

نموذج (هـ) -

مختصر توصيف المقرر

Course number: ISE 406	Course name: Engineering Management
Language: English	Pre-requisites: ISE 305
Credit hours: 3 (3+ 0 + 0)	Course level: Level 9

Module Description

وصف المقرر:

This course is a general course designed to teach engineers the basic management skills they will need to be effective throughout their careers. It covers organization structure and the role of engineers in management of organizations. The management process, management and planning strategies, managerial functions related to production, inventory and human resources. Topics cover the basic elements of project planning and control including process of project management, strategic and intermediate term planning, organizing, leadership, motivation, finance, budgeting and operations management. Case studies pertaining to engineering problems will be utilized

Module Aims

أهداف المقرر:

This course aims to equip engineers with key management principles and skills, they will need. The skills and knowledge covered in this course include necessary exposure to common engineering management topics such as planning, organizational structure and design, project and financial management and control, leadership, motivation, ethics and professionalism and the role an engineer can play in managing an organization. It also aims to expose students to qualitative tools to manage organizations and give them a chance to work in teams and give oral presentations and write a report.

مخرجات التعليم: (الفهم والمعرفة والمهارات الذهنية والعملية)

يفترض بالطالبة بعد دراستها لهذا المقرر أن تكون قادرة على:

Define the basic principles of management as applicable to engineering problems	
Apply appropriate management techniques for managing contemporary organizations using different case studies	
Use the techniques, skills, and modern engineering tools necessary for basic engineering management practices	
Apply qualitative tools and techniques to manage organizations like surveys, research, voting and other methods to draw conclusions and make decisions.	
Use appropriate project management tools like MS Project	
Communicate effectively in written/oral presentation	
Work effectively in teams	

الكتاب المقرر والمراجع المساندة:

اسم الكتاب	اسم المؤلف	اسم الناشر	سنة النشر
MGMT	Chuck Williams	Cengage Learning	2014
Principles of Operation Management	Jay Heizer and Barry Render	Pearson	2016

Topics to be covered

الموضوعات التي سيتم تناولها:

List of topics	No. of Weeks	قائمة الموضوعات
Introduction to engineering and management	1	
Historical development of engineering management	1	
Forms of business and organizations	1	
Planning & forecasting and decision making	2	
Designing Adoptive organization	2	
Motivating and leading technical people	2	
Project Management	2	
Ethics & Social responsibility	1	
Financial control	2	