



Sub.	Course Description – توصيف مقرر دراسي	الموضوع	 كليات المعرفة ALMAAREFA COLLEGES
Date		التاريخ	

Course Code & No	ETHC 440		رقم المقرر ورمزه
Course Name	Ethics in Engineering		اسم المقرر
Credit Hours	2 (2+0+0)		عدد الساعات المعتمدة
Pre-requisite			المتطلب السابق

General Description	توصيف عام
<p>Ethical philosophy, issues, and set of rules. Theory and the practice of engineering ethics using a multi-disciplinary and cross-cultural approach. The origin of ethical laws. The codes of ethics. Protecting Intellectual property. The legal and Ethical Domain. Solving Ethical conflicts. Historical cases are taken primarily from the scholarly literatures on engineering ethics. Practical and hypothetical cases are to be introduced and the students will compare these cases and recommend action.</p>	

Course Objectives	أهداف المقرر
<p>The course aims to provide the knowledge Ethical philosophy, issues, and set of rules. Theory and the practice of engineering ethics using a multi-disciplinary and cross-cultural approach. The origin of ethical laws. The codes of ethics. Contract and liabilities. Protecting Intellectual property. The legal and Ethical Domain. Solving Ethical conflicts. Historical cases are taken primarily from the scholarly literatures on engineering ethics. Practical and hypothetical cases are to be introduced and the students will compare these cases and recommend action.</p> <p>By the end of the course, each student should be able to</p> <ul style="list-style-type: none"> • Understand the ethical issues and its rules • Demonstrate ethical behavior in engineering environment • Understand the contracts and legalities issues • Analyze and compare legal and contract cases 	

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Course Outlines	مفردات المقرر
<ul style="list-style-type: none"> • Ethical philosophy and morality issues. • Ethical set of rules • Theory and the practice of engineering ethics using a multi-disciplinary and cross-cultural approach. • The origin of ethical laws. • The origin of ethical laws. • Protecting Intellectual property. • The legal and Ethical Domain. • Solving Ethical conflicts. • Historical cases are taken primarily from the scholarly literatures on engineering ethics • 10. Practical and hypothetical cases 	

References	المراجع
<p>Required Textbooks Notes, several references, Internet information</p> <p>Essential References Materials</p> <ul style="list-style-type: none"> • Lang, Erin R., S.M.ASCE “Applying Ethics to Engineers”. Journal of Professional Issues in Engineering Education and Practice, ASCE/ July 2003, pp: 134-135 • Read for Assignment: Richard A. Burgess • Michael Davis • Marilyn A. Dyrud • Joseph R. Herkert • Rachelle D. Hollander • Lisa Newton • Michael S. Pritchard • P. Arne Vesilind” Engineering Ethics: Looking Back and Looking Forward” Sci Eng Ethics (2013) 19:1395–1404 • 3. Harris, Charles E. The Good Engineer: Giving Virtue its Due in Engineering Ethics. Sci Eng Ethics (2008) 14:153–164 	