



Jordan University of Science and Technology
Faculty of Engineering
Industrial Engineering Department

IE335 Engineering Measurements Lab - JNQF Level: 7

Second Semester 2023-2024

Course Catalog

1 Credit Hours. The lab covers the experiments for linear measurements, angular measurements, fixed and deviation type of gauges, optical measurements and roughness measurements. The measurements are focused on industrial engineering applications.

Teaching Method: On Campus

Text Book

Title	Applied Metrology for Manufacturing Engineering
Author(s)	A. Grous
Edition	1st Edition
Short Name	Ref # 1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref # 2	Metrology for Engineers	T. Galyer and Shotbolt	5th Edition	

Instructor

Name	Prof. Omar Al-Araidah
Office Location	CH1L2
Office Hours	
Email	alarao@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun : 14:30 - 17:30

Room: LAB

Section 2:

Lecture Time: Mon : 14:30 - 17:30

Room: LAB

Section 3:

Lecture Time: Thu : 14:30 - 17:30

Room: LAB

Section 4:

Lecture Time: Tue : 14:30 - 17:30

Room: LAB

Prerequisites

Line Number	Course Name	Prerequisite Type
251000	ME100 Engineering Workshops	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Week 2	Measurement with Different Micrometers and Vernier Measuring Instruments	From Ref # 1
Week 3	Angular measurement ? Combination Set and Vernier Bevel Protractor?	From Ref # 1
Week 4	Angular Measurement ? Sin Bar?	From Ref # 2
Week 5	Measuring Tapered Components	From Ref # 1 , From Ref # 2
Week 6	Measuring and Checking Dovetails	From Ref # 1 , From Ref # 2
Week 7	Checking for Taper, Roundness and Concentricity of Cylindrical Work Pieces	From Ref # 1 , From Ref # 2
Week 8	Toolmaker?s Microscope	From Ref # 1 , From Ref # 2
Week 10	The Optical Projector	From Ref # 1 , From Ref # 2
Week 11	Machine Tools Metrology I	From Ref # 1 , From Ref # 2
Week 12	Machine Tools Metrology II	From Ref # 1
Week 13	Surface Roughness Measurement	From Ref # 1 , From Ref # 2

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Understanding and making linear and angular measurements [1SO6] [1L7S1]	100%	

Relationship to Program Student Outcomes (Out of 100%)						
SO1	SO2	SO3	SO4	SO5	SO6	SO7
					100	

Relationship to NQF Outcomes (Out of 100%)	
L7S1	
100	

Evaluation	
Assessment Tool	Weight
Midterm Exam	30%
Reports or Quizzes	20%
Final Exam	50%

Policy	
C	<p>Policy:</p> <p>NO audio or video recording is permitted</p> <p>Attendance will be checked at the beginning of each class. University regulations will be strictly followed for students exceeding the maximum number of absences. No make-up test will be given without an official university-approved excuse.</p> <p>Students are responsible for all email messages sent by the instructor</p> <p>Academic Honesty: Students will abide by JUST policy on academic honesty listed in the University Bulletin. Failure to abide by this policy will result in serious consequences, such as a zero grade and possibly an F for the course.</p> <p>NOTE: If you are a student with special needs (disability), please contact me as soon as possible.</p>

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