Tunisian Republic
Private Higher School of Engineers of Gafsa
Private Higher Education Institution,
State-approved under N° 05-2013

Course Title:	**Internship 1**
Course Code:	CSE660/1
Program:	Master Degree In Computer Engineering
Department:	Computer Engineering
Course coordinator:	Department Head
Institution:	Private Higher School of Engineers of Gafsa (ESIP)

A. Course identification

1. Credit hours: 5 (-----)
2. Course type   **a.** College ☐ Department ■ Others ☐   **b.** Fundamental ■ Transversal ☐ Optional ☐
3. Level/year at which this course is offered: 6/3
4. Pre-requisites for this course (if any): Scientific Backgrounds, Programming, Design Tools, writing skill

1. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Self-study	Total workload
1	**Traditional classroom**	…..		
2	**Blended**	….		
3	**E-learning**	……	55	130
4	**Distance learning**	……		
5	**Other ()**	75		

2. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	-
2	**Laboratory/Studio**	-
3	**Tutorial**	-
4	**Others** (Project management, project definition in collaboration with industrial supervisor(s), regular supervision, coding, simulation, implementation and validation)	130
	Total	130

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B. Course Objectives and Learning Outcomes

Course Description

The introductory engineering internship is designed to provide students with their first professional experience in their field of study. Over a period of 1 to 2 months, students are immersed in a professional environment where they apply their theoretical and technical knowledge to real tasks. This internship aims to familiarize students with workplace practices, strengthen their technical skills, and develop their understanding of professional dynamics, project management, and team communication.

Course Main Objectives

✓ Familiarize students with the culture and work methods within a company or organization.

✓ Give students the opportunity to apply theoretical concepts learned in class to real-world projects or tasks, using the tools and technologies relevant to their field.

✓ Help students strengthen technical skills based on assigned projects, in areas such as software development, systems maintenance, network management, or any other relevant domain.

✓ Develop essential communication, teamwork, and task management skills required for success in a professional environment.

✓ Encourage students to assess their own performance, reflect on challenges encountered and solutions applied, and document their experience professionally.

1. Course Learning Outcomes

CLOs		Aligned PLOs
	Knowledge and understanding	
1.1	✓ Allows students to gain an advanced understanding of computer engineering practices in a professional environment, applying their knowledge to solve real-world challenges.	PLO.K1
1.2	✓ Promotes the development of expertise in a specialized area, such as artificial intelligence, cybersecurity, or networks, addressing industry-specific challenges.	PLO.K3
	Skills	
2.1	✓ Encourages students to apply critical thinking and problem-solving skills to analyze real-life situations and select appropriate tools and technologies.	PLO.S1
2.4	✓ Develops skills in analyzing and evaluating the performance of hardware and software systems, with awareness of real-life technical challenges.	PLO.S5

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CLOs		Aligned PLOs
2.5	✓ Trains students to design and document software solutions and structure their reports professionally, considering project objectives and encountered constraints.	PLO.S7

C. Course Content

No	List of Topics	Contact Hours (weeks)
1	Orientation and Introduction ▪ Company Overview: Introduction to the organization's mission, values, and structure. ▪ Introduction to Tools and Technologies: Familiarization with software tools, equipment, or technologies used by the company.	1
2	Development of Technical and Soft Skills ▪ Application of Technical Skills: Participation in more technically demanding projects or tasks related to the student's specialization. ▪ Collaboration and Communication: Attending team meetings, communicating progress, and addressing encountered obstacles.	2-4
4	Internship Conclusion and Report Writing : ▪ Final Evaluation with Supervisor: Assessment of skills acquired, feedback on performance, and identification of areas for improvement. ▪ Internship Report Writing: Preparing a detailed report including a description of tasks completed, skills developed, challenges encountered, and solutions applied. ▪ Presentation and Feedback: Presenting the internship experience to the team or academic supervisor, followed by a Q&A session to assess learning outcomes.	Final Week
Total		Between 4-8 weeks

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**		
PLO.K1	✓ Allows students to gain an advanced understanding of computer engineering practices in a professional environment,	- Supervision - Workshops and Seminars	- Project Report - Oral Defense and Presentation

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Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	applying their knowledge to solve real-world challenges.	- Independent Study and Practical Work - projects	- Practical Demonstration
PLO.K3	✓ Promotes the development of expertise in a specialized area, such as artificial intelligence, cybersecurity, or networks, addressing industry-specific challenges.		
2.0	**Skills**		
PLO.S1	✓ Encourages students to apply critical thinking and problem-solving skills to analyze real-life situations and select appropriate tools and technologies.	- Supervision - Workshops and Seminars - Independent Study and Practical Work - projects	- Project Report - Oral Defense and Presentation - Practical Demonstration - Assignments
PLO.S5	✓ Develops skills in analyzing and evaluating the performance of hardware and software systems, with awareness of real-life technical challenges.		
PLO.S7	✓ Trains students to design and document software solutions and structure their reports professionally, considering project objectives and encountered constraints.		

2. Assessment Tasks for Students

	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Practical Work (written or oral)	-	00 %
2	Practical Demonstration	-	00%
3	Oral Defense and Presentation	October every year	40%
4	Project Report	September every year	60%

E. Student Academic Counselling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

1- Office hours
2- Blackboard interface

F. Learning Resources and Facilities

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1. **Learning Resources**

Required Textbooks	1. Documentation and tutorials specific to the chosen technology. 2. Research articles and academic literature relevant to the project topic. 3. Internal resources from the company (if applicable) and project management software/tools
Essential References Materials	PC Data projector
Electronic Materials	Lecture material in PPT Any Related material including the YouTube videos relating to engineering measurement Blackboard
Other Learning Materials	NA

2. **Facilities Required**

Item	Resources
Accommodation	**Classroom board** **Computer lab with the necessary software** **Internet access**
Technology Resources	**Data projector**

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment.	Students, Faculty, Program Leaders, Peer Reviewer	Direct/Indirect
Extent of achievement of course learning outcomes.	Faculty, Program Leaders, Peer Reviewer	Direct, Indirect
Quality of Learning resources	Faculty, Program Leaders, Peer Reviewer	Direct, Indirect
Teaching and learning quality and effectiveness.	Students, Faculty Program Leaders, Peer Reviewer	Direct, Indirect

H. Specification Approval Data

Council / Committee	Computer Engineering Council
Date	11/10/2023