The University of Jordan
School of Engineering

Department	Course Name	Course Number	Semester
Aircraft maintenance Engineering	Licensing Module 8: Basic Aerodynamics (Part 2)	0994157	Summer

2025 Course Catalog Description

Theory of flight, Flight stability and dynamics.

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	Licensing Module 8: Basic Aerodynamics (Part 1): 0994156
Co-requisites by course	-
Prerequisite for	-

Topics Covered

Week	Topics	Chapter in Text
1	Theory of flight	Chapter 4
2	Theory of flight	Chapter 4
3-4	Theory of flight	Chapter 4
5-6	Theory of flight	Chapter 4
6-7	Theory of flight	Chapter 4
7-8	Flight stability and dynamics	Chapter 5
9-10	Flight stability and dynamics	Chapter 5
11-14	Flight stability and dynamics	Chapter 5
14-15	Flight stability and dynamics	Chapter 5

Mapping of Course Outcomes to ABET Student Outcomes

SOs	Course Outcomes
1	State the relationship between lift, drag, thrust and weight.
1	Explain the requirement for stable and unstable flight.

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