


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

Course Code & No	ENGR 403		رقم المقرر ورمزه
Course Name	Planning and Engineering Management		اسم المقرر
Credit Hours	2 (2+1+0)		عدد الساعات المعتمدة
Pre-requisite	Completed level 6		المتطلب السابق

General Description	توصيف عام
<p>This course is in an introductory course on project and engineering management. The course covers the project management process from the beginning to the end, focusing on practical skills that make students able to immediately complete projects on time and on budget, while achieving their targets.</p>	

Course Objectives	أهداف المقرر
<p>The course aims to provide the knowledge and skills to understand the fundamental of project management and understand principles of project organization and contractual relationships. The students will be able to develop project schedules, resource levelling, time-cost trade-off, and monitor an engineering project.</p> <p>By the end of the course, each student should be able to</p> <ul style="list-style-type: none"> • Understand the basic concept of project planning and the principles of project organization and contractual relationships • Apply the following methods to prepare project schedules: activity-on-node, time-scaled diagram, bar chart, • Determine project schedule for purpose of resource levelling and allocation and time-cost trade-off., • Monitor an engineering project for purpose of time and cost control, • Analyze work changes and delays, and use computer software for preparing project schedules. 	

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Course Outlines	مفردات المقرر
<ul style="list-style-type: none"> • Introduction for management of engineering projects. • Planning with bar chart. • Critical path method using activity-on-node network and Time-scaled network. • Resource leveling and allocation. • Time-cost trade-off. • Contractual and organizational approaches. • Analysis of work changes and delays. • Time and cost control. 	

References	المراجع
<p>Required Textbooks Moder, J.; Phillips, C. and Davis, E., Project Management with CPM, PERT and Precedence Diagramming, Van Nostrand Reinhold, latest edition..</p> <p>Essential References Materials Kerzner, H. Project Management: A Systems Approach to Planning, Scheduling, and Controlling, John Wiley & Sons, Inc., latest edition.</p>	