



DAYANANDA SAGAR  
UNIVERSITY



Be the Cyber Defender  
Every Industry Depends On !



**B.Sc. (CYBERSECURITY)**

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# DSU & its Rich Legacy of Excellence & Innovation

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.

Dayananda Sagar University (DSU) is one of the top buoyant centers of transformative education, technological breakthroughs, & multidisciplinary research across engineering, law, management and media. Being a young, proactive, and leading university, DSU is breaking new ground and introducing some of the most advanced and innovative technologies in pedagogy with the goal of fostering the enduring skills and dispositions that the students will need for this new world.



## University Accreditation and Rankings



## 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) , M.Sc (Data Science), B.Sc (Cybersecurity) , M.Sc (Cybersecurity) programs, thereby strengthening its academic and research ecosystem.

The three-year B.Sc (Cybersecurity) program at DSU is built on the belief that strong theoretical foundations, combined with intensive hands-on learning, are essential to thrive in today's rapidly evolving digital landscape. As the world increasingly depends on skilled cybersecurity professionals to safeguard critical systems, the School's mission is to nurture the next generation of digital defenders – individuals equipped with technical expertise, industry-ready skills, and a deep commitment to ethical responsibility.

## 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), B.Sc (Cybersecurity), M.Sc (Cybersecurity) 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 & Dean

School of Computer Applications

Dayananda Sagar University, Bengaluru

# Program Overview

In today's hyperconnected world, cybersecurity is no longer optional — it's essential. Every organization, from start-ups to global enterprises, needs skilled professionals who can safeguard digital assets, protect privacy, and ensure trust in technology.

The B.Sc (Cybersecurity) program at Dayananda Sagar University (DSU) is designed to prepare students to become the front-line defenders of the digital age. Through a blend of theoretical learning, hands-on practice, and industry exposure, students will explore the fascinating world of ethical hacking, network defense, cryptography, cloud security, and digital forensics.

This three-year, career-focused program equips learners with the right mix of technical expertise, analytical mindset, and ethical responsibility to thrive in a rapidly evolving cybersecurity landscape.

## Why Study Cybersecurity?

**"Cybersecurity is one of the fastest-growing & most in-demand careers of the 21st century."**

### Massive Global Demand

According to the (ISC)<sup>2</sup> Cybersecurity Workforce Study (2025), there is a global shortage of over 3.4 million cybersecurity professionals — a gap that continues to widen every year.

### Booming Career Opportunities

India alone is expected to create 1.5 million cybersecurity jobs by 2026 (NASSCOM-DSCI Report, 2024).

### High Earning Potential

Cybersecurity professionals earn salaries that are 30–40% higher than other IT roles at the entry level.

## Dynamic & Impactful Work

From protecting governments and financial systems to investigating cybercrimes, cybersecurity experts play a direct role in national and global security.

## Future-Proof Career

With AI, cloud computing, and IoT creating new digital ecosystems, cybersecurity is one of the few domains where demand consistently outpaces supply.

*If you're curious, analytical, & passionate about problem-solving – cybersecurity isn't just a course; it's a calling.*

# WHY CHOOSE B.Sc (Cybersecurity) at DSU?

## EC-Council Academic Partner

Authorized academic partner of EC-Council, the world's leading cybersecurity certification body – giving students exclusive access to industry-grade learning resources and official certification pathways.

## Industry Immersion Sessions

Specialized training sessions that cover multiple cybersecurity domains and prepare students for global competency standards and professional certifications recognized worldwide.

## Hands-on Cyber Range Learning

Simulated attack-defense environments that replicate real-world security challenges – allowing students to learn by doing, not just by reading.

## Industry-Validated Curriculum

Co-designed with industry professionals and aligned to global frameworks to ensure professional readiness and relevance from day one.

## Expert-Led Sessions

Learn directly from certified ethical hackers, digital forensics experts, and security analysts from academia and industry.

# Structured Project-Based Learning

## Foundational Project (Year 1)

Builds technical and analytical fundamentals.

## Pre-Industry Readiness Project (Year 2)

Solves simulated cybersecurity problems using professional tools.

## Minor Project (Semester V)

Focused on a specialized cybersecurity domain.

## Major Project / Capstone (Semester VI)

Industry-oriented research or applied project, often co-mentored by corporate professionals.

### Interdisciplinary Edge

Work on live projects with peers from various disciplines gaining 360° exposure to technical, ethical, and business dimensions of cybersecurity.

### Career Enablement

Structured pre-placement training, portfolio building, and mock interviews conducted by cybersecurity specialists.

### Global Certification Support

Training aligned with global certification frameworks – boosting employability across international markets.

### Global Readiness

Exposure to international best practices, cyber laws, and governance frameworks, preparing graduates for global careers in cybersecurity, risk management, and information assurance.

# Specialization Tracks



Ethical Hacking & Penetration Testing



Digital Forensics & Incident Response



Cloud & Network Security

## Duration

3 Years (6 Semesters)

## Eligibility Criteria

Pass in PUC/10+2 examination with Mathematics / Statistics / Computer Science / Information Technology / Informatics Practices as compulsory subject along with other subjects and obtained minimum 50% marks (45% in case of candidate belonging to SC/ST category) in the above subjects taken together, of any Board / Council recognized by the respective State Government / Central Government / Union Territories or any other qualification recognized as equivalent thereto.

## Program Outcomes

Graduates will be able to:

- ❖ Demonstrate mastery in identifying, analyzing, and mitigating cyber threats.
- ❖ Design and implement secure network and software systems.
- ❖ Apply ethical principles & professional practices in cybersecurity management.
- ❖ Engage in continuous learning to adapt to evolving cyber technologies.

# Career Opportunities

The growing digital ecosystem has created an unprecedented demand for skilled cybersecurity professionals. Graduates of the B.Sc (Cybersecurity) program can pursue diverse roles that combine technology, analysis, and problem-solving across multiple domains.

## Core Technical Roles

**Security Analyst / Engineer**

**Ethical Hacker / Penetration Tester**

**Digital Forensics Expert**

**Incident Responder / SOC Analyst**

**Network Security Administrator**

**Cloud Security Specialist**

**Vulnerability Assessment & Penetration Testing (VAPT) Associate**

## Support and Compliance Roles

- Threat Intelligence Associate**
- Risk & Compliance Officer**
- Cybersecurity Auditor / Compliance Analyst**
- Information Security Associate**
- Security Operations Coordinator**



## Emerging and Evolving Domains

**IoT Security Specialist**

**Cloud Infrastructure Security Associate**

**Malware Analyst (Entry-Level)**

**Privacy & Data Protection Analyst**

# Top Sectors Hiring Cybersecurity Graduates

- ❖ Banking & Financial Services
- ❖ IT & Cloud Service Providers
- ❖ Government & Defense Organizations
- ❖ Telecom & Network Management
- ❖ Healthcare & Life Sciences
- ❖ E-commerce & Retail Enterprises
- ❖ Manufacturing & Smart Infrastructure
- ❖ Consulting & Managed Security Services



## *A Future Built on Trust and Technology*

At DSU, we don't just train cybersecurity professionals — we build digital defenders who combine technical skill with ethical strength.

Join us to build a safer, smarter, and more secure digital world.





## **Admissions Helpline Nos:**

**080 4646 1800** **+91 6366885507** Visit: [www.dsuet.ac.in](http://www.dsuet.ac.in)

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