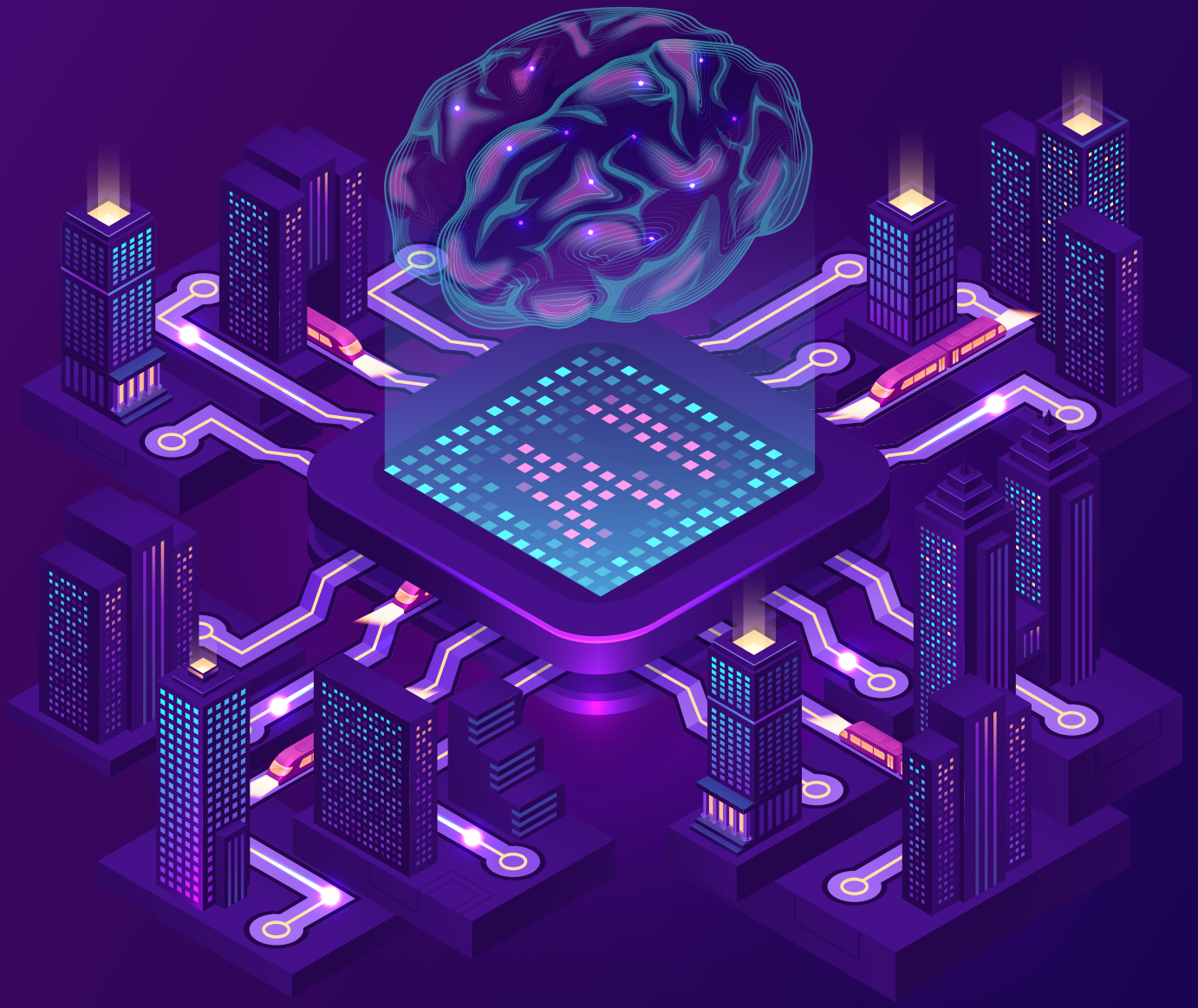
DAYANANDA SAGAR UNIVERSITY

A+ GRADE ACCREDITED BY NAAC

Shaping Minds for the Era of

Smart Innovation



B.Tech

CSE (AI & DATA SCIENCE)

Index

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

TIMES ENGINEERING
TIMES ALL INDIA ENGINEERING INSTITUTES RANKING SURVEY 2023
NUMBER ONE
- Top Emerging Engineering Institutes
- Emerging Engineering Institutes - Placement
- Emerging Engineering Institutes - Research Capability

IIRF -2025
EDUCATION IMPACT AWARD
Promising Private University for Academic Excellence & Learning

ICARE RATINGS KSURF
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

ET THE ECONOMIC TIMES 2023
Excellence in Academic Facilities & Learning Resources

IIRF -2024
NATIONAL RANK–9
TOP PRIVATE UNIVERSITIES IN INDIA (OVERALL)
STATE RANK 3 SOUTH ZONE RANK 3

IIRF -2026
EDUCATION IMPACT AWARD
Excellence in Employability & Placement Performance

TIMES BUSINESS AWARDS
BEST EMERGING UNIVERSITY 2021

34th ielts WORLD EDUCATION SUMMIT 2025 CHENNAI
01st November 2025
OUTSTANDING UNIVERSITY WITH BEST PLACEMENTS

Message from the Dean

Welcome to the Department of Computer Science and Engineering (Artificial Intelligence and Data Science) at Dayananda Sagar University, School of Engineering!
In an era where data-based decisions and intelligent systems reshape the world, the convergence of Artificial Intelligence and Data Science stands at the forefront of technological evolution. With this rapid advancement in view, we are proud to offer a dedicated Program in Artificial Intelligence and Data Science, designed to meet the growing demand for skilled professionals who can leverage data and AI technologies to solve real-world problems. Our mission is to deliver a high-quality, industry-aligned education that equips students with a strong foundation in computing, critical thinking, and problem-solving, along with hands-on experience in tools and technologies relevant to the Artificial Intelligence and Data Science ecosystem.

Our department has dedicated and research-oriented faculty experts with specializations in Artificial Intelligence & Machine Learning, Data Science & Big Data Analytics, Predictive Data Modelling, Deep Learning & Natural Language Processing, Computer Vision & Image Processing, Pattern Recognition & Cognitive Computing, Generative AI, Cloud & Edge Intelligence. Faculty members are actively involved in research and innovation, publishing in reputed journals, and collaborating with industries and government agencies to work on industrial and societal challenges. Envision our graduates as data-driven problem solvers and ethical AI professionals who can contribute meaningfully to technological advancement and social impact. Graduates of this specialized program are equipped with strong foundations in computer science, AI algorithms, and Data Analytics & Visualization enabling them to pursue high-demand roles that include Data Scientist, Data Analyst, AI Engineer, AI Ethics Officer, Data Security and Privacy Analyst, Business Analyst, etc. across industries.

Thank you for your interest in our department. We invite you to explore the opportunities, programs, and innovations we offer and be part of this exciting journey at the intersection of data, intelligence, and applications.

Dr. Udaya Kumar Reddy K R
Dean, School of Engineering

About School of Engineering (SoE)

The School of Engineering (SoE) was established in the year 2015 offering B.Tech, M.Tech and research programmes in various disciplines including Computer Science and Engineering (CSE), CSE(Artificial Intelligence & Machine Learning), CSE(Data Science), CSE(Cyber Security), Computer Science and Technology, Electronics and Communication Engineering, Aerospace Engineering and Mechanical Engineering. The Artificial Intelligence and Robotics branch was established in 2023. At SoE, your studies in each of these disciplines will focus on innovation.

School Vision

Transform lives through excellence in engineering education, research, and innovation with an emphasis on sustainability, inclusive technologies, and global needs.

School Mission

1. Design and deliver contemporary engineering curricula to address regional and global needs while emphasizing ethics, values, integrity, and regional relevance.

2. Carry out high-impact academic research, industry projects, and innovation activities with active student engagement to advance science and engineering knowledge and state-of-the-art industry practices.

3. Develop regional and national leaders to advance the society and economy.

Program Overview

Computer Science & Engineering (Artificial Intelligence & Data Science) is a discipline that concerns scientific methodologies, processes, and techniques drawn from different domains like statistics, cognitive science, and computing and information science to extract knowledge from structured data and unstructured data.

CSE (AI&DS) is transforming businesses around the world and as the pace of change accelerates, the value of AI and data science reap benefits, and secure a career that can gain a first-mover advantage on nascent industry trends, make impactful applications possible, and apply tangible results to solve complex business problems, DSU has launched the AI and Data Science Program. With some form of intelligence, this discipline is placed an interest on making processes efficient and endowing them.

The program allows you to specialize in AI&DS that combine a Cutting-edge and Curated Syllabus with seamless and wholesome learning experience. Outstanding Career / Placement opportunities in reputed core companies.

Program Vision and Mission

Vision

To be a center of excellence in Artificial Intelligence and Data Science education, fostering innovation, ethical values, and societal impact through advanced learning, interdisciplinary research, and industry collaboration.

Mission

- To impart strong foundational knowledge in Computer Science, Artificial Intelligence, Machine Learning, and Data Science through a dynamic and industry-relevant curriculum.
- To develop problem-solving and analytical thinking skills by engaging students in real-world applications, research projects, and hands-on learning.
- To foster innovation and entrepreneurship by creating an ecosystem that encourages creative thinking and the development of AI-driven solutions for societal and industrial challenges.
- To promote ethical, responsible, and inclusive use of AI technologies through awareness of data privacy, security, fairness, and sustainability.
- To build collaborations with academia, industry, and research organizations for internships, projects, and knowledge exchange, enhancing employability and lifelong learning.

Program Eligibility

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)

Program Unique Features

Comprehensive AI and Data Science Integration: The program uniquely blends Artificial Intelligence, Machine Learning, and Data Analytics, providing students with an end-to-end understanding of intelligent data-driven systems.

Flexible Curriculum with Emerging Electives: Offers electives in Data Engineering and MLOps, Deep Learning, Federated Learning, Generative AI, and Cloud-based AI, allowing students to specialize in trending domains.

Experiential and Project-Based Learning: Each semester emphasizes hands-on learning through mini-projects, hackathons, and case studies using real-world datasets and industry tools.

State-of-the-Art Laboratories: Equipped with advanced AI, Machine Learning, and Data Science labs featuring GPU-enabled systems and cloud-based resources for model training and deployment.

Career-Oriented Skill Development: Regular workshops on Python, R, Data Visualization, and AI certifications prepare students for roles like Data Scientist, AI Engineer, and ML Developer.

Industry Collaboration and Internships: MoUs with leading IT and analytics companies enable internships, expert lectures, and industry-driven projects, bridging the gap between academia and practice.

Research and Innovation Focused: Encourages students to participate in research publications, innovation challenges, and start-up incubation in cutting-edge areas like AI in healthcare, robotics, and smart cities.

Ethical and Responsible AI Development: Incorporates training in AI ethics, data privacy, and sustainability, preparing students for responsible AI developers.

Interdisciplinary Applications: Focuses on applying AI and data science in healthcare, finance, agriculture, and cybersecurity, enabling a broader societal impact.

Global Competency and Lifelong Learning: The program cultivates analytical thinking, innovation, and continuous learning, equipping students to excel in global technology environments.

Curriculum

A rigorous B.Tech CSE (AI & Data Science) curriculum strikes a good balance between foundational computer science, specialized AI and Data Science knowledge, real-world application, and research or innovation. Below is a detailed outline, related to core courses,elective courses, that align with global standards (like ACM / IEEE guidelines) and meet industry demands.

Salient Features of Curriculum

- **Industry-Aligned Curriculum**
- **Strong Foundation in Core Computing and Statistics**
- **Experiential and Project Based Learning**
- **Specialized Domains and Electives**
- **Research and Innovation Focus**
- **Integration of Modern Tools and Platforms**
- **Interdisciplinary and Outcome Based Approach**
- **Skill Development & Placements**
- **Foreign Language & Global Exposure**
- **Entrepreneurship and Industry Collaboration**

Core Courses

Data Structures, Operating Systems,Computer Organization and Architecture, Database Management Systems, Design and Analysis of Algorithms, Applied Machine Learning,Computer Networks,Theory of Computation and Compiler Design Artificial Intelligence,Business Essentials for Engineers,Programming In Java,R Programming,Django Framework,Data Analytics and Visualizations,Deep Learning Data Mining and Predictive Analytics,Data and Information Security, Natural Language Processing,Generative AI,Business Analytics and Intelligence,Data Science in Cloud Environment, BI Using Tableau / Power BI.

Elective Courses

Artificial Intelligence, Data Science, Machine Learning, Deep Learning,Generative AI, Natural Language Processing, Computer Vision, Big Data Analytics, Reinforcement,Learning and Robotics,Cyber Security, IoT and Blockchain Technology, Edge Computing, Quantum Computing, Explainable AI, Agile and Devops, Knowledge Engineering, Acoustics, Image and Video Processing, Agentic AI, MLOps, IoT data processing, Stream processing, Satellite Data Analysis, Big Data Technologies, High Performance Computing, Social Media Analytics, Healthcare Analytics, Cloud Data Management, Industrial and Medical, Responsible AI, AI for Robotics, Distributed AI, IoT Security and Privacy in Cloud,Quantum Machine Learning.Explainable AI, Agile and Devops, Knowledge Engineering, Acoustics, Image and Video Processing,Agentic AI,MLOps, IoT data processing,Stream processing, Satellite Data Analysis, Big Data Technologies, High Performance Computing,Social Media Analytics, Healthcare Analytics,Cloud Data Management,Industrial and Medical, Responsible AI, AI for Robotics, Distributed AI,IoT Security and Privacy in Cloud, Quantum Machine Learning,

Project Components

The project works are integral components of the B.Tech program, which provide students with opportunities to apply theoretical knowledge to real-world engineering problems, foster innovation, and develop independent research skills. These components are spread across all three years of study, as cited below, and are integral to the curriculum.

Year / Semester	Component
II Year, III and IV Semester	Course related mini projects
III Year, V and VI Semester	Mini Project/ Internship
IV Year, VII Semester	Project Phase I (Design & Proposal)
IV Year, VIII Semester	Project Phase II (Implementation & Report)

Foreign Languages Offered

Foreign languages such as German and French are introduced in B.Tech programs to:

- Enhance global employability and communication skills.
- Support student exchange programs and higher studies abroad.
- Enable collaboration with multinational companies and foreign research institutes.

Program Industry Insights

India's demand for AI professionals to hit 1 million by 2026: Report- The Times of India

Demand for AI/ML roles surged by 39% in recent periods (e.g. 2024) even when overall IT hiring was soft - The Indian Express.

Predicted 137,630 new job openings in Data Science by 2026 in India- Analytics Insight

The Big Data & Analytics market in India is projected to reach US $ 18.9 billion by 2025, growing at 27.8% CAGR (2019-25) from US$ 5.5 billion.

Majority of Data Science / Analytics roles in 2023 fall in: ₹6-10 LPA (33%) and ₹10-15 LPA (24%) brackets. Roles paying over ₹15 LPA or for freshers are relatively fewer- Business Standard.

Bengaluru remains top (26%) for data science / analytics jobs; followed by Delhi NCR (22%), Hyderabad (12%), Chennai (9%) etc. - Business Standard.

To meet demand, India's AI talent pool needs to expand from 600-650 thousand to 1.25 million by 2027. Up-skilling programs (e.g. NASSCOM / MeitY / FutureSkills PRIME) are underway to bridge this gap.

Emerging Job Opportunities

Data Scientist	Machine Learning Engineer	AI Engineer	Data Analyst
Business Analyst	Data Architect	Edge AI Developer	Generative AI Engineering

Internship Opportunities

The Department of CSE (AI and Data Science) has strong collaborations with leading organizations such as IBM, AWS Academy, Microsoft, and NVIDIA. Through these partnerships, students work on live industry projects, internships, and research-based assignments in emerging domains like Predictive Analytics, Computer Vision, and Natural Language Processing. These initiatives ensure that graduates acquire practical experience and are fully prepared to meet global industry demands.Students undergo industrial internship or training programs of 4-6 weeks duration to gain exposure to engineering practices, data handling, and basic AI and DS applications.

Industry Tie-Ups and Industry Projects Executed by students

Established Memoranda of Understanding (MoUs) at the school level and partnerships with reputed organizations for training, internships, and joint projects in AI and Data Science.

- IBM India Pvt. Ltd. – AI & Cloud computing certifications, industry-aligned courses.
- Amazon Web Services (AWS) Academy – Cloud-based AI/ML learning modules and projects.
- Microsoft Learn for Educators – AI and Data Analytics certification programs.
- Infosys Springboard / TCS iON / Wipro TalentNext – Industry-readiness training and live project mentoring.
- NVIDIA Deep Learning Institute (DLI) – GPU programming and deep learning workshops.
- Google AI / Tensor Flow Developer Program – Hands-on learning in applied AI models.
- Startups and MSMEs in analytics, healthcare, finance, and agriculture – real-world capstone projects.

Companies Offering Internships

The Department of CSE (AI and Data Science) has strong collaborations with leading organizations such as IBM, AWS Academy, Microsoft, and NVIDIA. Through these partnerships, students work on live industry projects, internships, and research-based assignments in emerging domains like Predictive Analytics, Computer Vision, and Natural Language Processing. These initiatives ensure that graduates acquire practical experience and are fully prepared to meet global industry demands.

Placement

B.Tech Placement Record (2024-25)

450+	10 L	56 L
COMPANIES VISITED	AVERAGE PACKAGE (LPA)	HIGHEST PACKAGE (LPA)

Top Recruiters

Some of the top recruiters for engineering graduates operate on both a 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.

Top Recruiters

Cognizant, accenture, Prodapt, Capgemini, wipro, DXC TECHNOLOGY, Infosys, KOCH, kyndryl, IBM, TEACHNOOK, BOSCH, Mindtree, Chegg, skolar, Persistent, L&T Infotech, IQVIA, Mu Sigma, pwc, thoughtcentric labs, CitiusTech, TCS TATA CONSULTANCY SERVICES, intel, JPMORGAN CHASE & CO., UST Global, Mercedes-Benz, INMOVIDU, ivy comptech, ACCOLITE DIGITAL, 6D Technologies Smart Ideas, Delivered

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 Eurosynchronisation 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

Student Clubs for Technical & Holistic Development

The Department of Computer Science and Engineering (AI & DS) actively encourages students to participate in various clubs, societies, and technical communities aimed at enhancing employability skills, innovation, and holistic development. These clubs conduct regular activities, workshops, and competitions that focus on both technical and non-technical growth, preparing students to meet industry expectations.

Main Activities Involved

Smart India Hackathon (SIH): Encouraging innovation and problem-solving by working on real-world challenges provided by industries and government bodies.

Google Gemini Club Workshops: Hands-on sessions introducing students to AI, machine learning, and generative AI technologies.

NASA Space Apps Hackathon & Bharatiya Antariksh Hackathon: Promoting space research and interdisciplinary innovation through global-level challenges.

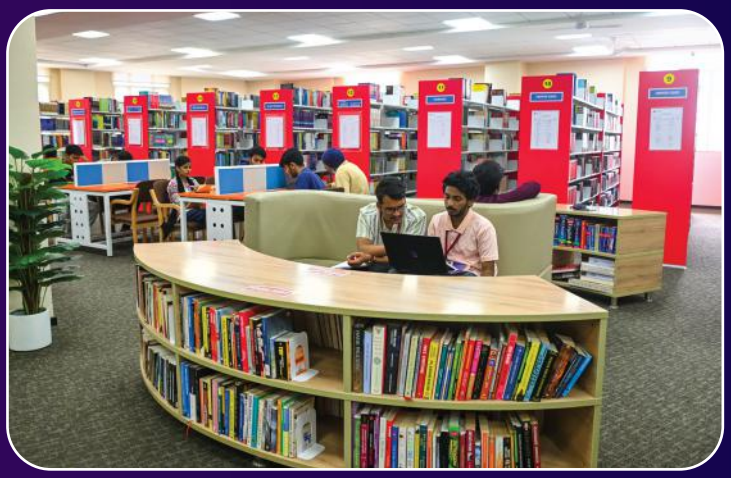
Mental Wellness Club: Focusing on psychological well-being, stress management, and peer support for healthy academic life.

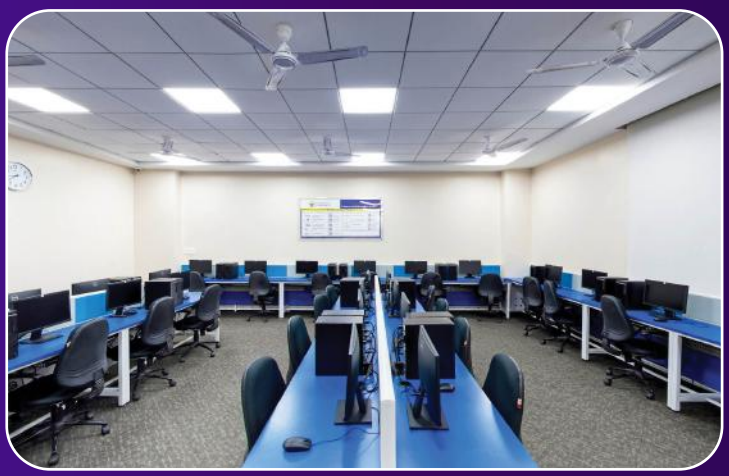
NCC (National Cadet Corps): Building discipline, leadership, and patriotism among students.

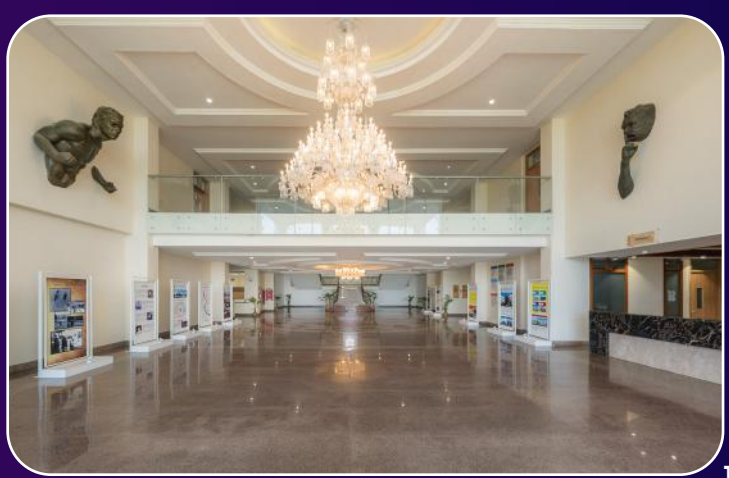
CodeSanket Club: Conducting coding contests, hackathons, and technical sessions to strengthen programming and problem-solving skills.

ACM Student Chapter: Organizing hackathons, tech talks, and competitions to bridge academia and industry.

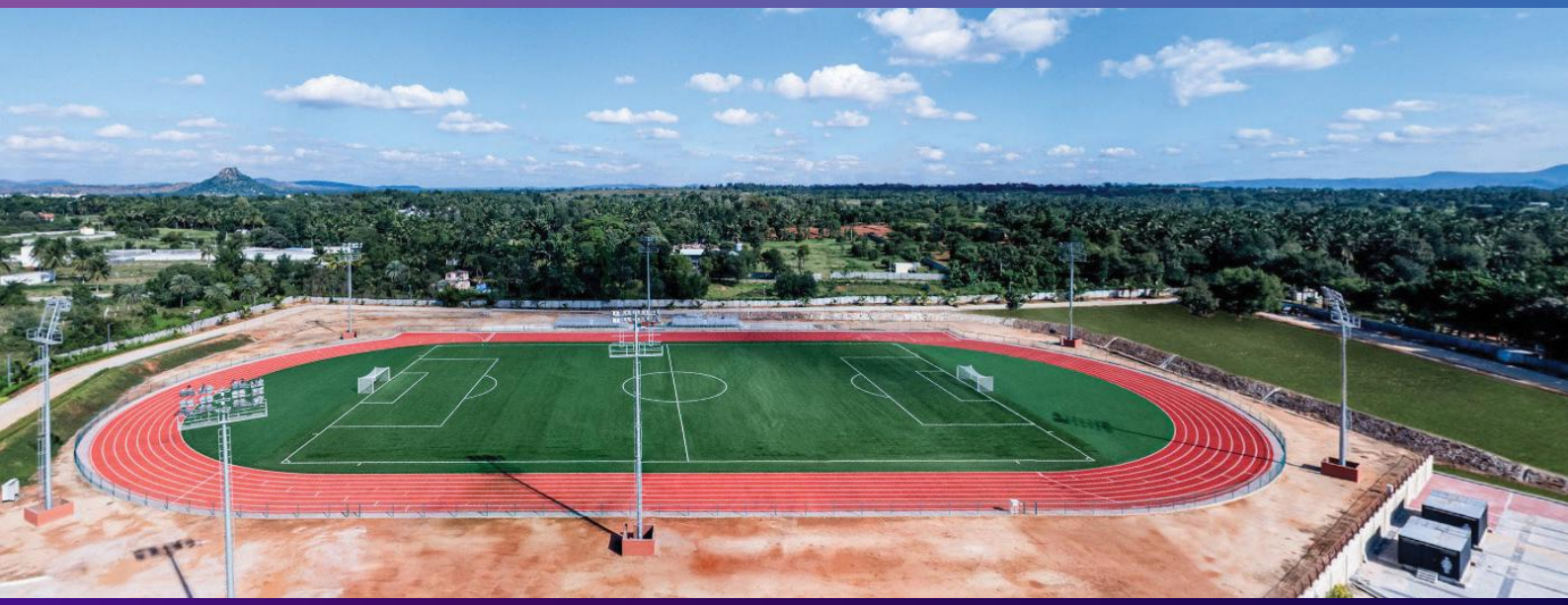
Infrastructure and Facilities







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

- 24/7 Assistance
- 24/7 Handyman
- 24/7 Concierge
- Face recognition & Biometric
- 24/7 Handyman
- Upper/lower bunk bed
- 24/7 Handyman
- Wi-Fi
- Vending Mechines
- RO Drinking Water
- CCTV Monitoring
- Study Zones
- Business Center
- Break-Out Zones
- F & B Partners
- Retail Cafeteria
- Gym Room
- Meditation Room
- Theatre
- Scenic natural views
- Sports Facilities
- Cupboard with a locker
- Parking
- Music Room
- Yoga Room
- Indoor Game Rooms
- Discussion Rooms
- Parcel Service

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

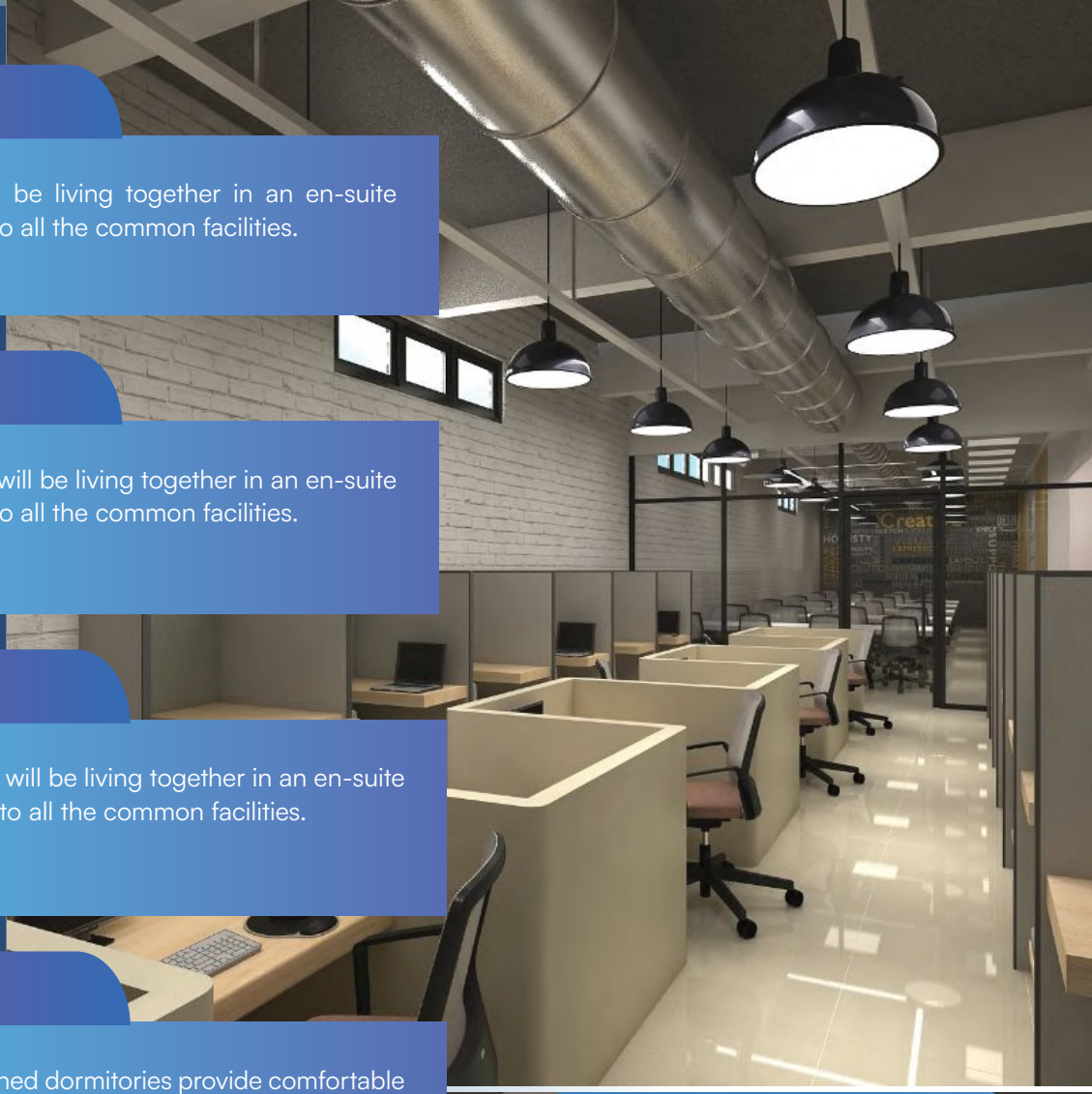
In this tier type, 3 students will be living together in an en-suite apartment with an access to all the common facilities.

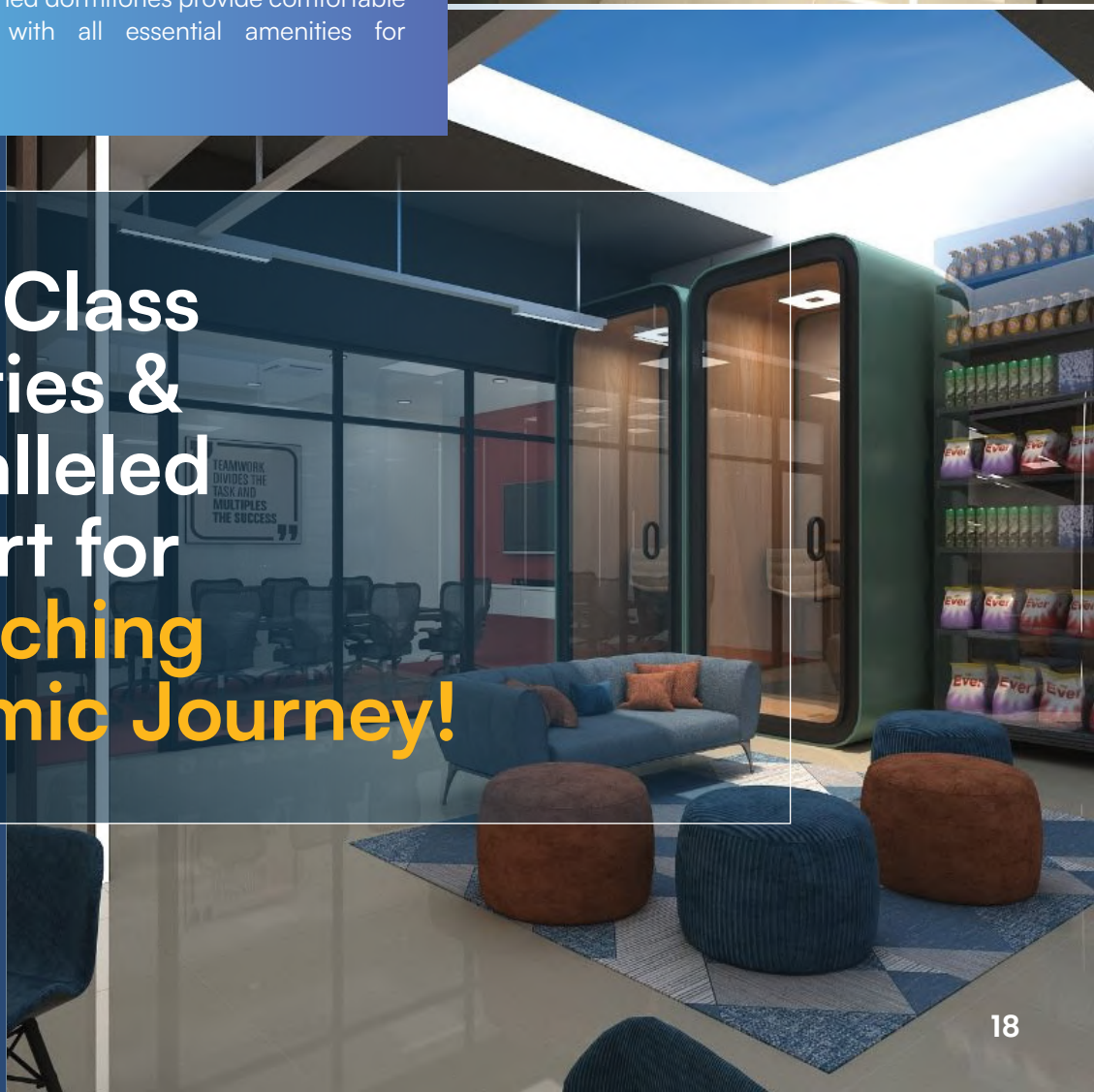
4 Tier Rooms

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.



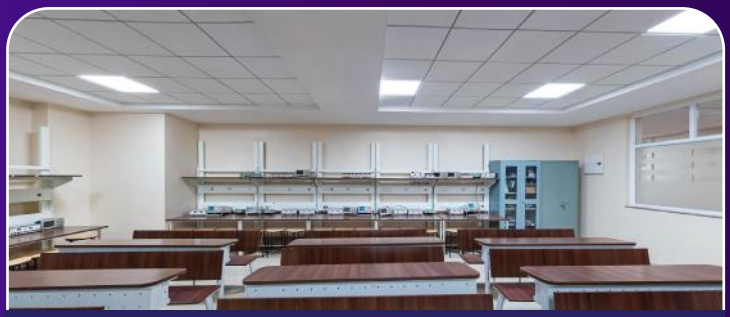


World-Class Amenities & Unparalleled Comfort for an Enriching Academic Journey!

Labs

Digital Circuit Lab

Common Computer Lab



Analog Circuits Lab

Structures Lab

Electronic Lab

Composites Lab

Physics Lab

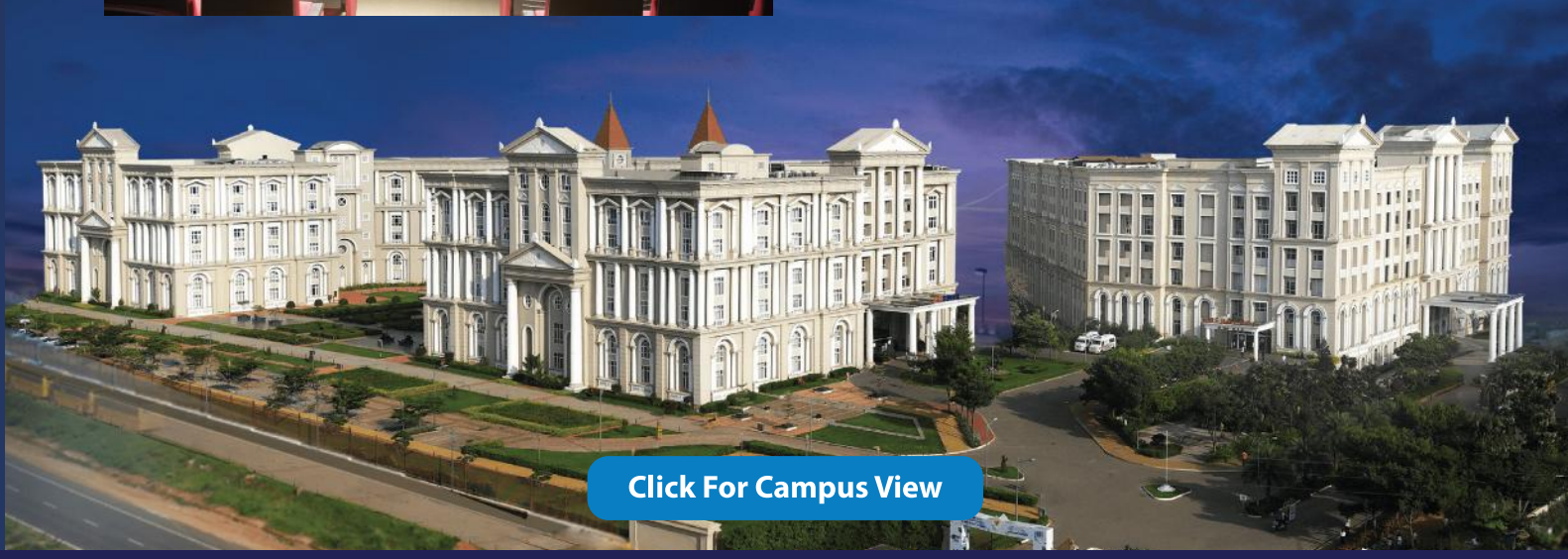
Tutorial Room

Glimpse of DSU Main Campus at Harohalli









Click For Campus View

DSU Main Campus : Devarakaggalahalli, Harohalli, Kanakapura Road, Bengaluru South – 562 112

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

www.dsu.edu.in admissions@dsu.edu.in