

DEPARTMENT OF INFORMATION TECHNOLOGY (IT)

Credit Based Grading System [CBGS - 2012(R)]/Choice Based Credit and Grading Scheme [CBCGS - 2016(R)]

University of Mumbai

TCET Vision

"Thakur College of Engineering and Technology The IT Department is committed to enrich internationally renowned premier Institute of Engineering and Technology

TCET Mission

"To provide state-of-the-art infrastructure and right academic ambience for developing professional skills as well as an environment for growth of leadership and managerial skills to students which will make them competent engineers to deliver quality results in industry"

Quality Policy

We, the staff, Faculty and the Management of Thakur College of Engineering and Technology, are committed to provide state-of-the-art infrastructure **PEO2:** and facilities, conductive academic environment to deliver Quality Technical Education to our students. We shall work as a team and interact with students in proactive manner to achieve our institutional Quality Objective and fulfil all academic and regulatory requirements to continually enhance the satisfaction of our students.

Department Vision

"The Department of IT will strive to be at the top position among the renowned provides of IT **PEO4:** To encourage and motivate Learner's education.

Department Mission

will excel in Technical Education to become an students by rigorously implementing quality education with a focus to make them industry ready, while imbibing in them professional ethics and social values to become responsible citizens.

Programme Educational Objectives

PEO1: To prepare Learner's with a sound foundation in the basics of information technology (IT) and information systems (IS) broad background across fundamental areas of information technology along with a depth of understanding in a particular area of interest within the domain of information systems.

To prepare Learner's to use effectively modern programming tools to solve real life problems.

PEO3: To prepare Learner's for successful career in Indian and Multinational Organizations, Identify and evaluate current and emerging technologies and assess their applicability to address the users' needs and recognize the need for continued learning and pursue t throughout their career and higher studies.

> for Research & Development and entrepreneurship.

To inculcate independent critical thinking,

problem solving and leadership skills, with 1 an ability to analyze the impact of technology on individuals, organizations 2. and society including professional, ethical, legal and public policy issues.

PEO6: To encourage learner to use best practices and implement technologies to enhance information security and enable compliance, ensuring confidentiality, information integrity, and availability.

fundamentals. Enabling them to gain a **PEO7:** To develop excellent written and oral 5. communication skills to effectively interact with clients, users, co-workers and managers. To Collaborate and work in teams to accomplish a common goal by integrating personal initiative and group cooperation.

Programme Specific Outcomes

The students should be able:

PSO1: To develop the culture of augmenting existing technologies to create scalable IT solutions

PSO2: To combine various technologies like IoT, Cloud and Analytics to provide integrated solutions to real time problems of government/industries.

PSO3: To master in moulding any problem into a web/internet based solutions.

Graduate Attributes & Programme Outcomes

- Engineering Knowledge: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- Problem Analysis: Identify, formulate, 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 specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.
- Conduct investigations of complex problems using research based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions.
- Modern Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- The Engineer and Society: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice.
- 7. Environment and Sustainability: Understand the impact of professional engineering solutions in societal and environmental context and demonstrate knowledge of and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- Individual and Team work: Function effectively as an individual and as a member or leader in diverse teams and in multi-disciplinary settings.
- 10. 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.
- 11. Lifelong 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.
- 12. Project Management and Finance: Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments.