



Sub.	Course Description – توصيف مقرر دراسي –	الموضوع	 <b>كليات المعرفة</b> ALMAAREFA COLLEGES
Date		التاريخ	

Course Code & No	IE332		رقم المقرر ورمزه
Course Name	Work design and analysis		اسم المقرر
Credit Hours	3 (2+1+2)		عدد الساعات المعتمدة
Pre-requisite	IE 343, IE 331 Co-Req.		المتطلب السابق

<b>General Description</b>	توصيف عام
Introduction to work analysis and design; Methods engineering: Study of the basic work measurement techniques; Applications and limitations of the stop-watch time study, pre-determined motion time systems.	

<b>Course Objectives</b>	أهداف المقرر
<p>The course aims to provide the knowledge and skills to design and analyze work utilizing well established approaches and techniques of time and motion study.</p> <p><b>By the end of the course, each student should be able to:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of the fundamental concepts of work systems and work study.</li> <li>• Use different types of engineering work methods such as charting and diagrams techniques in operations and job analysis (laboratory experiments &amp; case study).</li> <li>• Appraise various types of engineering work measurements such as direct time study, predetermined motion time systems, Standard Data Systems, work sampling in analysing time of tasks (laboratory experiments).</li> <li>• Judge a grasp of the fundamental principles of experimental design, collection of data related to work study, and their analysis and interpretation (laboratory experiments).</li> <li>• Operate in a team and communicate effectively in performing the assigned works</li> </ul>	

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Course Outlines	مفردات المقرر
<ul style="list-style-type: none"> <li>The course aims to provide the knowledge and skills to design and analyze work utilizing well established approaches and techniques of time and motion study .</li> <li></li> <li>By the end of the course, each student should be able to:</li> <li>Demonstrate an understanding of the fundamental concepts of work systems and work study .</li> <li>Use different types of engineering work methods such as charting and diagrams techniques in operations and job analysis (laboratory experiments &amp; case study .(</li> <li>Appraise various types of engineering work measurements such as direct time study, predetermined motion time systems, Standard Data Systems, work sampling in analysing time of tasks (laboratory experiments .(</li> <li>Judge a grasp of the fundamental principles of experimental design, collection of data related to work study, and their analysis and interpretation (laboratory experiments .(</li> <li>Operate in a team and communicate effectively in performing the assigned works</li> </ul>	

References	المراجع
<p><b>Required Textbooks</b>  Methods, Standards and Work Design, by B. W. Niebel and A. Freivalds, 11th ed, McGraw-Hill, Latest edition.  MOST work measurement systems, K.B. Zandin, Elsevier, Latest edition</p> <p><b>Essential References Materials</b>  Work measurement and methods improvement, L.S. Aft, John Wiley, Latest edition</p>	