



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

CE201 Statics - JNQF Level: 7

Summer Semester 2023-2024

Course Catalog

3 Credit Hours. 3 Credit hours (3 h lectures). Force vectors and resultant. Free-body diagram of forces and equilibrium of particles and rigid bodies. Moment of a force about a point and about an axis. Analysis of trusses and frames. Shear forces diagrams and bending moment diagrams.

Teaching Method: On Campus

Text Book

Title	Engineering Mechanics: Statics
Author(s)	Hibbeler RC
Edition	13th Edition
Short Name	Ref #1
Other Information	

Instructor

Name	Prof. Saad Abo-Qudais
Office Location	C2 L2
Office Hours	
Email	aboqdais@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Sun, Mon, Tue, Wed : 11:30 - 13:00
Room: C2008

Prerequisites		
Line Number	Course Name	Prerequisite Type
821016	HSS101PHY General Physics (1)	Prerequisite / Pass
921010	PHY101 General Physics (1)	Prerequisite / Pass

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Introduction to course outline, Objectives, and Grading	From Ref #1
Weeks 1, 2	Vector analysis	From Ref #1
Week 3	Statics of Particles	From Ref #1
Week 4	Rigid bodies: equivalent system of forces	From Ref #1
Weeks 4, 5	Equilibrium of rigid bodies	From Ref #1
Week 6	Supports detailing	From Ref #1
Weeks 6, 7	Reactions	From Ref #1
Weeks 8, 9, 10	Truss Analysis	From Ref #1
Weeks 10, 11	Frame analysis	From Ref #1
Weeks 12, 13, 14	Shear and moment diagrams of beams	From Ref #1
Weeks 14, 15, 16	Centroid and moment of inertia	From Ref #1
	Exam 1 during week 5 or 6	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Analyze equilibrium of a particle and rigid bodies in 2D and 3D [1SO1] [1L7K1]	25%	
Analyze simple trusses and frames using equilibrium equations [1SO1] [1L7S2]	25%	
An ability to draw the shear and moment diagrams of beams [1SO1] [1L7S2]	25%	
Ability to calculate the centroid and moment of inertia of composite cross-sections [1SO1] [1L7S2]	25%	

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

Relationship to NQF Outcomes (Out of 100%)	
L7K1	L7S2
25	75

Evaluation	
Assessment Tool	Weight
First hourly exam	25%
Second hourly exam	25%
HWs & Quizzes	10%
Final exam	40%

Policy	
Classroom Manners:	Classroom lectures will be informal to the extent that you are encouraged to ask questions and participate in any discussion at any time. However, side discussions between students during lectures will not be tolerated due to the fact that this kind of discussions distract other students. Good Conduct of students is very important and include: attending all classes, being on time, not doing other tasks, not responding to cellular phones (turning off cellular phones is alternatively recommended)?.etc. All these behaviors will provide a healthy classroom and comfortable environment to all students. Although good classroom manners do not affect your grade, providing a favorable impression during classroom may impact a pass/fail grade

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