Computer Science & Engineering

Programme Educational Objectives (PEO)

A graduate in the discipline of Computer Engineering is generally expected to have three kinds of knowledge. First, the graduate should have conceptual knowledge of the core topics of Computer Science. Second, she/he should have knowledge of mathematical formalism underlying various programming concepts. Third, graduates in the discipline of Computer Engineering should have the knowledge of the state of the technologies and tools so that he/she can apply the principles of Computer Science to solve real-life problems from diverse application domains. The programme of B.Tech in Computer Engineering at Dr. Babasaheb Ambedkar Technological University (DBATU) essentially aims to meet these broad expectations. At the same time, the program intends to comply with the courses and syllabus available at National Program on Technology Enhanced Learning (NPTEL) and SWAYAM. The following specific educational objective aims to achieve these global and regional expectations

Objective Identifier Objectives

PEO1 To provide knowledge of sound mathematical principles underlying various programming concepts.

PEO2 To develop an ability to understand complex issues in the analysis, design, implementation and operation of information systems.

PEO3 To provide knowledge of mechanisms for building large-scale computer-based systems.

PEO4 To develop an ability to provide computer-based solutions to the problems from other disciplines of science and engineering.

PEO5 To impart skills necessary for adapting rapid changes taking place in the field of information and communication technologies.

PEO6 To provide knowledge of ethical issues arising due to deployment of information and communication technologies in the society on large scale.

Programme Outcomes (PO)

After undergoing the learning process of four years, students of B.Tech. (Computer Engineering) at Dr. Babasaheb Ambedkar Technological University will have an ability to build information systems and provide computer based solutions to real life problems.The graduates of this programme will demonstrate following abilities and skill sets

PO1 The graduates will possess the knowledge of various discrete mathematical structures, Logic and numerical techniques.

PO2 The graduates will have an ability to apply mathematical formalism of Finite Automata and Probability in modeling and analysis of systems.

PO3 The graduates will have knowledge of core programming paradigms such as database orientation, object orientation, and agent orientation and concepts essential to implement software based system.

PO4 The graduates will have an ability to analyze problem, specify algorithmic solutions to them and to evaluate alternative solutions.

PO5 The graduate will have broad understanding of the impact of a computer based solutions in economic, environmental and social context and will demonstrate use of analytical tools in gathering requirements and distilling relevant information to provide computer based solutions.

PO6 The graduates will demonstrate the ability to build human centric interfaces to computers.

PO7 The graduates will posses the knowledge of advanced and emerging topics in the fields of operating systems, databases and computer networks.

PO8 The graduates will posses skills necessary to communicate design engineering ideas. The skills set include verbal, written and listening skills.

PO9 The graduates will understand ethical issues in providing computer based solutions also they will have an ability and attitude to address the ethical issues.

PO10 The graduates will understand the role of system software such as operating systems, database management systems, compilers, middle-ware and internet protocols in realizing distributed information environment.