

Doküman No	MF.FR.003
Revizyon Tarihi	13.11.2024
Revizyon No	01
Sayfa No	1/6

	WAP 327 - Workplace Application III					
Course Code Course Name Semester						
WAP 327	Work	Workplace Application III		Fall ⊠ Spring	Fall ⊠ Spring □ Summer □	
Hours		Credit	ECTS			
Theory		Practice	Lab	2	2	
0		6	0	3	3	

Course Details		
Department	Aerospace Engineering	
Course Language	English	
Course Level	Undergraduate ☑ Graduate □	
Mode of Delivery	Face to Face ☐ Online ☐ Hybrid ☐	
Course Type	Compulsory ⊠ Elective □	
Lecturer (s)	Departmental Academic Advisor & Workplace Mentor	
Course Objectives	The primary objective of this course is to enable students to apply the advanced theoretical knowledge and practical skills acquired during the first three years of their engineering education to complex projects in a professional workplace. The aims are to support students' specialization in a specific engineering field and to develop their project management, leadership, and independent problem-solving abilities. It provides opportunities for students to work with increased autonomy, take on significant roles within a team, and prepare for post-graduation professional life and the capstone project by solidifying their career goals.	
Course Content	This course requires students to spend one full day per week at a partner company. The course content includes advanced occupational health and safety protocols and risk assessment; taking on a significant role in a specific project team; applying advanced engineering principles to complex tasks or a defined sub-project under the guidance of a workplace mentor; documenting progress through weekly activity reports; and preparing a comprehensive final report and presentation summarizing their technical contributions, project outcomes, and professional development.	
Course Method/ Techniques	Lecture □ Question & Answer □ Presentation □ Discussion □	
Prerequisites/	Must be a 3rd-year student and have successfully completed WAP 228	
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Corequisites	(Workplace Application II).
Work Placement(s) The placement continues for 16 weeks throughout the semester, requiring full day (8 hours) per week.	
Textbook/References/Mat	erials
Workplace Educatio	n Guideline

Course Category			
Mathematics and Basic Sciences		Education	
Engineering	\boxtimes	Science	
Engineering Design		Health	
Social Sciences		Profession	\boxtimes

eekly Schedule		
No	Topics	Materials/Notes
1	Orientation, Review of Workplace Education, Setting project goals with mentor	Workplace Education Guideline
2	In-depth department introduction; understanding project scope and requirements	Workplace Education Guideline
3	Applying basic engineering principles; data collection and initial analysis	Weekly Report
4	Taking on simple tasks and understanding the workflow	Weekly Report
5	Taking on simple tasks and understanding the workflow	Weekly Report
6	Carrying out small-scale tasks assigned by the mentor	Weekly Report
7	Carrying out small-scale tasks assigned by the mentor	Weekly Report
8	Carrying out significant project tasks assigned by the mentor	Weekly Report
9	Carrying out significant project tasks assigned by the mentor	Weekly Report



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10	Carrying out significant project tasks assigned by the mentor	Weekly Report
11	Taking on more comprehensive tasks	Weekly Report
12	Taking on more comprehensive tasks	Weekly Report
13	Taking on more comprehensive tasks	Weekly Report
14	Documenting work according to technical standards	Weekly Report
15	Compiling all work and observations from the semester	Final Report Draft
16	Submission of the Final Report	Workplace Evaluation Form

Assessment Methods and Criteria		
In-term studies	Quantity	Percentage
Attendance	16	30
Lab	-	-
Practice	-	-
Fieldwork	-	-
Course-specific internship	-	-
Quiz/Studio/Criticize	-	-
Homework	-	-
Presentation / Seminar	-	-
Project	-	-
Report	16	70
Seminar	-	-
Midterm Exam	-	-
Final Exam	-	-
	Total	100%
Contribution of Midterm Studies to Success Grade	1	40
Contribution of End of Semester Studies to Success Grade	1	60
	Total	100%

ECTS Allocated Based on Student Workload			
Activities	Quantity	Duration (Hrs)	Total Workload
Course Hours	-	-	-
Lab	-	-	-
Practice	-	-	-
Fieldwork	-	-	-
Course-specific Work Placement	-	-	-
Out-of-class study time	-	-	-
Quiz/Studio/Criticize	-	-	-



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Homework	-	-	-
Presentation / Seminar	-	-	-
Project	-	-	-
Report	16	4	64
Midterm Exam and Preparation for Midterm	-	-	-
Final Exam and Preparation for Final Exam	-	-	-
Total Workload	64		
Total Workload / 25	2.56		
ECTS Credit	3		

Course Lea	Course Learning Outcomes					
No	Outcome					
L1	Evaluates and operates effectively within the organizational structure, professional culture, and project management workflows of an engineering workplace.					
L2	Integrates advanced engineering principles and theories to develop solutions for complex, real-world problems and contribute meaningfully to large-scale projects.					
L3	Manages and applies advanced engineering tools, software, and project management methodologies to execute assigned tasks with high proficiency.					
L4	Demonstrates leadership, autonomy, and proactivity within a team, effectively managing responsibilities and fostering ethical and professional workplace interactions.					
L5	Produces high-quality technical documentation and reports, and critically analyzes project processes and outcomes in accordance with professional standards.					
L6	Proactively applies workplace practices that adhere to occupational health, safety regulations, and quality assurance standards.					

Contributi	Contribution of Course Learning Outcomes to Program Competencies/Outcomes														
Contributi	Contribution Level: 1: Very Slight, 2: Slight, 3: Moderate, 4: Significant, 5: Very Significant														
	P1	P2	Р3	P4	P5	Р6	P7	P8	Р9	P10	P11				Total
L1	3	4	3	3	3	4	3	3	5	4	3				39
L2	5	4	5	4	4	3	3	3	3	4	2				40
L3	3	3	4	3	5	4	4	3	4	3	3				39
L4	5	3	4	5	5	4	3	5	5	4	2				45
L5	4	4	3	4	4	3	3	4	4	5	3				41
L6	4	3	3	3	5	5	4	5	4	3	3				42
													Tot	al	246



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- i. The ability to actively integrate theoretical engineering knowledge with practical applications; to understand and apply the operational, organizational, and cultural dynamics of a professional workplace within the context of assigned projects and tasks.
- ii. The ability to identify, analyze, and actively contribute to the solution of technical problems and engineering tasks encountered in the workplace; the ability to adapt and implement problem- solving methods according to real-world business objectives and constraints.
- iii. The ability to take ownership of and execute workplace projects, processes, and tasks in accordance with defined requirements and deadlines; the ability to develop systematic and proactive approaches to assigned responsibilities.
- iv. The ability to effectively select and apply modern engineering tools, software, and technologies specific to the industry and assigned tasks; the ability to analyze and manage technical information and data within a professional context.
- v. The ability to actively participate in workplace processes, gather technical information, analyze business outcomes, and constructively interpret and apply feedback from supervisors and colleagues to improve personal and team performance.
- vi. The ability to work productively as a member of intra-departmental and cross-departmental teams and to collaborate with colleagues; the ability to manage individual tasks and project responsibilities and work independently.
- vii. The ability to communicate effectively both orally and in writing in a professional setting; proficiency in preparing technical reports and professional correspondence, making meaningful contributions to project meetings, delivering technical presentations, and understanding and applying workplace instructions.
- viii. To embrace the need for continuous professional development and lifelong learning; the ability to assess personal competencies, seek new learning opportunities, and rapidly adapt to evolving industry trends and technologies.
- ix. The ability to act in full accordance with professional ethical principles and corporate policies; demonstrating professional responsibilities and the high standards of conduct expected in the workplace.
- x. The ability to implement fundamental business practices such as project workflows, time management, and quality assurance; to reflect an understanding of the importance of customer focus, efficiency, and innovation in a competitive environment through one's work.
- xi. The ability to evaluate the impact of one's activities on health, safety, and the environment; demonstrating an awareness of corporate social responsibility and the organization's role within the broader society and marketplace.