

# ENG231e Engineering Ethics

**Level:** 2

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY SEMESTER

**E-Learning:** BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

## **Synopsis:**

Nowadays, technology has a pervasive and profound impact on everyday life, where engineers play a crucial role in its development. It is therefore extremely important that engineers understand the importance of safety, health, and welfare of the public, when developing this technology. They must be morally committed and equipped to tackle any ethical issues they may encounter. This course aims at training the student to reach such a status through discussions and typical case studies where real examples are thoroughly discussed.

## **Topics:**

- Ethics and Professionalism
- Moral Choices and Ethical Dilemmas
- Codes of Ethics
- Moral Frameworks
- Ethics as Social Experimentation
- Safety and Risk
- Assessing and Reducing Risk
- Workplace Responsibilities and Rights
- Truth and Truthfulness
- Computer Ethics
- Environmental Ethics

## **Textbooks:**

Martin.: ETHICS IN ENGINEERING 4E 4th edition McGraw-Hill  
ISBN-13: 9781307131208-AA

Martin.: ETHICS IN ENGINEERING 4E (Customised ver) 4th edition McGraw-Hill  
ISBN-13: 9781307131208

**Learning Outcome:**

- Illustrate the ethical issues and dilemmas faced by engineers.
- Discuss the ethical issues in a scenario / statement / policy.
- Compare various policies / acts/ engineering work based on various ethical theories.
- Debate on the ethical issues in a given engineering situation.
- Give reasons / comments on ethical issues in engineering.
- Examine and support an ethical stance.
- Determine the ways to deal with ethical issues.
- Present the policies / solutions to address ethical issues in engineering.

**Assessment Strategies:**

<b>Continuous Assessment Component</b>	<b>Weightage (%)</b>
CLASS TEST	12
CLASS TEST	12
PRE-CLASS QUIZ	2
PRE-CLASS QUIZ	2
PRE-CLASS QUIZ	2
<b>Sub-Total</b>	<b>30</b>

<b>Examinable Component</b>	<b>Weightage (%)</b>
Written Exam	70
<b>Sub-Total</b>	<b>70</b>

**Weightage Total** **100**