

**The University of Jordan
School of Engineering**



Department	Course Name	Course Number	Semester			
Aircraft maintenance Engineering	Licensing Module 8: Basic Aerodynamics (Part 1)	0994156				
2025 Course Catalog Description						
Physics of the atmosphere, Aerodynamics, High speed airflow.						
Instructors						
Name	E-mail	Sec	Office Hours		Lecture Time	
			Sunday	Tuesday		
MEng. Aasef Hamadneh	ahamadneh@joramco.com.jo		1:00-2:00	1:00-2:00		
Text Books						
Title	Basic Aerodynamics					
Author(s)	EASA					
Publisher, Year, Edition	Issue 2 , 2024					
References						
Books						
Journals						
Internet links						
Prerequisites						
Prerequisites by topic	-					
Prerequisites by course	-					
Co-requisites by course	-					
Prerequisite for	-					
Topics Covered						
Week	Topics	Chapter in Text				
1	Physics of the atmosphere	Chapter 1				
2	Physics of the atmosphere	Chapter 1				
3-4	Aerodynamics	Chapter 2				
5-6	Aerodynamics	Chapter 2				
6-7	Aerodynamics	Chapter 2				
7-8	High speed airflow	Chapter 3				
9-10	High speed airflow	Chapter 3				
11-14	High speed airflow	Chapter 3				
14-15	High speed airflow	Chapter 3				

Mapping of Course Outcomes to ABET Student Outcomes							
SOs	Course Outcomes						
1	Identify the airflow patterns around the following shapes.						
1	Explain aerofoil terms.						
Evaluation							
Assessment Tools		Expected Due Date					Weight
Projects							20%
Midterm Exam							30%
Final Exam							50%
Contribution of Course to Meet the Professional Components							
Relationship to Student Outcomes							
SOs	1	2	3	4	5	6	7
Availability	X						
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 Curriculum Committee, 2025							