



**JORDAN UNIVERSITY OF SCIENCE & TECHNOLOGY
INDUSTRIAL ENGINEERING DEPARTMENT**

Course Number and Name	[IE 345]Work Measurement and Analysis
Course Description	Methods study, Time study and Job evaluation. Techniques of good methods study. Work station design using ergonomic principles. Job description and evaluation. Techniques of scientific time study. Standard basic times and work sampling are presented.
Credits and contact hours	3 Credit hours; 3 hours of lectures
Pre- or Co-requisites	IE344 Operations Research (1)
Required/ Elective	Required

Text Book(s)	F. Meyers, and J. Stewart (2002), <i>Motion and time study for lean Manufacturing, 3rd ED.</i> , Prentice Hall
References	B.Niebel and A. Freivalds (2003), <i>Methods Standards, and work Design</i> , International Ed., McGraw Hill

Course Objectives	<ul style="list-style-type: none"> • Understand the role of Industrial Engineer in the organization. • Use systematic approaches for analyzing, modeling and solving production related problems. • Work station design using ergonomic principles. • Utilize knowledge and techniques attained for scientific time study and good method study. • Demonstrate ability to seek further knowledge and specialized skills in Lean Methodology
Measured Outcomes	3f

Topics	Chapters in Text	Evaluation	
Introduction and History of Motion and time Study	Ch.1,2,3	Class Work	5
Importance and use of MTS	Ch.4	First Exam	30
Macromotion Study	Ch5	Second Exam	25
Micromotion Study	Ch6	Final Exam	40
Motion Economy	Ch7		
Predetermined Time Standard	Ch8		
Stopwatch time study	Ch9		
Standard data and Line balancing	Ch10		
Work sampling	Ch11		