Introduction:

The short course in Engineering Ethics aims to provide participants with a deep understanding of the ethical considerations that are integral to engineering practice. Participants will learn about the principles and values that underpin ethical decision-making, and explore how these can be applied in practical scenarios. The course will cover a range of topics, including professional responsibility, social responsibility, environmental sustainability, and the impact of technology on society. Through a combination of lectures, case studies, and interactive discussions, participants will develop their critical thinking skills and gain practical tools for ethical decision-making in the engineering profession. The course is suitable for engineers, engineering students, and professionals who are interested in the ethical aspects of engineering practice.

MARBLE ARCHES
Trainings & Events

Training Period: 2/3 - Days

Targeted Groups:

This course was design to fit:

- ✓ Engineering students at the undergraduate or graduate level
- ✓ Professional engineers seeking to fulfill continuing education requirements
- ✓ Engineers preparing for licensure exams
- ✓ Engineering educators looking to incorporate ethics into their curriculum
- ✓ Engineers transitioning to new roles with greater ethical responsibilities
- ✓ Industry professionals seeking to enhance their understanding of ethical issues in engineering
- ✓ Government employees working in engineering or related fields
- ✓ Non-engineers working in fields that interact with engineering, such as legal or policy professionals.

Course Objectives:

This course was designed to let the participants able to:

- ✓ To understand the basic principles and theories of ethics in engineering
- ✓ To identify ethical issues in engineering practice and analyze them using ethical frameworks
- ✓ To develop skills in ethical decision-making and communication
- ✓ To understand the social, environmental, and global impact of engineering

- ✓ To develop an understanding of the ethical responsibilities of engineers in the workplace

Course Content:

Unit 1: Introduction to Ethics

- ✓ Definition and nature of ethics
- ✓ Major ethical theories and principles

Unit 2: Ethics in Engineering Practice

- ✓ Professional codes of ethics
- ✓ Case studies of ethical issues in engineering
- ✓ Ethical decision-making frameworks

Unit 3: Social and Environmental Impacts of Engineering

- ✓ Global and local impact of engineering projects
- ✓ Social responsibility in engineering practice
- ✓ Environmental ethics and sustainability

Unit 4: Ethical Responsibilities of Engineers

- ✓ Professional obligations to society and the environment
- ✓ Workplace ethics and conduct
- ✓ Ethical leadership and communication

Unit 5: Emerging Issues in Engineering Ethics

- ✓ Ethical challenges of emerging technologies
- ✓ Diversity and inclusion in engineering practice
- ✓ Global perspectives on engineering ethics