

# Department of Computer Science and Engineering

## B. Tech. in Computer Science and Engineering

### **Program Educational Objectives:**

1. To produce proficient and competent Computer Science and Engineering graduates with a solid foundation in engineering, basic sciences and mathematics for successful professional careers in industry, academia, and public service.
2. To prepare graduates to become effective technical communicators/collaborators in multidisciplinary teams providing technical leadership to create innovative computing solutions for challenging real life problems.
3. The graduates of the programme will contribute to society in a professional, responsible and ethical manner.
4. Our graduates will pursue lifelong learning through such activities as higher studies, research & development, distance education, professional training and membership in professional societies to be able to adapt to challenges of changing environment.

### **Program Outcomes:**

The Bachelor of Technology in Computer Science and Engineering degree program aims to produce students that at the time of graduation will be able to

- a. Apply the basic mathematical, scientific and engineering concepts appropriate to the discipline of computer science and engineering.
- b. Analyse a problem, identify and define the computing requirements appropriate to its solution.
- c. Design, develop, and evaluate a computer-based system, component or process that meet desired needs within realistic constraints such as public health and safety, cultural, societal, and environmental considerations.
- d. Design and conduct experiments, as well as analyse and interpret data.
- e. Use state-of-the-art techniques, tools and skills necessary for computing practice.
- f. Include societal, health, safety, legal, and cultural issues and responsibilities with the computing solutions.
- g. Demonstrate the knowledge of sustainable development considering the impact of computing solutions in a global, economic, environmental, and societal context.
- h. Apply ethical principles and commit to professional ethics and responsibilities and norms of the computer science and engineering practice.
- i. Able to function effectively on multi-disciplinary teams to accomplish a common goal.
- j. Communicate effectively, both written and oral, with a range of audiences.
- k. Demonstrate knowledge and understanding of the engineering and management principles and apply these to his own work, as a member and leader in a team, to manage projects in multidisciplinary environments.
- l. Recognize the need for and have the preparation and ability to engage in life-long learning and continuing professional development.