DAYANANDA SAGAR UNIVERSITY

A+ GRADE ACCREDITED BY NAAC

Unleash Your Potential in Tech!

BACHELOR OF COMPUTER APPLICATIONS (BCA)

SCHOOL OF COMPUTER APPLICATIONS

Index

About DSU

Dayananda Sagar Institutions, founded in the 60s by the visionary Late Sri R. Dayananda Sagar (Barrister-at-Law), is committed to taking knowledge to the people and transforming today's students into responsible citizens and professional leaders of tomorrow.

Dayananda Sagar University (DSU), established by an Act of the Karnataka State in 2014, is built on this proud legacy and inspired by its significant milestones. It continues to meet the growing demand for quality higher education in this part of the world.

DSU is one of the most dynamic centers for transformative education, technological innovation, and multidisciplinary research across engineering, law, management, and media. As a young, proactive, and leading university, DSU is breaking new ground by introducing advanced and innovative teaching technologies aimed at fostering the enduring skills and mindsets students need for the modern world.

DSU & its Rich Legacy of Excellence & Innovation

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
03rd November 2025
OUTSTANDING UNIVERSITY WITH BEST PLACEMENTS

About School of Computer Applications

The School of Computer Applications offers a dynamic ecosystem for study, research, and professional growth for both faculty and students. It strives to groom its students into competent IT professionals, researchers, and entrepreneurs. The School of Computer Applications was established in the academic year 2016–17 with the 3-year BCA program, and further expanded with the 2-year MCA program in 2021–22, nurturing fresh talent in the field of Information Technology and equipping them with a plethora of skills to choose an area of interest at an early stage In line with emerging global trends and industry demand, the School has further diversified its offerings. From the academic year 2024–25 onwards, it has introduced the Ph.D (Computer Science) program, and from 2025–26 onwards, the B.Sc (Data Science) and M.Sc (Data Science) programs, thereby strengthening its academic and research ecosystem.

The three-year BCA program firmly believes that theoretical knowledge supported by ample in-depth practical exposure is essential to meet the challenges of this ever-changing field. As the world looks towards India for fresh and energetic talent in the IT domain, the School's mission is to shape the next generation of IT professionals with a strong foundation, employable skills, and a commitment to ethical values.

Vision

To develop innovative and skilled computer professionals through cutting-edge research, education, and entrepreneurial initiatives, fostering leadership qualities to address the evolving challenges of emerging technologies and contribute to societal advancements nationally and globally.

Mission

- To deliver cutting-edge education and research opportunities that drive innovation in computer science and applications.
- To maintain state-of-the-art facilities and attract internationally recognized faculty to support advanced learning and research.
- To continuously update our curriculum to reflect the dynamic landscape of emerging technologies and industry needs.
- To foster strong partnerships with industry and the community, enhancing practical experiences and entrepreneurial initiatives.
- To develop graduates who are not only skilled and innovative computer professionals but also ethical leaders, equipped to tackle global and national challenges and contribute to societal advancements.

Dean's Message

"The best way to predict the future is to create it."

– Peter Drucker

At the School of Computer Applications, Dayananda Sagar University, we believe in preparing students not just for today's opportunities but for tomorrow's challenges. In a world where technology evolves every moment, our mission is to nurture learners who are curious, creative, and ready to lead change.

Our programs — BCA, B.Sc (Data Science), MCA, M.Sc (Data Science), and Ph.D (Computer Science) — are designed as a seamless pathway from foundational learning to advanced research. Students gain exposure to cutting-edge domains such as artificial intelligence, machine learning, data science, cybersecurity, cloud computing, mobile and web technologies, as well as emerging fields like generative AI, Internet of Things (IoT), quantum computing, and blockchain — all supported by a curriculum that blends strong theoretical foundations with hands-on practice.

Beyond classrooms and labs, we place strong emphasis on research, innovation, and industry collaboration. Students actively participate in projects, hackathons, and research groups, present at conferences, and publish their work. Our faculty bring expertise, mentorship, and a global perspective, ensuring that learning goes far beyond textbooks. We are equally committed to holistic growth. From soft skills and leadership development to internships and placements, every student is guided to become not only an IT professional but also a responsible global citizen. Our alumni, now thriving in leading companies and entrepreneurial ventures, are living examples of what it means to learn, grow, and succeed at DSU.

I warmly welcome you to explore the opportunities at the School of Computer Applications. Together, let us create the future with knowledge, innovation, and purpose.

Dr. S. Senthil

Professor and Dean, School of Computer Applications
Dayananda Sagar University, Bengaluru

Bachelor of Computer Applications (BCA)

The BCA program is meticulously crafted to equip students with a robust foundation in computer applications, blending theoretical insights with hands-on practical experience. Spanning over three years, the curriculum is designed to meet the dynamic demands of the IT industry, ensuring that graduates are well-prepared to tackle real-world challenges in software development, database management, computer networks, and beyond.

In today's fast-paced technological landscape, businesses and organizations rely heavily on innovative solutions to drive growth and efficiency. The program addresses these needs by immersing students in cutting-edge technologies such as artificial intelligence, machine learning, data science, cybersecurity, cloud computing, and mobile/web applications, along with opportunities to pursue globally recognized industry certifications from platforms such as AWS, Microsoft, Google Cloud, and Cisco. These certifications, integrated into the learning journey, add significant value to students' professional profiles and enhance their employability worldwide.

Through rigorous coursework, projects, industry internships, and certification pathways, students not only gain technical proficiency but also develop critical thinking, problem-solving, and analytical abilities essential for success in diverse IT roles. Complementing this is a strong emphasis on soft skills, leadership, and professional readiness. Students undergo structured training in communication, teamwork, adaptability, and interview skills, preparing them to collaborate effectively in multidisciplinary teams, present their ideas with confidence, and adapt quickly to emerging technologies and global industry practices.

Duration : 3 years (6 semesters)

Eligibility Criteria

Pass in PUC/10+2 with at least 50% marks (45% in case of candidate belonging to SC/ST category) from any recognized Board/Council of or any other qualification recognized as equivalent there to.

Programmes Offered

BCA in AI & Data Science

BCA (General)

Choose one track from the options below in the 2nd year

- **AI, ML & Data Science**
- **Cybersecurity & Cloud Computing**
- **Mobile & Web Application Development**

Unique Advantages of School of Computer Applications

- Dynamic curriculum aligned with the latest industry trends, offering technical, industry, and global certifications every semester to enhance professional readiness.
- Courses delivered by industry leaders and international experts, ensuring practical insights, global perspectives, and high-quality learning experiences.
- Industrial immersion programs, live projects, and company visits provide hands-on exposure, bridging theory with real-world applications and nurturing professional competence.
- Project-based and interest-driven learning allows students to explore their passions, work on real-world problems, and apply concepts in practical scenarios.
- State-of-the-art computer labs and digital classrooms equipped with advanced tools foster interactive, practical, and personalized learning experiences.
- Soft skills, leadership, and communication training are integrated into the curriculum, supported by personalized mentoring and an active placement cell dedicated to top-tier opportunities.
- Participation in hackathons, collaborative projects, and research initiatives encourages innovation, teamwork, problem-solving, and exploration of individual interests.
- Strong industry connections and a vibrant alumni network offer mentorship, networking, and career opportunities, linking students with professionals and thought leaders worldwide.

Programme Outcomes

- To equip students with a strong foundation in computer applications, enabling them to analyze, design, and develop innovative software solutions to meet industry and societal needs.
- To develop technical proficiency in programming languages, database management, networking, and emerging technologies, fostering adaptability to advancements in the IT sector.
- To instill critical thinking, problem-solving abilities, and teamwork skills, preparing students for multidisciplinary challenges and professional excellence.
- To nurture ethical practices, effective communication, and lifelong learning, empowering students to contribute responsibly to the global computing community.

Project / Thesis Components

- **Foundational Project** – Begin with small-scale projects in the early semesters to build technical fundamentals, problem-solving skills, and hands-on exposure to emerging technologies aligned with students' interests.
- **Pre-Industry Readiness Project** – Simulate real-world industry scenarios to prepare students for professional environments by applying classroom knowledge to practical challenges, enhancing teamwork and project management skills.
- **Minor Project** – Solve targeted, real-world problems within chosen specializations, experimenting with tools, technologies, and frameworks to develop analytical, coding, and technical skills.
- **Capstone / Major Project** – Engage in real-world projects that solve industry problems, such as developing an AI-based recommendation system, creating a secure cloud infrastructure, or building a cross-platform mobile application. Mentored by faculty and industry experts, these projects integrate multiple technologies and often culminate in competitions or hackathons to showcase innovation and professional competence.
- **Internships & Certifications** – Each project phase is complemented by industry internships and technical/global certifications, ensuring students gain practical exposure and credentials recognized worldwide.

Program Industry Insights (Market Demand)

- AI & ML: The global AI market is projected to reach $1.8 trillion by 2030, growing at a CAGR of 37.3%.
- Cybersecurity: With increasing cyber threats, the demand for cybersecurity professionals is expected to grow by 35% by 2031.
- Mobile & Web Development: The web development industry is projected to grow by 13% from 2023 to 2031, driven by the increasing need for businesses to have an online presence.

Source: Grand View Research,
U.S. Bureau of Labor Statistics (BLS)

Emerging Job Opportunities

AI, ML & Data Science

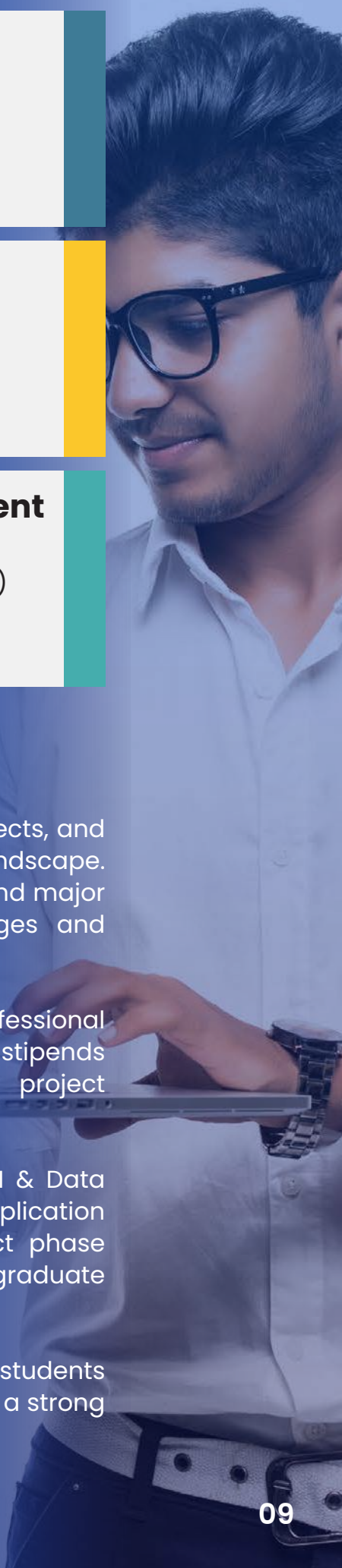
- Junior Data Scientist / Data Analyst
- Machine Learning Engineer (Entry-Level)
- AI/ML Developer Intern
- Business Intelligence Analyst (Junior)

Cybersecurity & Cloud Computing

- Cybersecurity Analyst (Entry-Level)
- Cloud Support Engineer / Cloud Developer
- Ethical Hacker / Security Tester (Junior)
- Network Security Administrator

Mobile & Web Application Development

- Mobile App Developer (Android/iOS)
- Web Developer (Frontend / Backend / Full Stack)
- UI/UX Designer
- Software Development Intern / Junior Developer



Internship

The BCA program emphasizes hands-on learning, real-world projects, and industry immersion, preparing students for the dynamic tech landscape. Students engage in foundational, pre-industry readiness, minor, and major projects, applying classroom knowledge to practical challenges and developing strong problem-solving, analytical, and technical skills.

Structured internships of 3–6 months provide exposure to professional workflows in top tech firms, startups, and global organizations, with stipends ranging from ₹10,000 to ₹30,000 per month depending on project complexity.

Students work on industry-relevant projects in areas such as AI & Data Science, Cybersecurity & Cloud Computing, and Mobile & Web Application Development, often mentored by industry experts. Each project phase integrates technical and industry certifications, ensuring students graduate as industry-ready professionals.

Interest-driven learning, hackathons, and research initiatives allow students to explore emerging technologies, showcase innovation, and build a strong professional portfolio.

Placements

Pre-Placement Training

Our BCA program integrates pre-placement training directly into the curriculum, ensuring students are fully prepared for recruitment opportunities. The training covers mathematical aptitude, quantitative reasoning, verbal and non-verbal reasoning, as well as soft skills such as communication, teamwork, and leadership.

These sessions are conducted by trained industry professionals, providing expert guidance, real-world insights, and personalized support. By combining analytical skills, reasoning abilities, and professional soft skills, students gain the confidence and competence needed to excel in competitive placement processes and secure top-tier career opportunities.

Some of the reputed companies where Computer Applications students have been placed are

Capgemini, TCS (TATA CONSULTANCY SERVICES), EY, Tech Mahindra, happiest minds, wipro, Mindtree, accenture, indegene, amazon, eurofins

Global Exposure

International Collaborations – Partnerships with reputed universities and institutions worldwide Study Abroad Programs – Exchange programs, summer schools, and dual-degree opportunities.

International Collaborations & Industry Partnerships

Our institution actively fosters global collaborations by partnering with reputed universities and institutions worldwide, creating avenues for knowledge exchange, research, and academic excellence.

In addition, we have established strong industry tie-ups with leading platforms and organizations such as Infosys Springboard, IBM SkillsBuild, AWS Academy, EC-Council, and ISC2, among many others. These partnerships provide our students with industry immersion opportunities, hands-on exposure, and globally recognized certifications, ensuring they are future-ready and aligned with the evolving demands of the digital world.

Further, we regularly invite international experts from prestigious institutions to handle select courses, ensuring our students benefit from global perspectives and advanced learning experiences.

Campus Features

- Incubation Centre
- State-of-the-Art Classrooms
- Wifi Enabled Campus
- Seminar Halls
- Sport Facilities
- CIL-Centre for Innovation
- Foreign Language Certification
- Training Centre
- Top Class Library Facility
- Hostel Facilities
- Infirmary
- Well-Equipped Lab Facilities
- Research Centre
- Food Court
- Student Parking Facility









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

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

DSU City Innovation Campus : Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Hosur Road, Bengaluru, Karnataka - 560068