WEX 328 – Workplace Experience I

Course Code	Course Name	Semester		
WEX 328	Workplace Experience I	Fall ☐ Spring ☒ Summer ☐		
Hours			**Credit**	**ECTS**
Theory	**Practice**	**Lab**	3	3
0	6	0		

Course Details	
Department	COMPUTER 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 objective of this course is to enable students to transition from supervised task execution to more independent project contributions within a professional engineering environment. The course aims to have students apply advanced engineering principles and analytical skills to solve real-world problems. Key objectives include developing core competencies in project management, system analysis, and process optimization; demonstrating a high level of professional autonomy and ethical responsibility; and effectively communicating technical work to diverse stakeholders. This experience serves as a critical preparation for the final year capstone project and future engineering practice.
Course Content	This course requires students to spend one full day per week at a partner company, taking on a more significant role within a project team. The content involves deeper involvement in defined project modules or medium-scale engineering tasks. Students will be responsible for analyzing existing systems, proposing and developing solutions under the guidance of a mentor, and contributing to formal project documentation. The course emphasizes the application of analytical tools, validation of results, and the preparation of a comprehensive final report and presentation that details their technical contributions, problem-solving process, and professional growth.
Course Method/ Techniques	Lecture ☐ Question & Answer ☐ Presentation ☐ Discussion ☐

Prerequisites/ Corequisites	Must be a 3rd-year student and have successfully completed WAP 327 (Workplace Application III) and all second-year courses.
Work Placement(s)	The placement continues for 16 weeks throughout the semester, requiring 1 full day (8 hours) per week.

Textbook/References/Materials

Workplace Education Guideline

Course Category				
Mathematics and Basic Sciences	☐		Education	☐
Engineering	☒		Science	☐
Engineering Design	☐		Health	☐
Social Sciences	☐		Profession	☒

Weekly Schedule

No	Topics	Materials/Notes
1	Course orientation, review of WAP 227 outcomes, and defining advanced project goals with the mentor.	Workplace Education Guideline
2	In-depth project analysis; understanding system requirements and project deliverables.	Workplace Education Guideline
3	Applying advanced engineering principles; system modeling and data analysis.	Weekly Report
4	Executing assigned project modules; contributing to design or analysis tasks.	Weekly Report
5	Implementing engineering solutions and documenting the process.	Weekly Report
6	Implementing engineering solutions and documenting the process.	Weekly Report
7	Carrying out technical tasks requiring analysis and independent problem-solving.	Weekly Report
8	Carrying out technical tasks requiring analysis and independent problem-solving.	Weekly Report
9	Carrying out technical tasks requiring analysis and independent problem-solving.	Weekly Report
10	Carrying out technical tasks requiring analysis and independent problem-solving.	Weekly Report
11	Taking on more comprehensive tasks	Weekly Report

12	Taking on more comprehensive tasks	Weekly Report
13	Testing and validating proposed solutions or project outcomes.	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	-	-	-
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 Learning Outcomes	
No	**Outcome**
L1	Analyzes and evaluates the organizational structure, professional culture, and their impact on project execution within an engineering workplace.
L2	Applies advanced engineering principles and analytical theories to contribute significantly to medium-scale engineering projects.
L3	Selects, adapts, and utilizes modern engineering tools, software, and analytical techniques to solve complex, ill-defined problems.
L4	Collaborates effectively and takes initiative within a team, manages complex responsibilities autonomously, and upholds professional ethics.
L5	Documents complex work processes and justifies outcomes through detailed technical reports, and presents findings effectively to a professional audience.
L6	Proactively applies and promotes workplace practices that adhere to occupational health and safety regulations.

Contribution of Course Learning Outcomes to Program Competencies/Outcomes

Contribution Level: 1: Very Slight, 2: Slight, 3: Moderate, 4: Significant, 5: Very Significant

	P1	**P2**	**P3**	**P4**	**P5**	**P6**	**P7**	**P8**	**P9**	**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
															Total	246

i. To integrate advanced engineering theory into practice by analyzing the operational and project management dynamics of a professional workplace.

ii. To analyze and solve complex engineering problems using industry-standard methods, analytical techniques, and creative thinking.

iii. To independently manage and execute assigned project tasks and processes, taking ownership to meet defined goals and deadlines.

iv. To proficiently apply specialized engineering tools, software, and technologies for advanced data analysis and solution development.

v. To contribute meaningfully to project outcomes by analyzing business needs and constructively applying feedback from supervisors and colleagues.

vi. To work effectively and with increased autonomy as a collaborative member of a project team, contributing to team goals and discussions.

vii. To communicate complex technical information effectively through detailed reports, professional correspondence, and formal presentations.

viii. To demonstrate a commitment to lifelong learning by proactively seeking new knowledge and adapting to evolving industry technologies.

ix. To act in full accordance with professional ethics and corporate policies, demonstrating a high standard of professional responsibility and integrity.

x. To apply fundamental business practices, including project workflows, time management, and quality assurance principles, in a project context.

xi. To evaluate the impact of engineering activities on health, safety, and the environment, reflecting a strong awareness of corporate social responsibility.