*About the Department*

The Department of Computer Science & Engineering endeavors to impart quality education to students in the areas of computer science with exposure to industrial problems and application development through specialization programmes, student workshops, industry internships, Value-added courses and Projects. Since the inception of the course in 1999 with the initial intake of 60, it has been accredited by NBA. In this short span of 23 years the intake is increased to 900. In addition, the Department offers Ph.D and M.Tech. course in Computer Science and Engineering . Along with the core degree, the Department of Computer Science Engineering also offers the following additional Honors in line with the industry's latest trends.

- Artificial Intelligence
- AI and Machine Learning
- Data Science
- Internet of Things
- Internet of Things and Cyber Security with Blockchain
- Bigdata Analytics
- Gaming Technology
- Computer Science and Business Systems

The department has very competent faculty certified and trained to teach advanced areas in computer science like cloud computing, software quality, cyber security, artificial intelligence and machine learning, blockchain technology, Internet of Things, Data Science and so on. The faculty is actively engaged in research and publications and has recognized projects to their credit in collaborations with industry, universities and research labs of high repute.

The soul of college / university life is the fraternities on the campus – the clubs that become a surrogate family for a student, helping him/her grow and explore latent talents in fields other than academics. The department has a strong tradition of student bodies and clubs that attract students from all disciplines, cutting across colleges, courses, and nationalities. There are technical clubs for the academically inclined like GeeksForGeeks, Google Developer club, Microsoft Azure Club and Hack Club that are active throughout the year to develop and support co-curriculum and extra curriculum activities among the students.; there are cultural clubs that give a student the opportunity to dabble in the fine arts, music, dance, theatre – everything that

feeds the mind and spirit. The student chapter of professional societies like ISTE, IEEE, CSE is active throughout the year to develop and support co-curriculum and extra curriculum activities among the students. State level on the Spot coding competition Hackathon is organized every year to boost the logical soundness amongst budding engineers.

The department not only provides state of the art computing facilities to the students but it also provides knowledge with the latest technologies and practical exposure so that they can make their presence felt in the latest technical revolution. Further to enhance the bond with industries, the department has various educate partner like CISCO NetAcad, AWS Eduate partner, Redhat Partner, Approved Remote Center by IIT Bombay, Approved Resourse Center by IIT Bombay.

Education here prepares students for an exciting career in industry, Governmental jobs, and universities. They also are given platform to form startup companies. The department has well equipped laboratories and our faculty is dedicated to excellence in teaching. It has a fine blend of well experienced faculty and young & dynamic faculty. The Students get an opportunity to work on projects to groom them for professional life. There is plenty of opportunity to interact with faculty and to receive individual attention. Students are also engaged in Internship of six months because of which they become industry ready.

*Vision*

To empower the students to be technologically adept, innovative and responsible global citizen and contribute significantly towards high quality technical education with ever changing world so as to build a strong & developed nation.

## Mission

- To enhance the technical knowledge of the students by embracing activity and analytical based learning and also outcome based education in varied areas of computer science and engineering.
- To groom competent professionals to become part of the industry & research organization at national & international level.

- Provide exposure of latest tools and technologies in the area of engineering and technology.

*Programme Specific Outcome (PSOs) for U.G. Programme*

- Provide exposure of latest tools and technologies in the area of engineering and technology.
- Students should be able to adapt to emerging information and communication to innovative ideas for solution to existing problem.
- To develop an ability to design , implement and evaluate a computer based system, process, component or program/software and complicated network systems to meet desired needs.

*Programme Outcome (POs) for U.G. Programme*

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **Conduct investigations of complex problems:**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **The engineer and society:**Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and

write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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*Programme Specific Outcome (PSOs) for U.G. Programme*

- Students will able to use engineering mathematics concepts to solve the specific or complex engineering problems using data structure, algorithms and front end-back end programming language.
- Students will able to apply the knowledge of engineering fundamentals to understand the functionality of hardware & software aspects of computer systems and further will have competent skills and knowledge of software design and development process.

*Programme Outcome (POs) for U.G. Programme*

- **Engineering knowledge:** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of Mathematics, Natural Sciences, and Engineering Sciences.

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