Civil Engineering

Goal of the Civil Engineering at Dr. Babasaheb Ambedkar Technological University, Lonere (BATU) is to provide students with preparation to become worthy of professional careers in the field and to be motivated for lifelong learning. All prescribed courses have definite objectives and outcomes. Program objectives are expected qualities of engineers as under:

a) Preparation: To prepare students to excel in various educational programmes or to succeed in industry / technical profession through further education/training;

b) Core Competence: To provide students with a solid foundation in mathematical, scientific fundamentals required to solve real life civil engineering problems;

c) Breadth: To train students with a breadth of scientific knowledge to comprehend, analyze, design & create novel products and solutions for real life problems;

d) Professionalism: To inculcate in students professional/ethical attitude, effective team work skills, multidisciplinary approach and to relate engineering issues to a broader context;

e) Learning Environment: To provide students with academic environment of excellence, leadership, ethical guidelines and life-long learning needed for a long / productive career.

Program Educational Objectives

1. Taking pride in their profession and have commitment to highest standards of ethical practices and related technical disciplines;

2. Able to design various structures and systems that is safe, economical and efficient;

3. Capable of using modern tools efficiently in all aspects of professional practices;

4. Dealing successfully with real life civil engineering problems and achieve practical solutions based on a sound science and engineering knowledge;

5. Shall be engage in continuous research, development and exchange of knowledge for professional development;

6. Be honest in their control and performing their duties and promote effective use of resources through open, honest and impartial services to the public;

7. Act in such a manner which will uphold the honour, integrity, or dignity of the engineering profession, and avoid knowingly engaging in business or professional practices of a fraudulent, dishonest or unethical nature;

8. Recognize that the lives, safety, health and welfare of the general public are dependent upon engineering, decision and practices;

9. Continue their professional development throughout their careers and provide opportunities for the professional development.

Program Outcomes

At the end of the program the student will be able to:

PO 1	Apply the knowledge of mathematics, basic sciences, and civil engineering to the solution of complex engineering problems.
PO 2	Identify, formulate, research literature, and analyze complex civil engineering problems reaching substantiated conclusions.
PO 3	Design solutions for complex engineering problems and design of civil engineering structures that meet the specified needs.
PO 4	Use civil engineering research-based knowledge related to interpretation of data and provide valid conclusions.
PO 5	Create, select, and apply modern civil engineering and IT tools to complex engineering activities with an understanding of the limitations.
PO 6	Apply reasoning acquired by the civil engineering knowledge to assess societal and safety issues.
PO 7	Understand the impact of engineering solutions on the environment, and demonstrate the knowledge for sustainable development.
PO 8	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO 9	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO 10	Communicate effectively on complex engineering activities with the engineering community and with society at large.
PO 11	Understand the engineering and management principles and apply these to the multidisciplinary environments.
PO 12	Recognize the need for life-long learning in the broadest context of technological change.

Program-Specific Outcomes (PSOs)

PSO 1	Make the students employable in engineering industries.
PSO 2	Motivate the students for higher studies and research.
PSO 3	Motivate the students for various competitive examinations