

The University of Jordan
School of Engineering



Department	Course Name	Course Number	Semester
Mechanical Engineering	Aeroelasticity	0994506	
2025 Course Catalog Description			
Wing divergence control reversal. Lift effectiveness. Swept wing aero elasticity. Vibrations of structure unsteady aerodynamic forces and moment. Flutter of a single degree of freedom system. Methods of flutter analysis.			
Instructors			
Name	E-mail	Section	Lecture Time
Prerequisites			
Prerequisites by topic			
Prerequisites by course			
Co-requisites by course			
Prerequisite for			
Topics Covered			
Week	Topics		
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
Evaluation			
Assessment Tools	Expected Due Date	Weight	

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Contribution of Course to Meet the Professional Components							
Relationship to Student Outcomes							
SOs	1	2	3	4	5	6	7
Availability							
Relationship to Aeronautical Engineering Program Objectives (AEPOs)							
AEPO1	AEPO2		AEPO3	AEPO4		AEPO5	
ABET Student Outcomes (SOs)							
1	An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics						
2	An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors						
3	An ability to communicate effectively with a range of audiences						
4	An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts						
5	An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives						
6	An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions						
7	An ability to acquire and apply new knowledge as needed, using appropriate learning strategies						
Updated by ABET Committee, 2025							