit and Healthy

HOSTEL

- On campus hostel is a home away from home set in serene, picturesque surroundings for students.
- Tasty and hygienic vegetarian food, Secure and safe environment for girls.
- Wi-Fi facility
- The atmosphere and schedule enunciate in students the religious faith by attending prayer both in the morning and evening
- Lady Doctor visits the hostel every evening and examination room with First aid medical facility for emergency situations.
- Potable drinking RO water.
- Hot water for bathing and washing.

Prayer Hall

ALUMNI ASSOCIATION

Alumni are one of the four pillars of any institution and serve as Ambassadors, their continued relationship with the School of Engineering is very important. Thanks to the Alumni Association which has facilitated fostering of an everlasting bond with the faculty. Alumni Association maintains up-to-date information about the whereabouts of the alumni scattered in different countries. Our alumni support the faculty by delivering lectures, offering placement and by motivating the studentsto become entrepreneurs.

PROMINENT ALUMNI

Gowri Rao Krishnamurthy
Product Manager at Face book,San Francisco, California

Ms. Shilpa Gupta
Scientist, European Satellites, Europe

Ms. Aashika Banu
Senior Civil Engineer
Cast Laborataries, PTE Ltd, Singapore

Ms. S.P. Dharshana
Vice President - Operation Denta Global India Pvt. Ltd., Chennai

Ms. Gayathri Madheswaran
Quality control Manager & QMS Lead Auditor
Rashid Printers, United Arab Emirates

Janani Nagapoorani V
Quess Corp Ltd.,
Ultratech Cement Ltd. Chennai

Dr. Sumi Singh
Senior Machine Learning Engineer, Missouri, USA.

Mrs. P.N. Aishwarya
Assistant Examiner of Patents and Designs, (Group 'A' Gazetted), Government of India

Mrs. Saranya Venkattaramen
Project Manager, Bosch Global Software Technologies, Coimbatore.

Madhumitha.R
Manufacturing Executive, ITC Ltd.

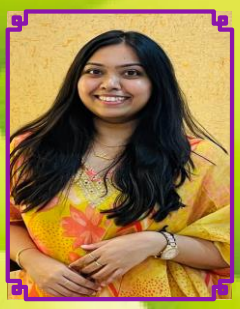
Srilakshmi.A
Associate analyst, Zifo RnD Solutions

L.S. Snekha
VWR Avantor, Junior Associate

Ms. S. Keerthana
Supervisor Technical Operation
Currency Note Press, Nashik

Ms. L. Sanjana
Founder, LS Traineeship

Ms. Jana Naga Poorani V
Senior Manager,
Aditya Birla Group,
Ultratech Cement Ltd, Coimbatore



Ms. Vaishnavi Nagabooshanam
Custom Software Engineering Analyst, Accenture

Ms. P. Vijaya Suganthi, Branch Manager, Government Press, Salem

Avinashilingam Institute for Home Science and Higher Education for Women
Satellite Campus, Ayya Avinashilingam Nagar, Varapalayam,
Thadagam (PO), Coimbatore - 641 108
E-mail: registrar@avinuty.ac.in / dean_engineering@avinuty.ac.in
Website: www.avinuty.ac.in