



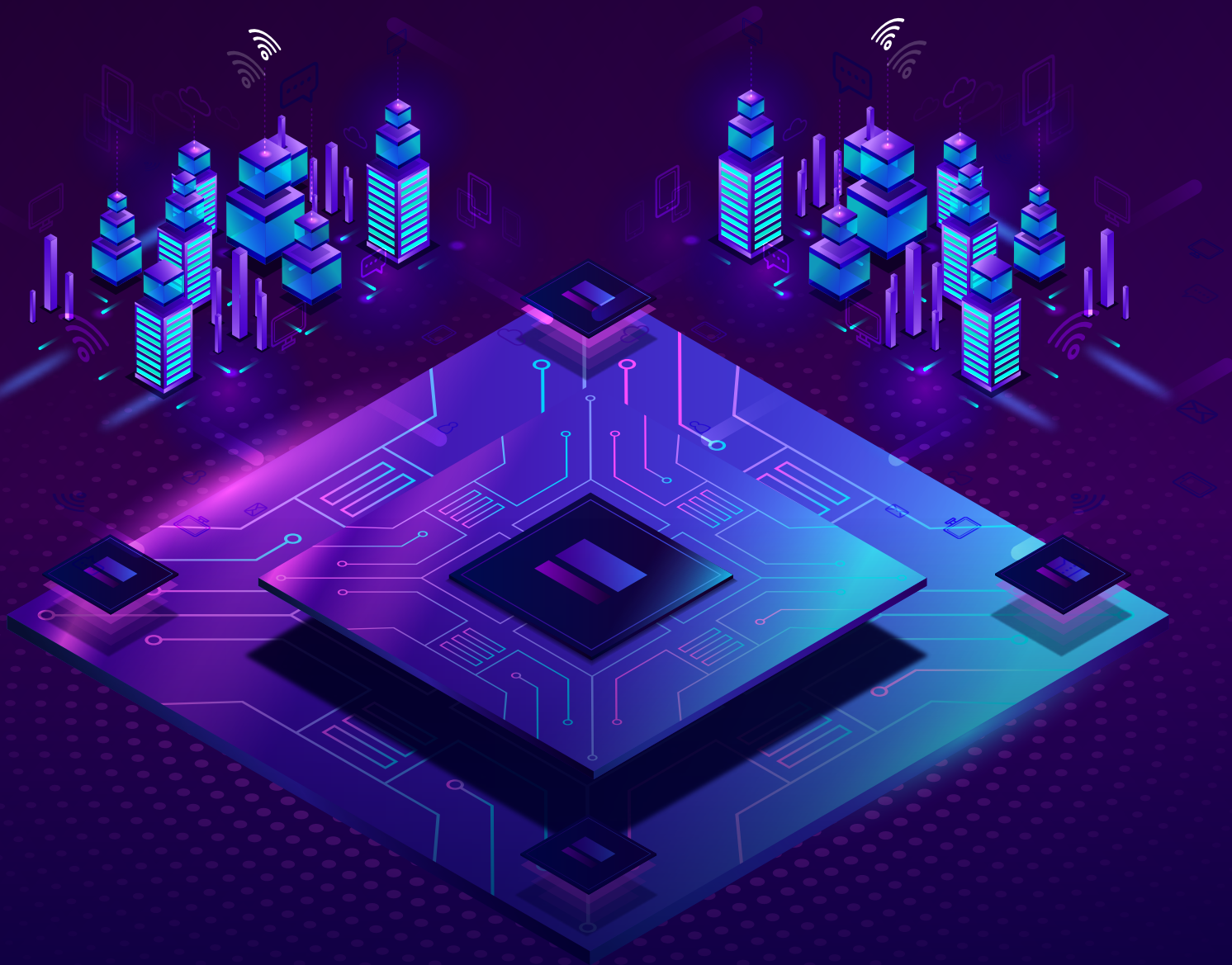
DAYANANDA SAGAR
UNIVERSITY



DECADES LEGACY
IN EDUCATION & HEALTHCARE



*Fusing Tech & Talent for
Future Innovators*



B.Tech
**Electronics & Communication
Engineering**

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A Place to Grow, Excel, Invent & Innovate!

About DSU

Dayananda Sagar Institutions founded in the 60's by a visionary, Late Sri. R. Dayananda Sagar (Barrister-at-Law) committed to take knowledge to the people, transforms today's students into responsible citizens and professional leaders of tomorrow. Dayananda Sagar University created by an Act of the Karnataka State in 2014, built on this adorable legacy and inspired by its own milestones, meeting the needs of quality higher education in this part of the world.

This main campus is thoughtfully planned on 130 acres, with a picturesque site and a blossoming green environment, making it free from city crowds and pollution. Being a completely self-contained campus adjacent to Harohalli Kanakapura Road, Bengaluru South District., it is equipped with all the modern state-of-the-art infrastructure, creating a conducive environment for progressive experiential learning and transforming you into next-generation innovators, explorers, leaders, and researchers.



University Accreditation and Rankings



Teaching Excellence
★★★★★
Research Excellence
★★★★★

- Emerging engineering institute
- Emerging engineering Institute Placement 2022
- Emerging Engineering Institute Research Capabilities

DSU has Rank No. 1 By TIMES OF INDIA 2022

2023 THE ECONOMIC TIMES Excellence in Academic Facilities & Learning Resources



OUTSTANDING UNIVERSITY WITH BEST PLACEMENTS

About School of Engineering

Welcome to the cutting-edge realm of engineering excellence at the School of Engineering (SoE), Dayananda Sagar University (DSU). School of Engineering (SoE) at Dayananda Sagar University (DSU) provide world-class education and experiential training in engineering, with a focus on innovation across various disciplines such as Computer Science, Artificial Intelligence, Robotics, and more. The unique and multidisciplinary learning here is backed by some of the world's best state-of-the-art infrastructure, job-role based emerging specialisations, innovative pedagogy, contemporary curriculum, multifaceted faculties, strong industry collaborations, and impeccable placements.

It has emerged as the top choice for students who want to become the next- generation technocrats, innovators, developers, and creators. Our advanced and exceptional M.Tech programs are meticulously designed to propel you into the forefront of evolving technologies. It offers specialised majors, allowing students to delve deep into their areas of interest and expertise, whether it's in computer science, electronics, or other engineering disciplines. The students are exposed to knowledge beyond their specialisation, which helps broaden their horizons of thought.



About ECE Department

The Department has highly skilled faculty members who specialize in subjects aligned with the latest industrial demands. Our educators bring cutting-edge research, development, and design expertise directly into the classroom, ensuring that students receive the most relevant and up-to-date instruction. The department has an exclusive BOSCH ETAS lab integrated into the curriculum and students have the opportunity to work in this niche lab to carry out projects. The industry-sponsored Analog Devices Lab also provides students with opportunities to carry out research in the Communication Domain.

About Electronics & Communication Engineering

Electronics and Communication Engineering (ECE) is an interdisciplinary field that intersects electrical engineering and computer science. It involves the creation, advancement, and implementation of electronic devices, systems, and communication technologies that are essential to modern living. ECE experts are instrumental in influencing technology progress, facilitating advancements across a wide range of industries, including telecommunications, healthcare, automotive, and more.

Program Overview

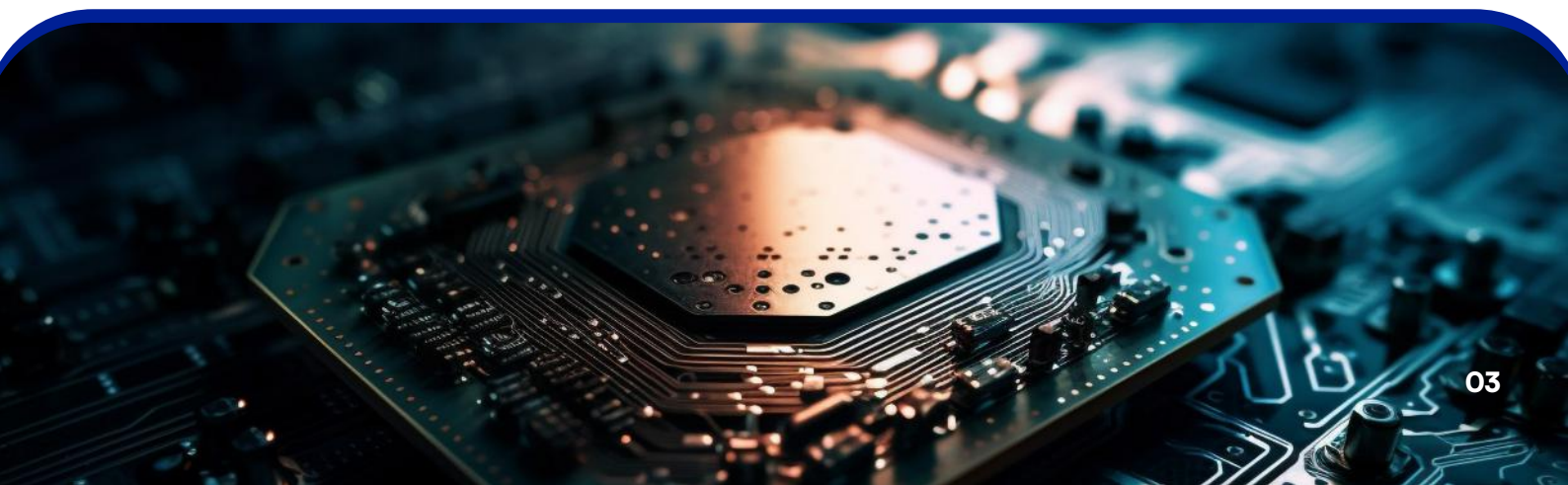
The Electronics and Communication Engineering (ECE) program at DSU is designed to create innovative engineers and entrepreneurs equipped with technological excellence, professional commitment, and a strong sense of social responsibility. We prioritize building technical aptitude, entrepreneurial spirit, and leadership skills in our students to empower them to navigate the complexities of globalization and technological advancements. With a foundation in the psychology of students, socio-cultural considerations, and interdisciplinary approaches, we provide a holistic education that goes beyond traditional boundaries and empowering our graduates to confidently address the ever-changing demands of the global industry. The program also emphasizes postgraduate studies and research, fostering a culture of continuous learning and innovation. Overall, the ECE program at DSU stands out for its practical orientation, industry-aligned specializations, and commitment to research, innovation, and ethical practices, empowering graduates to contribute significantly to the electronics and communication field and society as a whole.

Admission Eligibility Criteria

Pass in PUC / 10+2 examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry / Biotechnology / Biology / Computer Science / Electronics / Technical Vocational subjects and obtained at least 45% marks (40% in case of candidate belonging to SC/ST & OBC category) in the above subjects taken together, of any Board recognized by the respective State Governments / Central Government / Union Territories or any other qualification recognized as equivalent there to.

University offers prestigious merit scholarships based on your IIT-JEE Scores as per university cut off

Program Duration : 4 YEARS (8 Semesters)



Electives offered

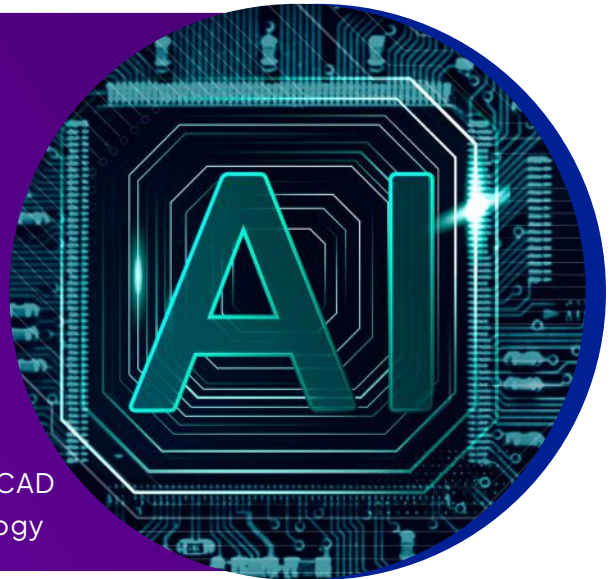
The curriculum encompasses a diverse range of advanced specializations aligned with emerging technologies and contemporary industry needs. This strategic approach guarantees that our graduates possess the skills and knowledge necessary to meet the demands of the ever-evolving real-world industry landscape.

Artificial Intelligence (AI) & Machine Learning (ML) in Electronics

The core strength of ECE—understanding the physics of electrical systems and the architecture of computer hardware combined with the powerful analytical and pattern-recognition capabilities of AI/ML, is driving the next generation of technological innovation. AI/ML techniques are being applied to make ECE systems smarter, more efficient, and more autonomous.

Key Focus Areas

- Principles of Soft Computing
- AI and ML for VLSI CAD
- Machine Learning & Deep Learning
- Wearable Technology

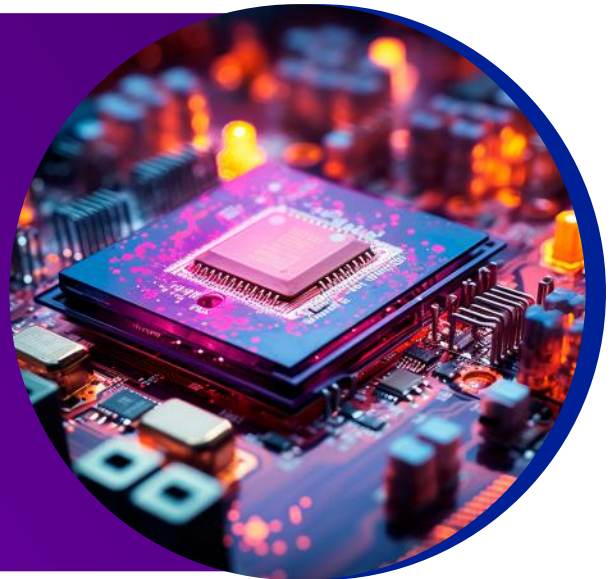


System on Chip (SOC) Design

This specialization focuses on the design and application of Chip Design Integrated Circuits (ICs), and VLSI. SoCs can be applied to any computing task. Specializing in SoC designing opens up a lot of avenues for you.

Key Focus Areas

- Digital Logic Design
- Advanced Digital System Design and Verification
- System-on-Chip (SoC) Design



Advanced Communication

The Evolution of Telecommunications specialization examines the historical development and the current advancements in communication systems, preparing students for the future of telecommunication technologies

Key Focus Areas

- Next-Generation Networks (5G and beyond)
- Fiber Optic Communication
- Satellite Communication Systems
- Wireless Communication Standards
- Telecommunication Protocols



IoT & Wireless Sensor Network

This specialization focuses on the Internet of Things (IoT) and Wireless Sensor Networks, exploring the integration of sensors and communication technologies to create intelligent, interconnected systems

Key Focus Areas

- ▶ IoT Protocols and Standards
- ▶ Wireless Sensor Node Design
- ▶ IoT Security and Privacy
- ▶ IoT Applications in Smart Cities
- ▶ Edge Computing for IoT



Embedded System Engineering

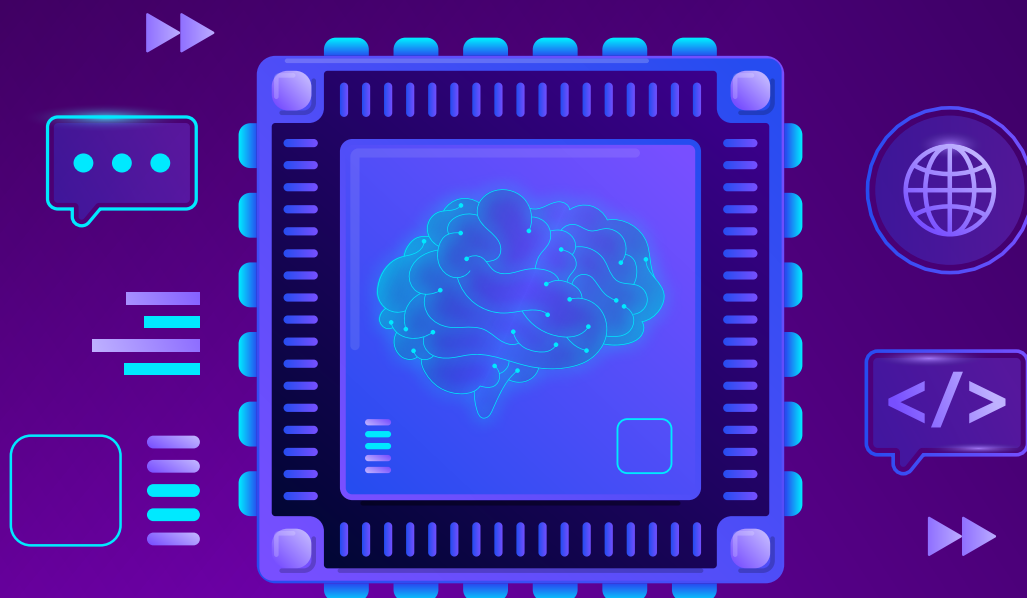
Microcontrollers are at the heart of embedded systems. This specialization provides a deep understanding of microcontroller architecture, programming, and applications.

Key Focus Areas

- ▶ Microcontroller Programming
- ▶ Embedded System Design
- ▶ Real-time Operating Systems
- ▶ IoT Device Development
- ▶ Control Systems with Microcontrollers



These specializations within Electronics and Communication Engineering offer students the opportunity to tailor their education to specific domains, ensuring a well-rounded understanding and skill set for future career paths in these evolving and niche fields.



Program Unique Features – Electronics and Communication Engineering (ECE)

Industry-Ready Curriculum

- Curriculum designed in consultation with industry experts to match emerging trends such as VLSI Design, Embedded Systems, AI/ML in ECE, 5G/6G, and IIoT.
- Regular syllabus updates aligned with NEP 2020 and national missions (Semiconductor Mission, Digital India, Make in India).

Skill Enhancement Courses

- Domain-specific skill courses on VLSI, Embedded Systems, Signal/Image Processing, AI/ML for ECE, RF & Antenna Design, and IoT.
- Hands-on training with tools like MATLAB, Cadence, VHDL and Xilinx.
- Certification programs mapped with industry-recognized platforms (NPTEL, Coursera, ARM University Program, MATLAB, etc.).

Value-Added Programs

- Short-term certificate courses in Embedded System, FPGA, IoT, and Python for ECE.
- Soft skills, communication, and leadership training programs for holistic development.
- Entrepreneurship, design thinking, and innovation workshops.

Industry & Academia Expert Interaction

- Regular guest lectures, masterclasses, and workshops from R&D organizations (ISRO, DRDO, BEL etc.) and industries like Intel, Texas Instruments, and Mathworks.
- Collaborative training with industry mentors and alumni working in global companies.

Interdisciplinary Open Elective Courses

- Electives across AI & Data Science, Computer Science, Mechanical, Robotics, Mechatronics, Biomedical Engineering, Renewable Energy, and Management.
- Encouragement of multi-disciplinary projects (e.g., AI-driven healthcare devices, IoT-enabled smart cities, UAV communication systems).

Research & Innovation Ecosystem

- Dedicated labs for VLSI, Communication, Signal Processing, IoT, Embedded Systems, and Machine Learning.
- Support for student publications, patents, and participation in hackathons & national innovation challenges.

Strong Industry Collaboration

- » MoUs and partnerships with leading industries and research institutes.
- » Opportunities for industry internships, live projects, and joint research.
- » Campus-driven Industry 4.0 skill development initiatives with Rexroth Bosch.

Global Exposure & Employability

- » International collaborations for student exchange and joint projects.
- » Curriculum aligned with future-ready roles: Chip Designer, RF Engineer, IoT Specialist, AI Engineer, Embedded Developer, and Communication Network Engineer.

Holistic Development & Career Support

- » Active IEEE, Student Branch Chapters such as Signal Processing Society (SPS), IEEE Microwave Theory and Technology Society (MTTS), and Council on Electronic Design Automation (CEDA) student chapters organizing technical fests, seminars, and competitions.
- » Structured placement training, GATE/IES coaching, higher education counseling.
- » Emphasis on entrepreneurship, incubation support, and start-up mentoring.

Unveiling the Advantages of Choosing ECE

Growing Technology Sectors

Rapid development in electronics, audio, and video communication systems offers continuous demand for skilled ECE professionals.

Robotics and Automation

Automation in industries creating a demand for electronic engineers in designing and implementing robotics and automation systems

5G and Telecommunications

The rollout of 5G networks worldwide has increased the demand for ECE engineers with expertise in communication systems, signal processing, and network design.

Globalization and Outsourcing

As technology continues to connect the world, there is a demand for ECE engineers who can contribute to global projects.

Gateway to Innovation

ECE serves as a centre for innovation, providing students with the opportunity to be at the forefront of technological advancements.

High Growth and Job Security

The technology-driven nature of the ECE field ensures continuous growth and job security for professionals. As industries continue to digitize and automate, the demand for skilled ECE graduates is projected to remain robust.

Contribution to Sustainable Solutions

ECE is increasingly focused on developing sustainable and environmentally friendly technologies. Graduates have the opportunity to contribute to green engineering practices, aligning with the global shift towards sustainability.

Job Profiles for ECE Engineers

Electronics Engineer

Create and enhance electronic systems and components. Contribute to projects involving circuit design, testing, and troubleshooting.

Communication Systems Engineer

Design and fine-tune communication networks for seamless data transmission. Implement technologies that enable effective data exchange.

Embedded Systems Engineer

Develop embedded systems for diverse applications, integrating hardware and software.

VLSI (Very Large-Scale Integration) Design Engineer

Innovate and construct complex integrated circuits for advanced electronic devices.

Network Engineer

Strategically plan and manage computer networks for organizational efficiency. Ensure smooth communication systems operation within the workplace.

Control Systems Engineer

Design and implement control systems essential for industrial automation. Contribute to projects involving robotics and automation technology.

Signal Processing Engineer

Analyze and manipulate signals to enhance various types of data. Develop signal enhancement algorithms for practical applications.

IoT (Internet of Things) Specialist

Design and implement IoT systems, driving the advancement of smart homes, cities, and industries. Lead sensor integration, data analysis, and connectivity projects.

Robotics Engineer

Contribute to the design and construction of robotics systems for diverse industries. Engage in projects involving automation, artificial intelligence, and machine learning.

RF (Radio Frequency) Engineer

Optimize RF systems to facilitate wireless communication. Contribute your expertise to antenna, transmitter, and receiver projects.

Telecommunication Engineer

Plan and manage telecommunication networks to support evolving communication technologies. Drive the deployment of innovative communication solutions.

Power Electronics Engineer

Design and implement power electronic systems for efficient energy conversion. Spearhead projects in the realm of renewable energy systems and electric vehicles.

Biomedical Engineer

Apply ECE principles to create medical devices and equipment for healthcare. Contribute to projects focused on technical solutions for medical diagnosis and treatment.

Research and Development Engineer

Engage in research to develop and enhance new technologies. Contribute to advancements in both academic and corporate research settings.

Entrepreneur/Start-up Founder

Pursue entrepreneurial endeavour's based on innovative ECE solutions. Explore entrepreneurial opportunities in fields such as IoT, electronics manufacturing, and communication technologies.

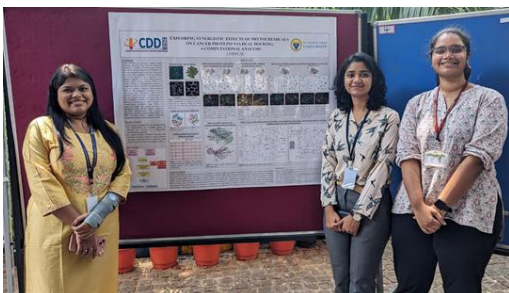
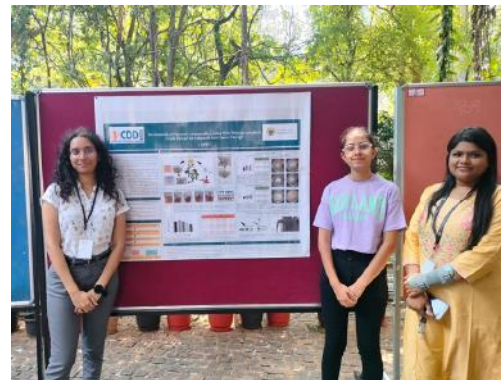
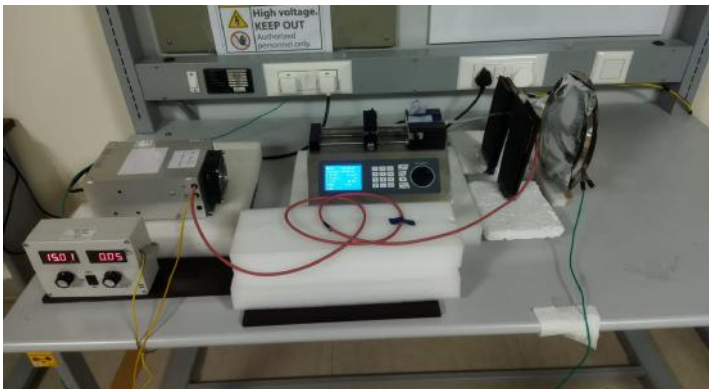
These job prospects showcase the diverse opportunities available for ECE engineers, enabling them to contribute to a variety of industries and work on cutting-edge technologies that shape the future. The continuous evolution of technology ensures that ECE professionals remain in demand around the world.



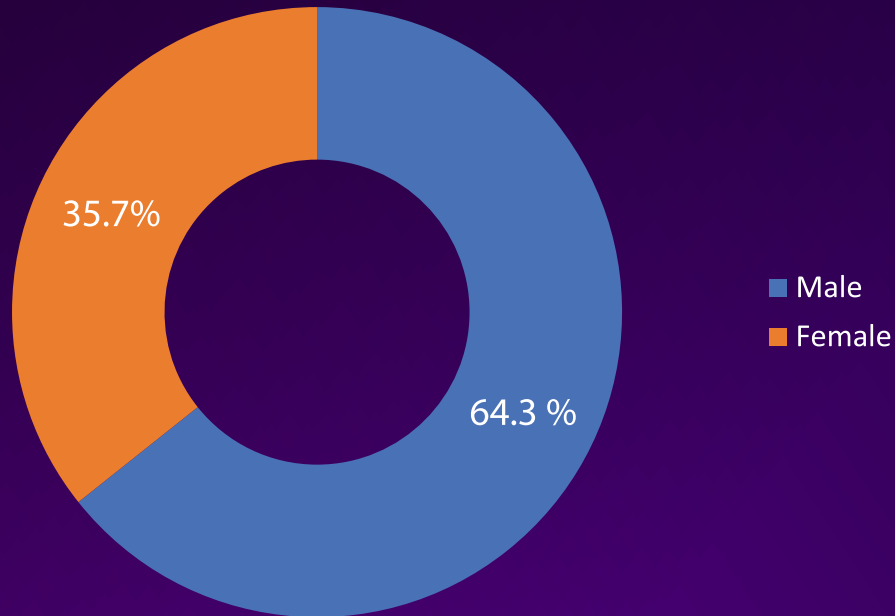
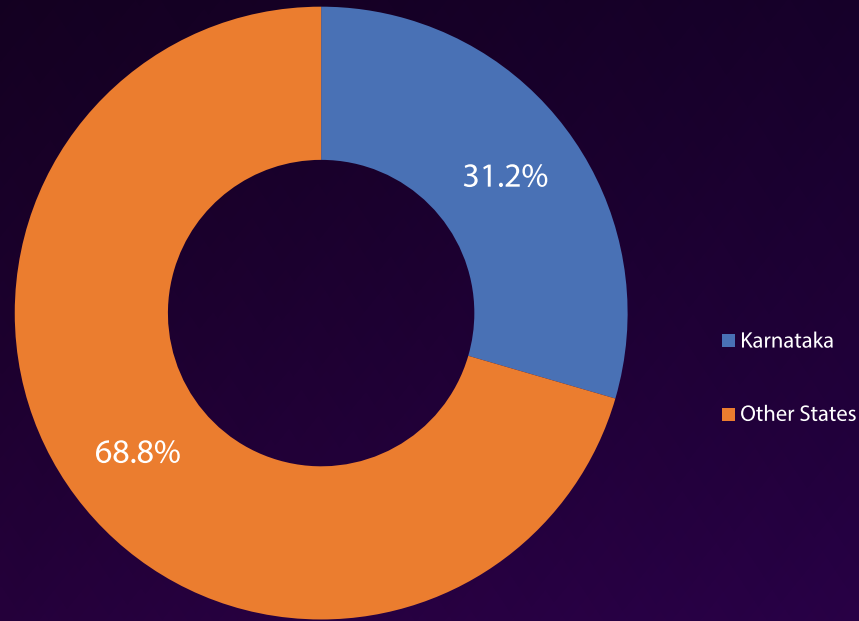
Research Projects funded by Government and Non-government Agencies

The Department of Electronics and Communication Engineering hosts several specialized research laboratories, generously funded by both government and non-government agencies. Students are strongly encouraged to utilize these state-of-the-art facilities to further their academic and research endeavors.

- Dr. Arungalai Vendan S has developed Magnetic Impelled Arc Butt (MIAB) Welding Lab with the support of DST funds. DSU is the only private organization throughout India among all streams to have this Magnetically Impelled Arc Butt (MIAB) Welding lab created with DST funds. Welding Research Institute (BHEL) and IIT Madras are the two more organizations within India to have this facility.
- Dr. RUPAM BHADURI, Professor, is executing the prestigious Collaborative Project of Mission Innovation (International Apex Body) and DST, Ministry of Science & Technology, Govt. of India - Funded Project on Integrated Clean Energy Material Acceleration (IC-MAP): An INDO - CANADIAN Joint Venture.
- Dr. BM Ashwin Desai Project got the research fund as Principal Investigator for the project title: Investigation and optimization of factors influencing the high voltage electrical discharge-based extraction of protein from peanut meal from SERB-DST Government of India.



DSU B.Tech 2025 – A Glimpse into Our Diverse Student Landscape



University offers prestigious merit scholarships based on your IIT-JEE Scores

Scholarship Highlights

2025- **INR 6.24 Cr.** awarded to **780** Students

2024- **INR 6.79 Cr.** awarded to **905** Students

2023- **INR 5.80 Cr.** awarded to **806** Students

Placements

Pre-Placement Training

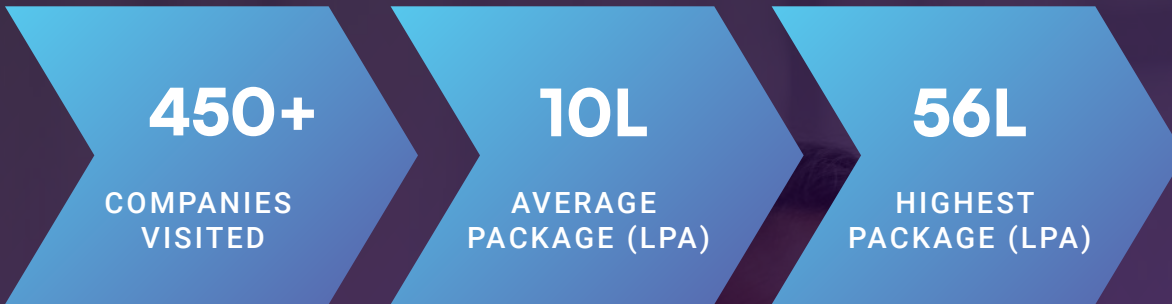
VLSI Training Collaboration

The Department of Electronics and Communication Engineering, Dayananda Sagar University, has collaborated with VinyanaTech, a Bangalore-based company specializing in VLSI circuit design and testing. Guided by Dr. C.P. Ravikumar, a renowned VLSI expert with decades of academic and industry experience at IIT Delhi and Texas Instruments, this program offers hands-on training with industry - standard tools. With India's semiconductor industry expanding rapidly through initiatives like ISM and PLI, this collaboration will equip DSU students with the skills required to excel in the growing VLSI and semiconductor ecosystem.

The Training & Placement Centre (TPC) plays a vital role in making Dayananda Sagar University (DSU) the most favourite destination for many national and international companies to recruit fresh talent every year. The training & placement is the centralised activities for all Dayananda Sagar Group of Institutions.

Therefore, there is a humongous opportunity for students of DSU to get placements in various companies. More emphasis is on institute-industry interaction, pre-training learning initiatives, participating in industrial exhibitions, distinguished lectures by eminent speakers from industries, preplacement talks, written tests, group discussions, alumni activities and so forth. The TPC ensures smooth functioning of the placement activities in the campus and they get placed in the best of both national and international companies.

B.Tech Placement Record (2024-25)



Top Recruiters (National & International)

Some of the top recruiters for ECE operate on both national and international scale, with a strong presence in countries leading the tech industry. They range from major tech giants to specialized startups and staffing agencies.

International Recruiters



National Recruiters



Students also received opportunities from innovative startups like Rocket Genie, Movidu Technologies, LearnFlu, Intellipaat, LaunchED, and Yuvipec.

Global Opportunities

Memorandum of Understanding (MoU) with MIT Square, London

Sponsorship support of USD 1200 received from MIT Square, London, in connection with the Memorandum of Understanding (MoU) established between our institution a MIT Square Group of Companies.

This support was extended towards our participation and execution of ROBOSOCCEER, a prestigious national-level robotics competition to showcases AI-driven soccer-playing robots developed by top engineering minds acro the country.

Under the Scholar in Residence at SOE” program organized by DSU International Affairs with the ECE Department the Value-Added Programs conducted in the Department.

- **Dr. Stefano Rinaldi**, an Associate Professor at the University of Brescia offered a 10-day extensive value-added program on Mastering Industrial IoT: A comprehensive Exploration to fourth-semester students from March 5-15, 2024.
- **Dr. Pavelyev, Vladimir S**, Head-Department of Nano engineering, Samara National University, Russia offered a Value-Added Course on & Diffractive Micro-Optics.

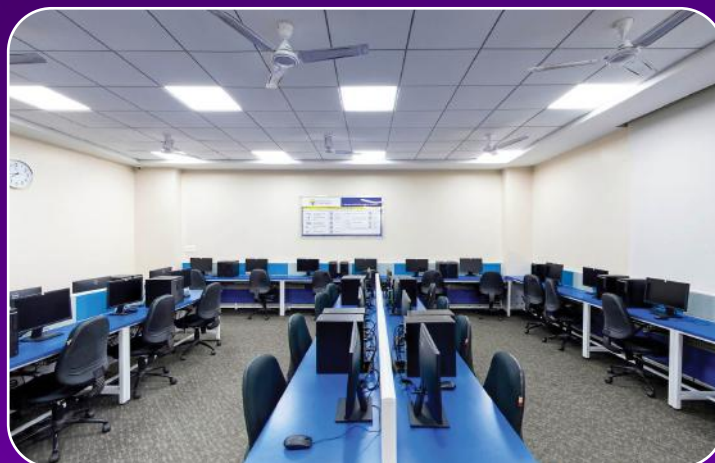
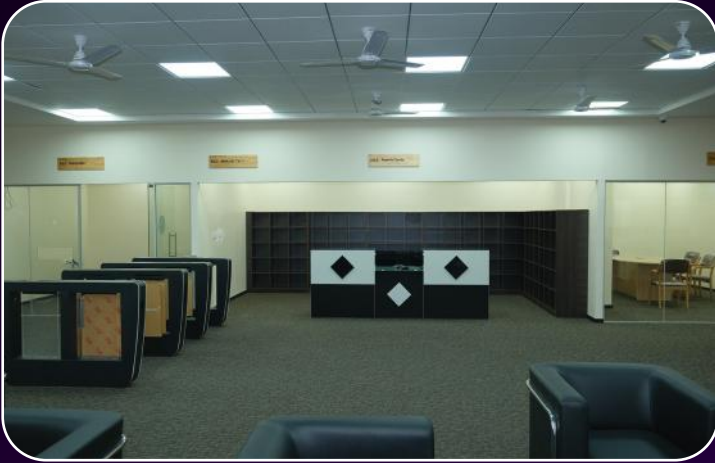


Foreign university collaboration for student exchange and internship opportunities*

UNIVERSITY	COUNTRY
University of South Carolina Aiken	USA
The University of Wisconsin–Madison	USA
Northeastern University	USA
German Varisty, Aachen	Germany
Steinbeis University	Germany
RWTH Aachen University	Germany
Indo Eurosynchroisation Pvt Ltd	Germany
Samara National Research University	Russia
The University of Brescia	Italy
Limkokwing University of Creative Technology	Malaysia
James Cook University	Australia
Ming Chi University of Technology	Taiwan
Amazon College International	Srilanka
Worcester Polytechnic Institute	USA
Western Connecticut State University	USA
The University of Huddersfield	England
TUM Asia Pte Ltd	Singapore
THE UNIVERSITY OF WOLVERHAMPTON	UK
Southern Connecticut State University	USA
DSTI – School of Engineering	France
The University of Liverpool	UK
The University of Worcester	UK
Illinois Tech	USA
Dniprovsky State Technical University	Ukraine
Visayas State University	Philippines
Nelson Marlborough Institute of Technology	New Zealand
New Jersey Institute of Technology	New Jercy
INTI International University	Malayasia
Relaince College	Malayasia
Hasanuddin University	Indonesia
LeTourneau University	USA
MIET, Moscow	Russia
Daffodil University	Bangladesh
University of Liberal Arts ULAB	Bangladesh
Multimedia University (MMU)	Malaysia
Mangosuthu University of Technology MUT	South Africa
University of Lay Adventists of Kigali (UNILAK)	Rwanda
Atyrau University	Kazakhstan
MENDEL UNIVERSITY IN BRNO	Czechia
Ernst Abbe University of Applied Sciences Jena	Germany
King Ceasor University	Uganda
Algebra University	Crotia
University of Evansville	USA
Nizhyn Mykola Gogol University	Ukraine
Dmytro Motornyi Tavria State Agrotechnological University	Ukraine
Széchenyi István University	Hungary
Southern Federal University	Russia
Uni La Salle Polytechnic Institute	France

*Applicable as per university terms and conditions

Infrastructure and Facilities



Sports Facilities



Library



About Library

The Library, established alongside DSI and expanded with Dayananda Sagar Institutions (1969), Dayananda Sagar College of Engineering (1979), and Dayananda Sagar University (2014), was envisioned by the founder, Late Sri R. Dayananda Sagar, as a world-class knowledge hub. Built systematically, it accommodates 560 users and houses an extensive collection of books, CDs, DVDs, periodicals, and digital resources. Serving undergraduates, postgraduates, research scholars, and faculty, the Library reflects the University's academic excellence and is managed by a team of skilled and dedicated professionals.

School of Engineering Collections

Titles	6385
Volumes	21305
Book Bank	433
Bound Volumes	139
Book CD's	643
Periodical CD's	17
Educational Video's	47
National & International Print Journals	60
News Papers	10
Magazines	15
E-Books	12579



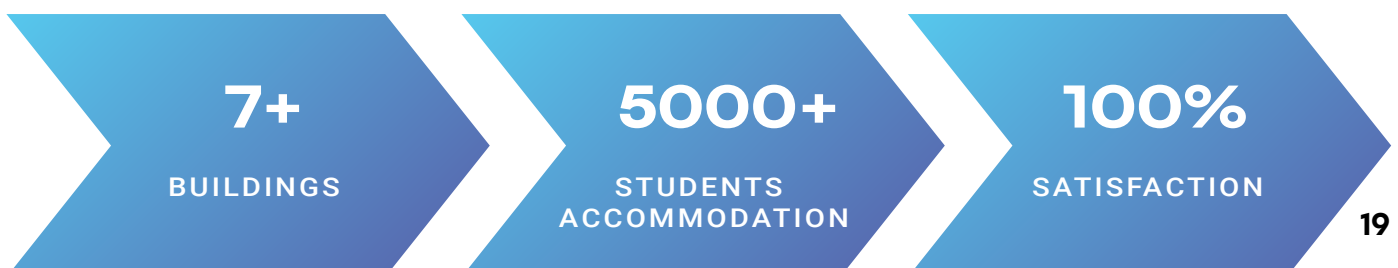
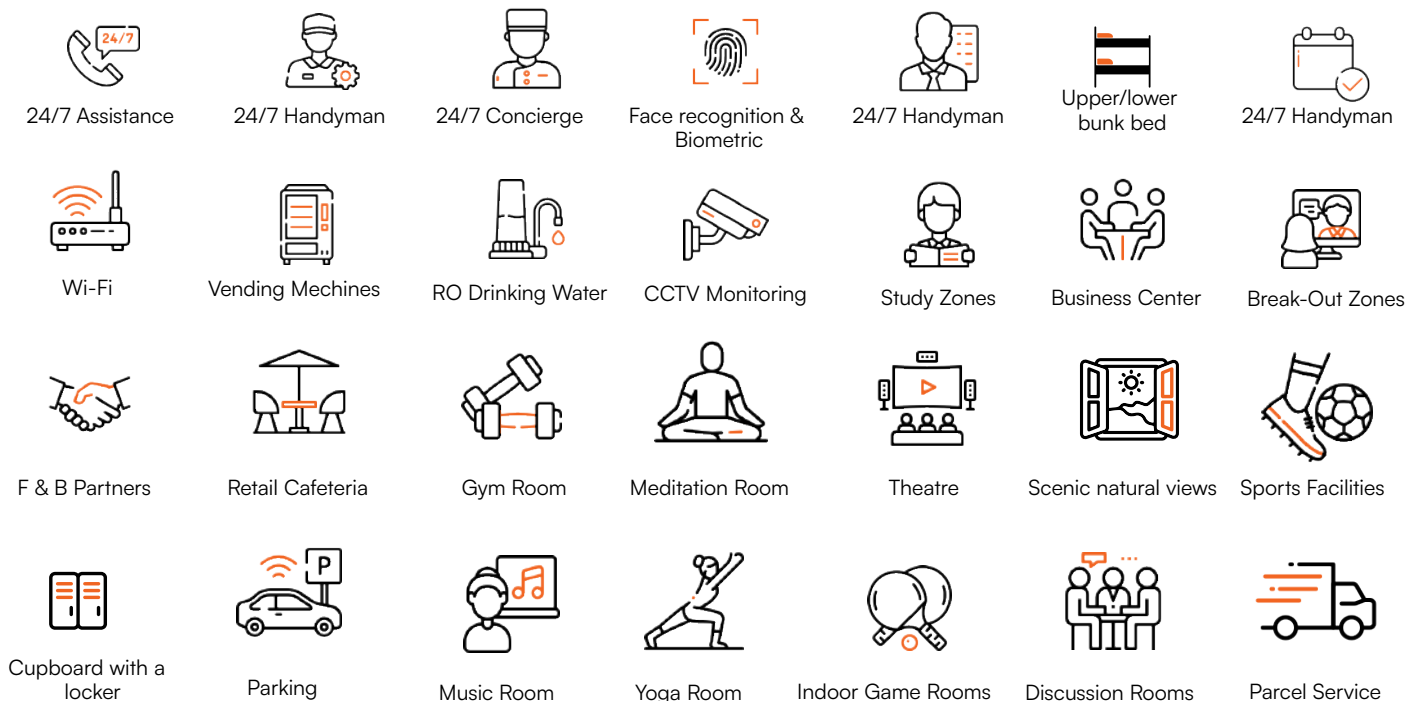
DSU Main Campus Hostel



About Hostel

Our hostel, located within the heart of the DSU main campus, offers a perfect blend of comfort, safety, and convenience. Designed to meet the needs of today's students, our state-of-the-art facilities ensure that you have everything you need for a successful and fulfilling college experience. With a secure environment and a focus on student well-being, our hostel provides the ideal space for both academic focus and relaxation. Whether it's modern amenities, dedicated support for your studies, or a community that fosters growth, our hostel is your home away from home—helping you thrive every step of the way!

Facilities



2 Tier Rooms

In this tier, 2 students will be living together in an en-suite apartment with an access to all the common facilities.

3 Tier Rooms

In this tier type, 3 students will be living together in an en-suite apartment with an access to all the common facilities.

4 Tier Rooms

In this tier type, 4 students will be living together in an en-suite apartment with an access to all the common facilities.

Dormitory

Spacious and well-maintained dormitories provide comfortable shared accommodation with all essential amenities for students.

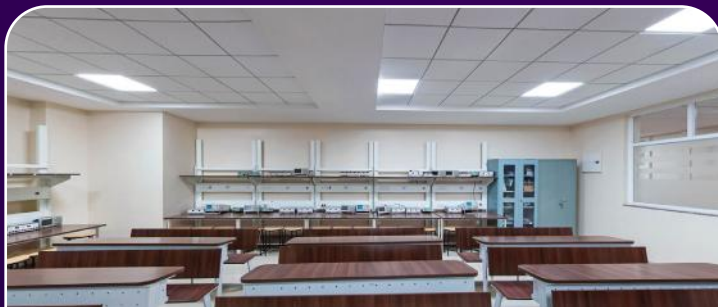
**World-Class
Amenities &
Unparalleled
Comfort for
an **Enriching
Academic Journey!****



Digital Circuit Lab



Common Computer Lab



Analog Circuits Lab



Structures Lab



Electronic Lab



Composites Lab



Physics Lab



Tutorial Room

Glimpse of DSU Main Campus at Harohalli



CLICK HERE
TO VIEW
(360 VIEW)
OF THE
CAMPUS

DSU Main Campus: Devarakagalahalli, Harohalli, Kanakapura Road, Bengaluru South – 562112

Admissions Helpline Nos:  **080 4646 1800**  **+91 636 688 5507**

 www.dsu.edu.in

 admissions@dsu.edu.in