ECC429 – Engineering Ethics

Faculty of Engineering - Compulsory Course

Credit: 3 ECTS:6

Course Description: Engineering Ethics is a fourth-year mandatory course emphasizing the critical role of ethics in engineering education. It treats ethical considerations as 'social experimentation,' enabling engineers to address dilemmas in the public interest. The course covers emerging ethical challenges in information technologies, particularly global data distribution. It provides a comprehensive global perspective on engineering ethics, specifically focusing on information ethics. Through prior engineering education and experiences, students gain a broad understanding of ethics' paramount importance in various engineering fields. The course encourages philosophical reflection on how ethics shapes technical decisions and engineering design, considering the pervasive impact of technology.

Course Outcomes:

- Think critically about the ethical implications of engineering decisions.
- Recognize the paramount importance of prioritizing public safety, health, and welfare in engineering practices.
- Appreciate the significance of upholding ethical standards across diverse engineering fields.
- Establish connections between academic conduct rules and engineering ethical codes.
- Understand and embody the high ethical standards and moral values expected of professional engineers.
- Identify, evaluate, and propose actionable solutions for ethical issues within the engineering profession.
- Analyze and reflect upon ethical concerns specific to information technology.
- Acknowledge the evolving nature of technology and its potential to give rise to new ethical dilemmas, underscoring the enduring relevance of ethics in engineering practice