



DAYANANDA SAGAR
UNIVERSITY



DECADES LEGACY
IN EDUCATION & HEALTHCARE



Reach Beyond Borders,
to Achieve Extraordinary!

B.Tech.
Aerospace Engineering

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A Place to Grow, Excel, Invent & Innovate!

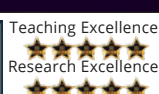
About DSU

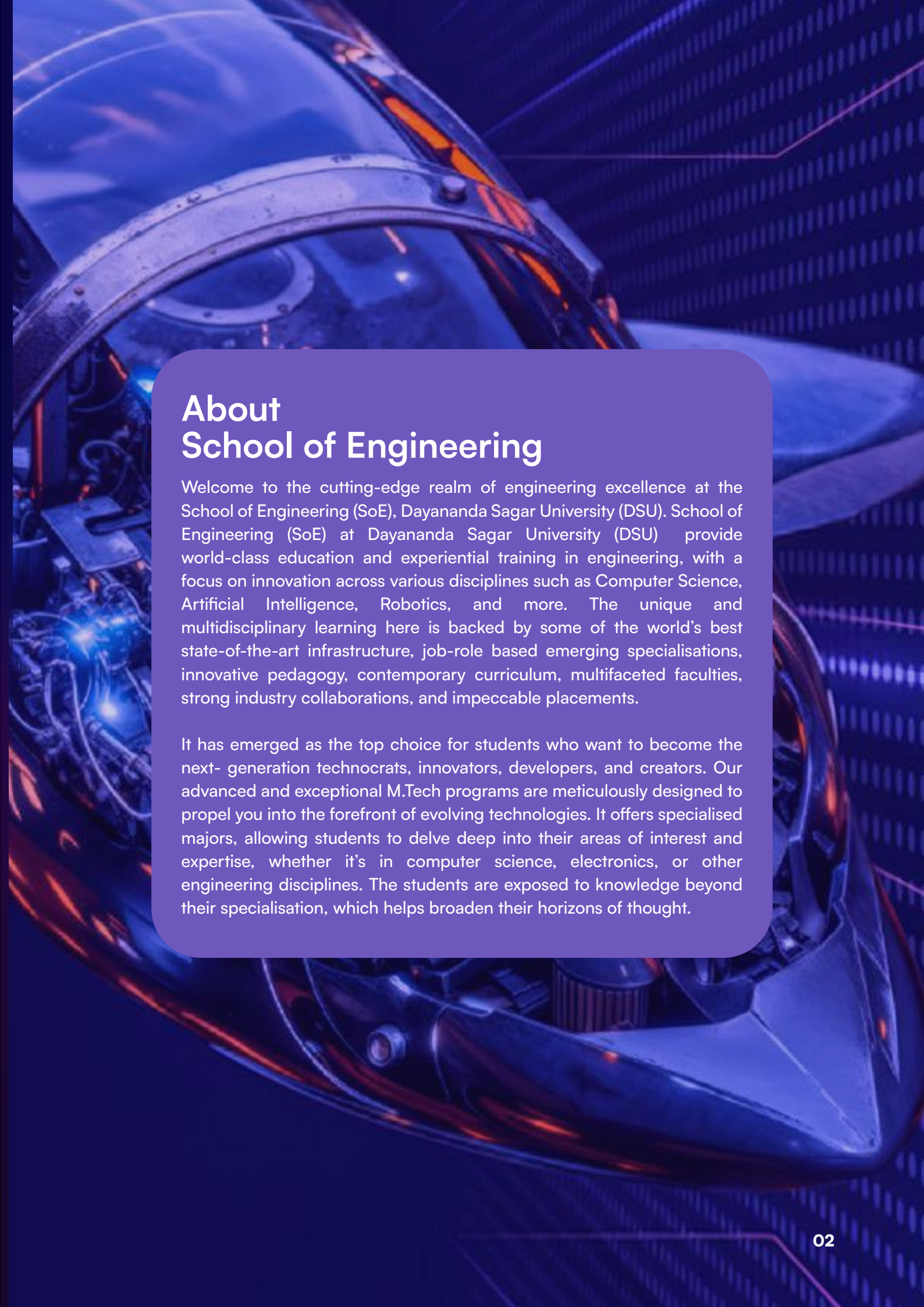
Dayananda Sagar Institutions founded in the 60's by a visionary, Late Sri. R. Dayananda Sagar (Barrister-at-Law) committed to take knowledge to the people, transforms today's students into responsible citizens and professional leaders of tomorrow. Dayananda Sagar University created by an Act of the Karnataka 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





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 Aerospace Engineering

Aerospace Engineering is the upcoming field of engineering that deals with the development of aircraft and spacecraft. It consists of two major branches, Aeronautical Engineering and Astronautical Engineering. Aeronautical Engineering deals with aircraft whereas Astronautical Engineering deals with the spacecraft.

The Aerospace Engineering program at DSU offers a comprehensive undergraduate curriculum aimed at producing skilled and innovative Aerospace Engineers. Students are equipped with theoretical knowledge and practical skills necessary for conceptualizing, designing, analysing, and developing mechanical systems. Interdisciplinary training expands their scope, while experienced faculty with industry connections enrich the learning experience. The Department offers a vibrant academic atmosphere that enables independent research and the free exchange of ideas among students and faculties. The department has continuous interaction with Aerospace and Defense organizations of international reputation like Dassault Systems to help students build the required skill set.



VISION

To become a global leader in Aerospace Engineering education and research by transforming individuals to be creative, innovative and socially responsible citizens desired by industry, research organizations and society.



MISSION

To impart technical knowledge, ethical values, practical and entrepreneurial skills to transform individuals into competent engineers.

Program Overview

Aerospace Engineering is an exciting discipline that merges science, technology, and innovation to design and develop aircraft, spacecraft, and defense systems. Established in 2018, the Department of Aerospace Engineering at our university has grown rapidly, nurturing students into top-tier engineers who contribute to national and international aerospace organizations. With a vibrant academic culture, the department promotes independent research, hands-on learning, and collaboration with reputed aerospace firms such as Dassault Systèmes. Our aim is to empower students with the knowledge and skills to excel in the evolving aerospace industry.

Curriculum Highlights

The B. Tech Aerospace Engineering program offers a robust curriculum that covers both foundational and advanced subjects.

Core areas include

Aerodynamics and Propulsion

Aerospace structures and materials

Flight mechanics

Avionics and control systems

Satellite Technologies

To complement technical depth, the program integrates emerging fields such as:

- Artificial Intelligence & Machine Learning (AI & ML) for aerospace applications
- Drone Technology and Digital Twins
- Computational Tools for Design and Analysis (e.g., Dassault 3DEXPERIENCE software)

Students have the flexibility to choose interdisciplinary electives from fields like Electronics, Computer Science, and Mechanical Engineering from their fifth semester onwards. Clubs and workshops provide platforms for practical engagement, especially in areas like drone fabrication and flight control simulation.

Admission Eligibility Criteria

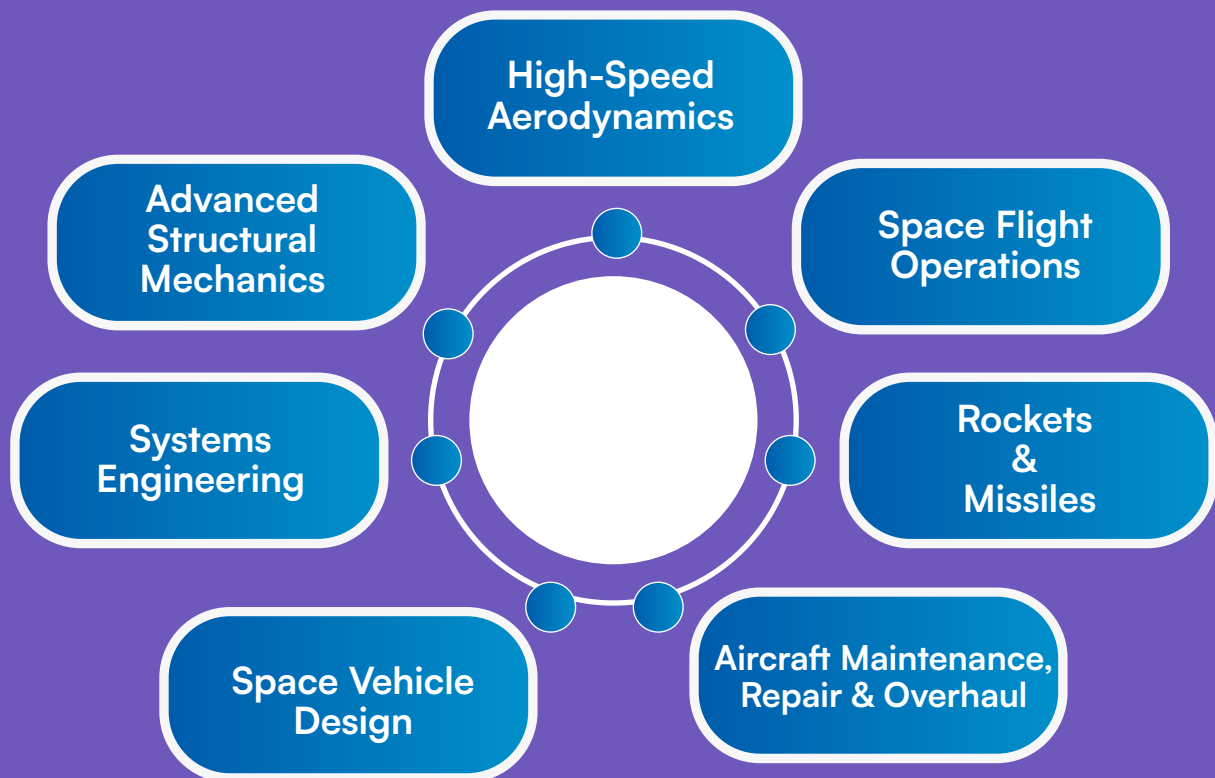
Pass in PUC / 10+2 examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry / Biotechnology / Biology / Computer Science / Electronics / Technical Vocational subjects and obtained at least 45% marks (40% in case of candidate belonging to SC/ST & OBC category) in 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 Courses

The Electives offered by the Department of Aerospace engineering at Dayananda Sagar University.



Curriculum Enrichment Points in Aerospace Engineering

Computation Fluid Dynamics & Finite Elemental Analysis

Smart Manufacturing & Industry 4.0

Fly-by-wire systems, embedded systems, navigation & guidance technologies real-time flight control system simulations

Unmanned Aerial Vehicle (UAV) design, mission planning, remote sensing, and satellite communication systems

Capstone Projects & Industry Collaborations

Unique or Pioneering programs

Student CubeSat and CanSat Programs:

Highlight: A student-led initiative that has designed, built, and launched multiple CubeSats in collaboration with ISRO or private space tech partners.

What Makes It Unique: Focus on real payloads (e.g., Earth observation, data collection, communication) with PCB-integrated structures and student-led mission control.

Visuals: Images of launch, integration room, students working on payloads, deployment animation.

Digital Twin of Model Rocketry and CanSat

This pioneering program integrates Digital Twin technology with student-built model rockets and CanSat payloads, enabling real-time simulation, telemetry visualization, and predictive maintenance. Students develop a virtual replica of the rocket and satellite system—mirroring its structural, thermal, and flight dynamics behaviour. By coupling sensors and flight data with the digital model, the program empowers students to optimize designs, anticipate failures, and perform mission rehearsals before actual launches. This fusion of hands-on rocketry and advanced aerospace simulation provides an industry-relevant, innovation-driven learning platform unique to the department.

Emerging Job Opportunities

Aerospace Engineering offers diverse and exciting career opportunities across industries such as aviation, space exploration, defence, UAV technology, and advanced manufacturing. Graduates can work as aerospace design engineers, propulsion specialists, avionics engineers, UAV developers, or materials scientists in leading organizations like NASA, ISRO, Boeing, Airbus, DRDO. With advancements in electric propulsion, hypersonic travel, satellite technology, and autonomous systems, the demand for skilled aerospace engineers continues to grow. Emerging fields like urban air mobility, space tourism, and sustainable aviation further expand career prospects, making aerospace engineering a dynamic and future-ready profession.

A beginner in Aerospace Engineering can explore various job opportunities in different domains, including:

Aerospace Design Engineer

Assisting in the design and analysis of aircraft, spacecraft, and UAV structures using CAD and simulation tools.

Propulsion Engineer

Working on jet engines, rocket propulsion, and hybrid-electric propulsion systems for improved efficiency and performance.

Avionics Engineer

Developing and testing electronic systems, communication, and navigation controls for aircraft and spacecraft.

Flight Test Engineer

Conducting simulations and real-time testing of aircraft, UAVs, or space systems to ensure performance and safety.

Manufacturing & Materials Engineer

Working in composite materials, additive manufacturing, and advanced fabrication techniques for aerospace components.

Aerodynamics Engineer

Performing wind tunnel testing and computational fluid dynamics (CFD) simulations to optimize aircraft performance.

Unmanned Aerial Vehicle (UAV) Engineer

Designing, testing, and developing drone systems for defence, logistics, and surveillance applications.

Satellite Systems Engineer

Assisting in satellite design, integration, and testing for communication, earth observation, and deep-space missions.

Quality, Safety and Maintenance

Ensuring compliance with aviation regulations and conducting inspections for aircraft and aerospace systems.

Research & Development Associate

Working in labs or organisations to explore next-generation aerospace technologies like hypersonic, space propulsion, or urban air mobility.



Career BOOOM in Aerospace Engineering? (Industry Insights)

The Aerospace Engineering industry is experiencing unprecedented growth, and there has never been a better time to be part of this exciting journey. Bengaluru, as India's aerospace hub, faces a growing demand for skilled professionals from both local entities like National Aerospace Laboratories and global giants like Rolls Royce and SpaceX. The Department of Aerospace Engineering at our university goes beyond the standard curriculum, offering additional training and practical experiences aligned with national and global industry needs.

Here's why:

Industry Expansion

Aerospace engineering encompasses aircraft and spacecraft development, with constant advancements in drone technologies, satellite technologies, autonomous systems, air transport, and space-based internet technologies the opportunities are expanding

Global Opportunities

The demand for aerospace engineers is not limited by borders. With DSU's program, you position yourself to explore international opportunities in the commercial and defence sectors, making your career truly take off.

Innovation at its Core

From advancing drone technologies and satellite systems to pioneering autonomous vehicles & space-based internet, the aerospace sector offers diverse opportunities for those equipped with the skills to drive innovation forward



Aerospace Engineering Lab for Experiential Learning

DSU has established a Centre of Excellence (COE) in Aerospace Engineering with M/s. Dassault Systems (DS/3DS) who will be the technology partner, COE for Aerospace & Defence - Government of Karnataka, a knowledge partner and M/s. Dysmech Consultancy Services Pvt. Ltd. (DCS) as the interfacing partner.

The CoE is aimed to strengthen technical education infrastructure to promote industry relevant skill. The COE will have the state-of-the-art Labs including:

Product Design and Development

Flight Physics Validation

Aerospace Structures Design

Avionics

Aircraft Systems

Reality

Composites

Objective of CoE projects

Objective

Enable skill development for improved livelihoods and social upliftment.

Competency

Impart modern technical skills to create industry-ready human capital.

Knowledge & R&D

Establish high-end assets for skill development center to foster human capital formation.

Industry Linkages

Forge partnerships with industry for live exposure to technology, project work, and processes.

Placements

Boost recruitment through DS/DCS HR initiatives and industry collaborations within CoE.

Institute Role

Collaborate with DS, CoE — A & D (GoK), and DCS to establish and facilitate institutional co-operation for CoE.

Professional Club Activities

Aeronautical Society of India Student Chapter (AESI)

The Department of Aerospace Engineering at Dayananda Sagar University have Inaugurated Aeronautical Society of India (AeSI), Students Chapters on 22/5/24.

Recently our students have participated in **Advances in Aerospace Technologies — AI & Structural Analysis seminar organised by AESI Bangalore**

Dassault Systemes La Foundation

Funded Projects

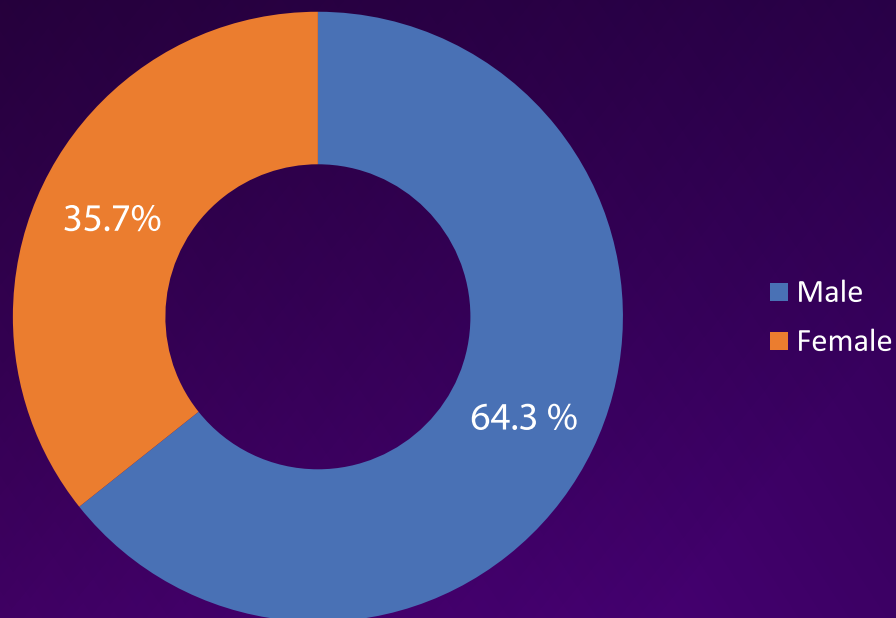
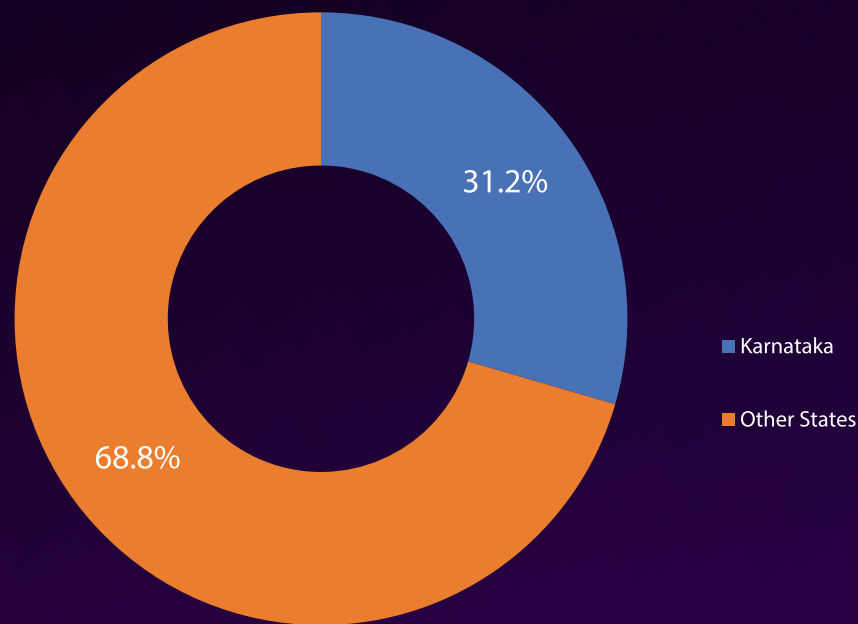
Dr Prasanthakumar HG is currently working on Dassault Systemes La Foundation funded project titled Design and Development of Digitally twinned satellite (D-SAT) payload.

Engineering Design Internship

The student from the department of Aerospace Engineering completed the Engineering Design Internship opportunity provided by Dassault systems La foundation the title of the Internship program is that “Converting drone winch mechanism into 3D Digital Twin” and Converting Multi Role Multi mission Drone into 3D digital twin.



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

B.Tech Placement Record (2024-25)

450+

COMPANIES
VISITED

10L

AVERAGE
PACKAGE (LPA)

56L

HIGHEST
PACKAGE (LPA)

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



Mercedes-Benz

Cognizant



AIRBUS

Capgemini



BOSCH

intel

kyndryl

DXC
TECHNOLOGY

Chegg

pwc

amazon

Google



NVIDIA

Microsoft

SAMSUNG
Research

accenture

National Recruiters



tcs
TATA
CONSULTANCY
SERVICES

KOCH



L&T Infotech



Mindtree

Prodapt

IQVIA

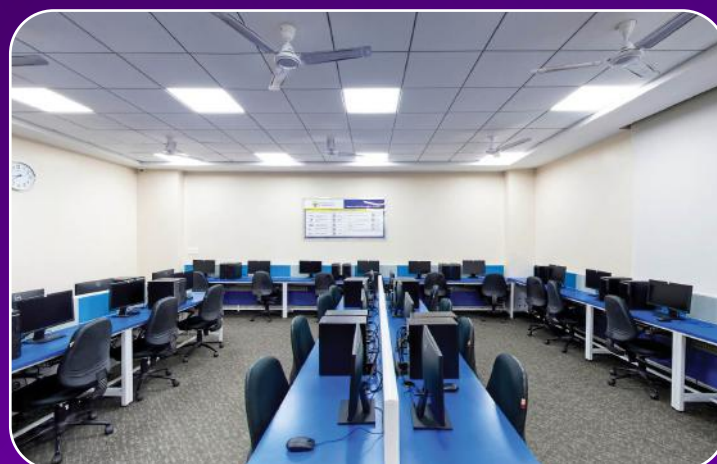
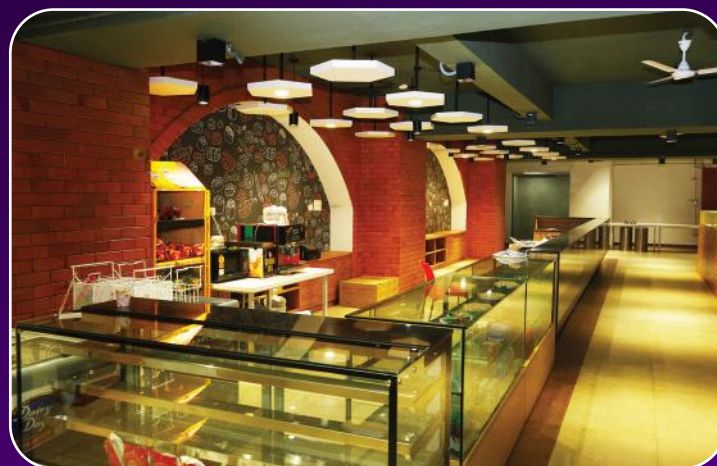
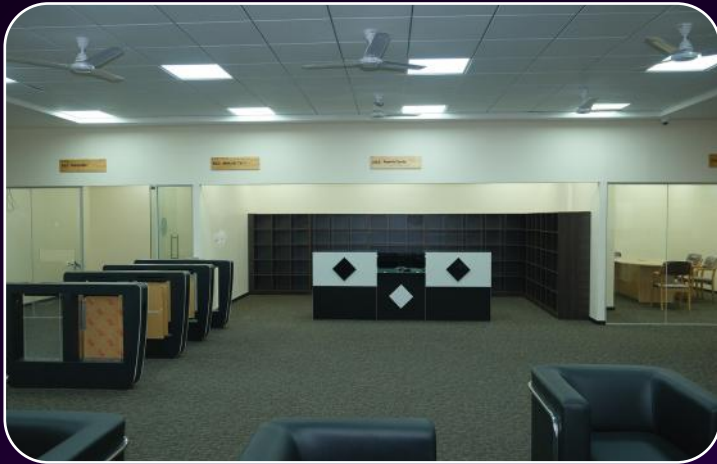
Infosys

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 Jercey
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



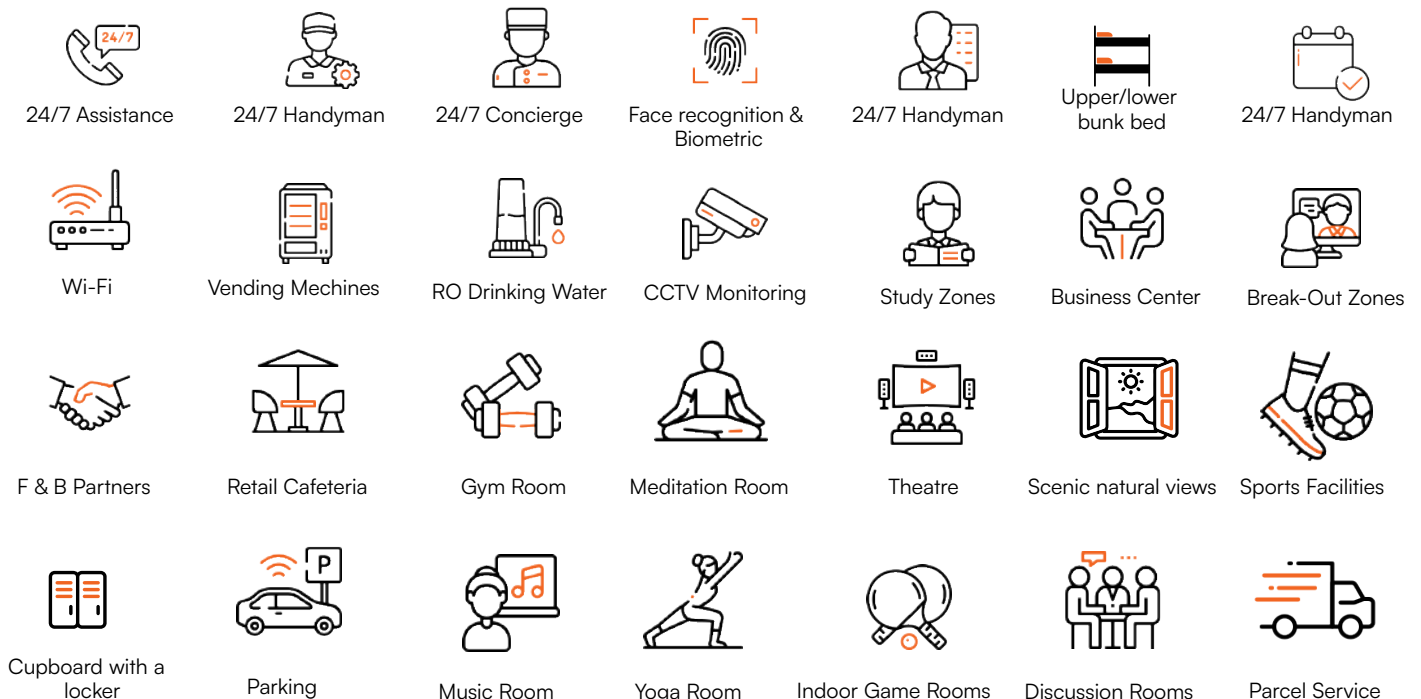
DSU Main Campus Hostel



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



7+
BUILDINGS

5000+
STUDENTS
ACCOMMODATION

100%
SATISFACTION

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!****

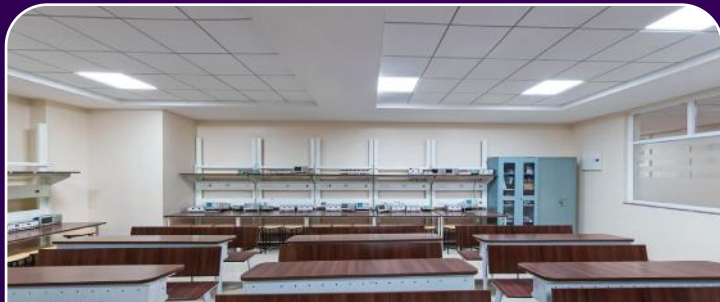
Labs



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**

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