



العدد :

التاريخ : / / ٢٠

Course number and name	ER 417: Engineering Ethics and Professionalism
Credits and contact hours	1 credit and 1 hour
Course coordinator	
Textbook	Seebauer, E.G. and Barry, R.L. Fundamental of Ethics for Scientists and Engineers (New York: Oxford University Press, 2001).
Course Information	a. Prerequisites: High school math b. Required
Topics to be covered	Course introduction and overview, Morals and ethics, Comparison of ethics and engineering ethics, Ethics at personal and student level, The concept of professions, The importance of ethics in science and engineering, The role of codes of ethics, Professional responsibilities of engineers, The concept of morality, The importance of core values, Moral/ethical dilemmas and hierarchy of moral values, Factors affecting moral responsibility, and degrees of responsibility, Overview of ethical theories and applications, Basics of ethical analyses and decision-making, The importance if intention, Truth (personal and social), Ethical leadership in engineering and society, Conflicts of interests, Engineers in organizations, Ethics in the workplace, Fairness (personal and social), Ethics in the electronic and digital age, Privacy and confidentiality issue, Responsible conduct of research, Intellectual property and society, Innovation and ethics, Sustainable engineering, Global and cultural considerations.