

ENGINEERING TECHNOLOGY (ENGT)

ENGT 111 Intro to Project Mgmt (1 Credits)**Lecture:** 1

The course emphasizes the different aspects of a given engineering project, such as planning, time and cost management, scope management, human resource management, communications management and conflict management. One hour of lecture per week.

College/School: Col of Science, Engr & Tech**Department:** Department of Engineering**ENGT 331 Engineering Economy (3 Credits)****Lecture:** 2, **Lab:** 2

Engineering Economy (3) Overview of the methodologies for evaluating engineering and technology projects in terms of the selection and justification of design alternatives, operating policies, and capital expenditures. Two hours of lecture and two hours of laboratory per week.

College/School: Col of Science, Engr & Tech**Department:** Department of Engineering**ENGT 332 Ind Prod & Work Measurements (3 Credits)****Lecture:** 2, **Lab:** 2

Industrial Productivity and Work Measurements (3) Study of industrial productivity and its assessment, measurements, analysis, and improvements with emphasis on human productivity, work design, method analysis, and ergonomics. Two hours of lecture and two hours of laboratory per week

College/School: Col of Science, Engr & Tech**Department:** (R)Dept of Engineering Tech**ENGT 333 Ethics in Prof Eng Practice (1 Credits)****Lecture:** 1

This course develops students' knowledge of: the nature of engineering ethics Legal, professional, and personal definitions of engineering ethics; the value of engineering ethics (varied contemporary and contemporary and historical legal, professional, and personal reasons why an engineer should be ethical and the resolution of ethical dilemmas using common ethical dilemmas, identify possible actions to be taken in response, and probable consequences of those actions.

College/School: Col of Science, Engr & Tech**Department:** Department of Engineering**ENGT 431 Quality Control & Measurements (3 Credits)****Lecture:** 2, **Lab:** 2

Quality Control and Assurance (3) Introduction to statistical quality control methods as applied to design tolerance, process control and process capability. Two hours of lecture and two hours of laboratory per week.

College/School: Col of Science, Engr & Tech**Department:** (R)Dept of Engineering Tech**ENGT 432 Industrial Quality Control (3 Credits)****Lecture:** 2, **Lab:** 2

Industrial Quality Control (3) Study of quality management and product reliability to reduce defects and/or failures in production processes. Application of SPC control charts and reliability testing to optimize quality control processes. Two hours of lecture and two hours of laboratory per week. Prerequisite: ENGT 431.

Prerequisite(s): (ENGT 431)**College/School:** Col of Science, Engr & Tech**Department:** (R)Dept of Engineering Tech**ENGT 433 Alternative Energy Tech (3 Credits)****Lecture:** 3

The course discusses the use of solar (thermal and photovoltaic), hydro-electric, wind, geothermal, ocean thermal, wave, tidal and geothermal energy, as well as energy from biomass. The use of fuel-cell and heat pump systems is dealt with. Issues relevant to energy efficiency and energy storage are discussed. The potential of using renewable energy technologies as a complement to, and, to the extent possible, replacement for conventional technologies, and the possibility of combining renewable and nonrenewable energy technologies in hybrid systems are analyzed. Two hours of lecture and two hours of laboratory per week.

College/School: Col of Science, Engr & Tech**Department:** Department of Engineering