

Department of B.Sc Computer Science and Engineering



A three-year Bachelor's Degree Program recognized by Osmania University that focuses on the fundamentals of computer science and the principles of engineering. This program in Computer Science and Engineering is designed to transform students into computing professionals by striking a fine balance between theoretical learning and practical application. The curriculum is meticulously crafted by industry experts to cover core areas such as programming, algorithms, data structures, software development, and systems analysis, while also incorporating emerging technologies. Students will gain a robust theoretical foundation paired with hands-on experience, equipping them with the skills to design innovative solutions and tackle complex challenges in the digital age.



Vision :

- To inculcate academic excellence, team spirit, analytical and logical skills, leadership qualities in students for global competence.

Mission:

- Imparting education for forming men and women for others by developing their individual aspirations, building quality into learning and improving technical competence.



Higher Education Prospects

Graduates of this program have a wide range of opportunities to pursue higher education in specialized fields. They are eligible to enroll in advanced degree programs such as:

- MCA
- M.Sc. (Computer Science)
- M.Sc. (Data Science)
- M.Sc. (AI & ML)
- M.Sc. (Information Technology)
- M.Sc. (Big Data Analytics)
- M.Sc. (Software Engineering)
- M.Sc. (Cloud Computing & IoT)
- MBA (Information Systems)
- Any other Allied program

Career Opportunities

After successful completion, students will be placed as:

- Software Engineer
- Data Scientist
- Machine Learning Engineer
- AI Researcher
- Systems Analyst
- IT Consultant
- Database Administrator
- Web Developer
- Full Stack Developer
- DevOps Engineer
- Mobile Application Developer
- Game Developer
- IT Project Manager

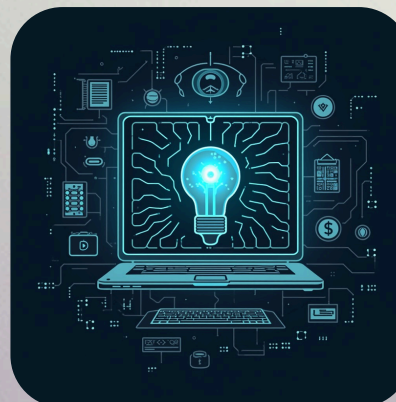
Why Loyola Academy ?

- NAAC accredited and renowned for academic excellence.
- Robust industry ties ensuring exceptional placements. An innovation-centric approach emphasizing emerging technologies.

Unique Features of Our Program:

Well-Rounded Education: Our students learn the core areas of computer science and also explore the details of cyber security technologies.

Hands-On Learning: Through workshops and projects, students get practical experience with cyber security applications, helping them use what they learn in real-life situations.



Admission Guidelines

Candidates must have completed 10+2 or passed with minimum of 60% or above with MPC / MEC at intermediate level.



Ist year

SEM 1

SEM 2

Subjects-

- General English-I
- Value Education and Personality Development
- Digital Logic and Design and Computer Organization
- Differential Equations and Elementary Number theory
- Operating Systems
- Problem Solving and Programming in C

Subjects-

- General English-II
- Indian Heritage and Culture
- Web Technologies
- Matrices & Vector Calculus
- Engineering Drawing and Engineering Workshop
- Data Structures with C

IIInd year

SEM 3

SEM 4

Subjects-

- Environmental Studies and Gender Sensitization
- PC Operating System GE-1
- Database Management System
- Probability & Statistics
- Java Programming
- Computer Networks

Subjects-

- Discrete mathematics
- Software Engineering
- Machine Learning
- Python Programming
- Advanced Java
- UI/UX
- **Internships / Mini Project**

IIIrd year

SEM 5

SEM 6

Subjects-

- Software Testing and Quality/ Software Process Management
- Power BI/ Data visualization tools
- Full Stack Development
- Operations Research
- Deep Learning
- Data engineering through python

Subjects-

- Artificial Intelligence / Blockchain Technologies
- Cloud computing /Datamining
- Big Data Analytics
- **Major Project**

Extra Curricular Activities

- Sports
- Resonance

Student Support

- Academic Counseling
- Mentoring
- General Elective
- Self Study

Non CGPA Courses

- Bridge Courses
- PLANET
- NPTEL

Non CGPA Courses

- INDUSTRIAL VISITS
- Minor projects
- Internships
- Research papers
- Presentations
- Group discussions
- Seminars/Debates