Jordan University of Science and Technology

Faculty of Engineering

Aeronautical Engineering Department

AE592 Graduation Project Ii - JNQF Level: 7
First Semester 2023-2024

Course Catalog
3 Credit Hours. Provides students the opportunity to individually explore an aeronautical engineering problem or issue within their field of study and apply their education to solving the problem for the benefit of the local community and society as a whole. Students produce a short report that documents the application of previous learning, experience and knowledge to the problem at hand, and evaluates the results.

Text Book	
Title	AE Assessment Rubrics for BS Projects, available from the BS by the project advisor or project advisor or Committee
Author(s)	Guidance and Notes delivered to students by the project advisor
Edition	1st Edition
Short Name	1
Other Information	

Instructor	
Name	**Prof. Tariq Darabseh**
Office Location	N1 L2
Office Hours	Sun : 11:00 - 13:00 Mon : 10:00 - 12:00 Tue : 11:00 - 12:00 Wed : 11:00 - 12:00
Email	darabseh@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: U : -
Room: LAB

Prerequisites		
Line Number	**Course Name**	**Prerequisite Type**
715911	AE591 Graduation Project I	Prerequisite / Study
714901	AE490 Engineering Training	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Weeks 1, 2, 3	Problem formulation: a. Knowledge integration b. Operational and realistic constraints c. Design objectives d. Evaluation criteria	
Weeks 3, 4	Design options and initial layout	
Weeks 4, 5	Work plan and budgeting	
Weeks 5, 6	Progress report and oral presentation	
Weeks 6, 7, 8, 9, 10, 11, 12	Implementation phase	
Weeks 12, 13, 14	Design refinement	
Week 14	Final report and oral presentation	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
demonstrate a high level of proficiency in executing the experimental and/or practical phases related to the aeronautical engineering problem addressed in Graduation Capstone Project I. [1SO6] [1L7S3]	20%	
conduct comprehensive research relevant to the aeronautical engineering problem, gathering and analyzing data to inform their study. [1SO1] [1L7K1]	10%	
apply engineering principles and design methodologies to develop solutions and interventions pertaining to the aeronautical engineering problem under investigation. [1SO2] [1L7S1, 1L7S2]	10%	
produce a thorough and well-structured technical report that documents the entire research process, including background, objectives, methodology, results, analysis, and recommendations. [1SO3] [1L7C3]	10%	

develop and deliver a final presentation that effectively communicates the key aspects of their aeronautical engineering project, showcasing their understanding of the problem, methodology, findings, and recommendations. [1SO3] [1L7C3]	10%	
analyze critically the results of their study, demonstrating the ability to interpret findings, identify limitations, and propose potential areas for further exploration or improvement. [1SO6] [1L7S3]	10%	
exhibit strong problem-solving skills by addressing challenges encountered during the experimental and practical phases, making informed decisions to enhance the quality of their work. [1SO4] [1L7C2]	10%	
collaborate effectively within teams, demonstrating the ability to work together to achieve project objectives and share responsibilities. [1SO5, 1SO7] [1L7C1, 1L7C3, 1L7C4]	20%	

Relationship to Program Student Outcomes (Out of 100%)						
SO1	SO2	SO3	SO4	SO5	SO6	SO7
10	10	20	10	10	30	10

Relationship to NQF Outcomes (Out of 100%)							
L7K1	L7S1	L7S2	L7S3	L7C1	L7C2	L7C3	L7C4
10	5	5	30	6.67	10	26.67	6.67

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