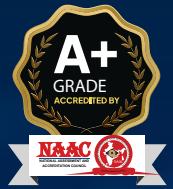




DAYANANDA SAGAR
UNIVERSITY



Be the Tech Innovator
the Digital World is Waiting For

**MASTER OF
COMPUTER APPLICATIONS
(MCA)**

SCHOOL OF COMPUTER APPLICATIONS

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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



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

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

DSU has 1 Rank No. 1 By TIMES OF INDIA 2022

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



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 with the 3-year BCA program and further expanded with the 2-year MCA program, 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 and has introduced Ph.D (Computer Science), B.Sc. Data Science, B.Sc. (Cybersecurity), M.Sc Data Science and M.Sc (Cybersecurity) programs, providing a strong pathway for students aspiring to pursue an advanced master's degree in Data Science or enhance their knowledge with a specialised Data Science master's degree. These additions strengthen DSU's position among the best Data Science colleges in Bangalore and also support increasing interest in integrated progression routes for MCA.

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

Master of Computer Applications (MCA)

The Master of Computer Applications (MCA) at Dayananda Sagar University (DSU) is a future-ready postgraduate programme that prepares graduates to become tech leaders, solution architects, full-stack innovators, AI practitioners, and cloud-ready professionals. Designed for the digital-first world, the programme blends advanced computing, software engineering, AI & data technologies, cloud-native systems, and cyber-aware development practices. Students gain hands-on expertise through modern tools, real-world projects, interdisciplinary problem-solving, and industry-driven learning environments. With a strong emphasis on employability, innovation, and leadership, the MCA programme helps learners move from being programmers to architects, analysts, strategists, and technology creators—capable of driving transformation across global industries.

Eligibility Criteria

Any UG degree (B.E / B.Tech / B.Sc / B.Com / B.A / B.Voc / BCA etc.) preferably with Mathematics at 10+2 or Graduation level, with 50% marks (45% for SC/ST) in the qualifying examination.

Duration : 2 years (4 Semesters)



Tracks Offered



**Artificial Intelligence,
Machine Learning &
Data Science**



**Cloud Computing,
DevOps &
Cyber Security**



**Web & Mobile Application
Development with
Emerging Technologies**



Unique Advantages of School of Computer Applications

- ◆ Dynamic curriculum aligned with current industry demands and trends.
- ◆ Regular guest lectures, technical seminars, and workshops by industry experts and academicians.
- ◆ Skill development programs embedded within the curriculum to enhance employability.
- ◆ State-of-the-art computer labs equipped with high-performance systems for optimal learning experiences.
- ◆ Cutting-edge digital classrooms facilitating interactive and engaging teaching methods.
- ◆ ICT tools integrated into teaching to enhance learning efficiency and accessibility.
- ◆ Self-directed learning encouraged to foster independent thinking and creativity.
- ◆ Active training and placement cell dedicated to securing top-tier job placements.
- ◆ Emphasis on project-based learning to bridge theoretical knowledge and practical application.
- ◆ One-to-one student mentoring providing personalized academic and career guidance.
- ◆ Industrial visits to leading companies offering exposure to diverse professional environments.
- ◆ Soft skills training programs designed to develop communication, teamwork, and leadership abilities.
- ◆ Strong alumni network offering mentorship, networking, and career opportunities.
- ◆ Regular participation in hackathons promoting innovation, teamwork, and problem-solving skills.

Why Study MCA?

The Fastest Pathway to Become an Industry-Ready IT Professional

A PROFESSIONAL MASTER'S DEGREE FOR HIGH-GROWTH TECH CAREERS

MCA equips learners with the advanced computing skills required for careers in software development, cloud engineering, DevOps, cybersecurity-aware development, AI-enabled applications, and enterprise systems.

OPEN TO GRADUATES FROM ANY STREAM

Students from Science, Commerce, Arts, and Vocational backgrounds can enter the IT field through this structured, well-supported pathway.

HIGH CAREER DEMAND ACROSS INDUSTRIES

Digital transformation across IT, BFSI, healthcare, retail, telecom, and manufacturing has sharply increased the demand for MCA graduates with advanced technical capabilities.

BRIDGES THE GAP BETWEEN UG DEGREES AND IT CAREERS

MCA strengthens programming, data handling, problem-solving, networks, software engineering, and cloud skills—ensuring students are truly job-ready.

A BALANCE OF THEORY AND PRACTICAL APPLICATION

MCA blends strong theoretical understanding with hands-on implementation—enabling students to design, code, deploy, and innovate confidently.

BETTER PLACEMENT AND LEADERSHIP PATHWAYS

MCA graduates often progress faster into senior roles such as Software Architect, Technical Lead, Project Manager, IT Consultant, and Product Engineer.

IDEAL FOR LEARNERS WHO WANT TO BUILD & INNOVATE

Perfect for those who aim to:

- ❖ Build software and mobile apps
- ❖ Develop cloud-native and AI-integrated systems
- ❖ Work as full-stack engineers
- ❖ Lead technology projects
- ❖ Create real-world solutions through hands-on development

Why Choose MCA at DSU?

Where Software Development
Meets Innovation & Industry Practice



APPLICATION-ORIENTED CURRICULUM

Focused on building strong foundations in software engineering, full-stack development, system design, and real-world application development.



MODERN TECH SKILLS FOR INDUSTRY 4.0

Hands-on exposure to cloud-native development, DevOps workflows, secure coding, AI-enabled applications, and emerging mobile/web technologies.



HANDS-ON CODING & DEVELOPMENT LABS

Practical training through cloud-enabled development environments, modern toolchains, and project-based coding exercises.



RESEARCH-DRIVEN LEARNING

- ◆ Training in research methodology and technical writing
- ◆ Faculty mentorship for identifying research problems
- ◆ Opportunities to publish papers
- ◆ Emphasis on innovation and analytical thinking



STRUCTURED PROJECT FRAMEWORK

- ◆ Skill Building Project (Sem II): Practical development-focused mini project
- ◆ Minor Project (Sem III): Research or industry-oriented problem
- ◆ Major Dissertation (Sem IV): Deployable software system or research-based thesis



INDUSTRY IMMERSION SESSIONS

Engaging sessions by Software Architects, Cloud Engineers, DevOps Professionals, AI Developers, and Tech Entrepreneurs offering real-world perspectives.



GLOBAL ACADEMIC PARTNERSHIPS

DSU's collaborations with leading technology organizations such as Infosys, IBM, AWS, and others provide students with industry-aligned learning resources and practical exposure. Our academic partnership with EC-Council further strengthens secure coding and digital risk awareness.



INNOVATION & ENTREPRENEURSHIP SUPPORT

Access to DSU's premier labs and centres, including:

- ◆ ETAS (Bosch) Automotive Lab
- ◆ Autodesk Innovation Centre
- ◆ IBM Software Lab
- ◆ DERBI Entrepreneurship Incubator

Market Growth Potential & opportunity

According to the U.S. Bureau of Labor Statistics (BLS), Employment in computer and information technology occupations is projected to grow 11 per cent from 2019 to 2029, much faster than the average for all occupations. These occupations are projected to add about

Course Highlights

- ◆ To impart technical knowledge through innovative teaching, research and consultancy.
- ◆ Provides state-of-the-art facilities and internationally recognised faculty.
- ◆ To adapt to the dynamic needs of industries through curriculum updates. Promotes partnerships with industry and community.
- ◆ To produce competent graduates with professional ethics and life skills.

Academic Project Overview

Students carry out mini projects in many courses across the semesters to strengthen their understanding of fundamentals through the practical application of theoretical concepts. Minor projects are included in the curriculum for the all-round development of students that shape them for a better future. There is a Major project to carry out in the final year to enhance the technical caliber of students. Projects related to societal, cutting edge and research areas are currently being pursued by students. The students are also encouraged to carry out projects in industries/reputed organisations.

Internship

With the inclusion of Summer Internships, students get practical exposure to the professional work environment. Students can join the Internship Program in reputed industry / academic institute / R&D / Government organisations.

Project Work Internship Opportunities

Real-world exposure. Industry-driven learning. Career-ready outcomes.

Type of Work	Semester	Duration	Remarks
Skill Building Project	II Semester	6 Months	>> Foundation for real-world problem solving >> Guided by industry-trained faculty >> Focus on full-stack, cloud, AI-ML, or cybersecurity fundamentals
Minor Project	III Semester	6 Months	>> Research-oriented or industry-linked mini project >> Exposure to tools, datasets, enterprise workflows >> Opportunity to convert into conference/journal publications
Major Project	IV Semester	6 Months	>> Full time Capstone industry project with strong practical outcomes >> Live problem statements from companies >> Deployable, portfolio-building solutions
Internship	IV Semester	6 Months	>> Full-time industry internship >> Drives employability and professional experience >> Guidance from experienced industry professionals

*Note: The exclusive 1-year internship pathway (starting from Semester III) is applicable only for students who secure internships in top MNCs and global tech companies. Eligible students are allowed to undergo a 1-year integrated internship, enabling:

- >> Real corporate experience while earning the MCA degree.
- >> Early industry absorption
- >> Exposure to enterprise-scale technologies
- >> High-value resume



EC-Council Academia Partnership



Why This Partnership Matters

Dayananda Sagar University is now an Authorized Academia Partner of EC-Council, the global leader in cybersecurity education, certifications, and cyber defense training.

Benefits for Our Students

Academic & Curriculum Advantages

Access to industry-aligned curriculum, EC-Council courseware/tools, and hands-on modules simulating real-world cyberattack and defense scenarios.

Certification & Career Boost

Students get discounted pathways to world-renowned certifications such as Certified Ethical Hacker (CEH) / EC-Council Certified Security Analyst (ECSA) Certified Network Defender (CND) / Certified Secure Computer User (CSCU) Certified Penetration Testing Professional (CPENT) / Digital Forensics Essentials (DFE) Certified SOC Analyst (CSA)

Skill Development & Practical Exposure

Hands-on sessions through EC-Council's iLabs, virtual labs, and cyber ranges to build skills in ethical hacking, forensics, network defense, incident handling, and real-world attack-defense problem-solving.

Internships, Projects & Research

Opportunities for EC-Council-supported internships and industry projects.

Programme Outcomes

- ◆ Design and develop enterprise-level, innovative computing solutions using modern software engineering practices.
- ◆ Apply analytical and problem-solving skills to address complex computing and business challenges.
- ◆ Work with advanced tools in AI, cloud computing, DevOps, cybersecurity, mobile development, and full-stack engineering.
- ◆ Demonstrate leadership, teamwork, ethical responsibility, and effective communication in professional settings.
- ◆ Engage in research, innovation, and continuous learning to stay relevant in a rapidly evolving technological landscape.



Exciting and Diverse Career Avenues

Technical Roles

Software Developer
Full-Stack Engineer

Cloud Engineer

DevOps Engineer

Cybersecurity-Aware Developer

Web/Mobile Application
Developer

Data Analyst
Junior Data Scientist

Database Engineer

UI/UX Developer

Strategic Roles

Software Architect

Project Manager

IT Consultant

Product Analyst

Technical Lead

Innovation & Research Roles

Research Associate

Technology Innovator

Ph.D. Aspirant

Startup Founder through
DERBI Incubator

Where Can MCA Take You?

Explore the Leading Industries
Seeking Your Expertise!

- ◆ IT & Software Development
- ◆ Cloud & Infrastructure Services
- ◆ FinTech & BFSI
- ◆ Healthcare IT & MedTech
- ◆ E-Commerce & Retail Tech
- ◆ Telecommunications
- ◆ Industry 4.0 & Manufacturing
- ◆ EdTech
- ◆ Government & Public Sector
- ◆ Research & Innovation Labs

Faculty

The School of Computer Applications has highly experienced and accomplished faculty members. Students are consistently taught new-age, industry-relevant skills to stay ahead in the field. The faculty adopts a variety of innovative teaching-learning methods to ensure effective and engaging education.

The following are some of the teaching and learning methods being used by the faculty members at the university.

- ◆ Face-to-face lectures enriched with audio-visual aids
- ◆ Project-Based Learning (PBL)
- ◆ Workshops, group discussions, debates, and presentation
- ◆ Demonstrations and hands-on learning
- ◆ Laboratory sessions, fieldwork, and workshops
- ◆ Industry visits for practical exposure
- ◆ Seminars on relevant topics
- ◆ Collaborative group exercises
- ◆ Capstone projects and project exhibitions
- ◆ Participation in technical events and competitions



Placements

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.

Pre-Placement Training

- ◆ **Aptitude, coding, resume building, mock interviews**
- ◆ **Domain-specific bootcamps and many more**

6.5L Average Package

15L Highest Package

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



Mindtree



Campus Features



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 Computer Applications

Titles

350

Volumes

932

National & International
Print Journals

12

E-Books

86



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