

<b>Course Title:</b>	<b>Project Mangement</b>
<b>Course Code:</b>	CSE513
<b>Program:</b>	Master Degree In Computer Engineering
<b>Department:</b>	Computer Engineering
<b>Course coordinator:</b>	IMED MIRAOUI
<b>Institution:</b>	Private Higher School of Engineers of Gafsa (ESIP)

### A. Course Identification

<b>1. Credit hours:</b>	<b>3 (3-0-0)</b>
<b>2. Course type</b>	
a.	College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Fundamental <input checked="" type="checkbox"/> Transversal <input type="checkbox"/> Optional <input type="checkbox"/>
<b>3. Level/year at which this course is offered:</b>	3.5/3
<b>4. Pre-requisites for this course (if any):</b> Networking Fundamentals, Operating Systems: Foundational Knowledge of Computer Science	
<b>5. Co-requisites for this course (if any):</b>	

### 1. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Self-study	Total workload
1	Traditional classroom	.....	11	26
2	Blended	15		
3	E-learning	.....		
4	Distance learning	.....		
5	Other ()	.....		

### 2. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	10
2	Laboratory/Studio	00
3	Tutorial	5
4	Others (specify)	-
	<b>Total</b>	<b>15</b>

## B. Course Objectives and Learning Outcomes

### Course Description

This course, Project Management, introduces students to the core principles of project management with a focus on Agile frameworks, particularly Scrum. Students will learn to plan, execute, and monitor projects through iterative sprints, while developing essential skills in task prioritization, stakeholder management, and teamwork. The course also covers the use of tools like Jira and Trello to track project progress and evaluate performance. Practical simulations and real-world case studies ensure students can apply Scrum methodologies to software development projects effectively.

### Course Main Objective

- Understand the fundamental concepts of project management, including planning, execution, monitoring, and closure.
- Learn to identify and manage project stakeholders effectively.
- Master essential project planning tools, such as Gantt charts and prioritization matrices.
- Gain an overview of different project management methodologies (Waterfall, Agile).
- Understand the principles of Agile methods, especially Scrum.
- Learn how to plan and organize a software project using Scrum.
- Develop collaboration, communication, and leadership skills within a project team.
- Use project management tools like Jira and Trello effectively.
- Manage risks, timelines, and budgets efficiently in technical projects.

### 1. Course Learning Outcomes

CLOs		Aligned PLOs
1	<b>Knowledge and Understanding</b>	
1.1	✓ Demonstrate an understanding of the fundamental concepts of project management, including planning, execution, monitoring, and closure	PLO.K1
2.1	✓ Learn to identify and manage project stakeholders effectively	PLO.K2
2.2	✓ Gain an overview of Agile project management frameworks, particularly Scrum, and apply this knowledge to solve industry-specific challenges	PLO.K3
2	<b>Skills</b>	
2.1	✓ Communicate technical and project-related concepts effectively within teams, lead project discussions, and collaborate to achieve project goals	PLO.S2
3.1	✓ Develop strong organizational and project management skills, including task prioritization, time management, and efficient use of resources.	PLO.S3
7.1	✓ Analyze and evaluate the performance of Scrum-managed software development projects, considering challenges such as changing requirements, budget constraints, and time limitations.	PLO.S7/ PLO.S6

## C. Course Content

No	List of Topics	Contact Hours
1	<b>Chapter1:</b> Project Management Overview	3

	<ul style="list-style-type: none"> <li>Definition and Importance: Managing resources, timelines, costs, and quality to achieve project goals.</li> <li>Project Lifecycle: Initiation, planning, execution, monitoring, closure.</li> <li>Triple Constraint: Time, cost, quality.</li> <li>Stakeholders: Sponsor, project manager, team, clients</li> </ul>	
2	<b>chapter 2 : Introduction to Agile and Scrum</b> <ul style="list-style-type: none"> <li>Agility: Flexibility and quick iterations.</li> <li>Scrum: Agile framework with short work cycles (sprints).</li> <li>Scrum Roles: Product Owner, Scrum Master, Development Team.</li> <li>Scrum Events: Sprint, Daily Scrum, Sprint Review, Retrospective.</li> <li>Scrum Artifacts: Product Backlog, Sprint Backlog, Increment.</li> </ul>	3
3	<b>Chapter3: Scrum Project Lifecycle</b> <ul style="list-style-type: none"> <li>Project Initiation: Creating and prioritizing the product backlog.</li> <li>Sprints: Planning, developing, and reviewing tasks in each sprint.</li> <li>Performance Tracking: Using tools like Jira, Trello, and Burndown charts to monitor progress.</li> </ul>	3
4	<b>Chapter4: Scrum in Practice</b> <ul style="list-style-type: none"> <li>Case Study: Analyzing a real-world Scrum project.</li> <li>Project Simulation: Team-based sprint simulation, applying Scrum concepts in practice</li> </ul>	3
5	<b>Chapter4: Scrum Tools and Techniques</b> <ul style="list-style-type: none"> <li>Introduction to Jira, Trello, and other Agile project management tools.</li> <li>Task tracking, sprint management, and team collaboration.</li> <li>Automation of Agile workflows (continuous integration).</li> </ul>	3
<b>Total</b>		<b>15</b>

## D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and Understanding</b>		
PLO.K1	✓ Demonstrate an understanding of the fundamental concepts of project management, including planning, execution, monitoring, and closure	<ul style="list-style-type: none"> <li>Lectures</li> <li>Hands-On Labs</li> </ul>	<ul style="list-style-type: none"> <li>Exam, Quizzes, Homework assignments</li> </ul>

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
PLO.K2	✓ Learn to identify and manage project stakeholders effectively	<ul style="list-style-type: none"> <li>Group Discussions</li> <li>Research Projects</li> </ul>	Practical Work
PLO.K3	✓ Gain an overview of Agile project management frameworks, particularly Scrum, and apply this knowledge to solve industry-specific challenges		
<b>3.0</b>	<b>skills</b>		
PLO.S2	✓ Communicate technical and project-related concepts effectively within teams, lead project discussions, and collaborate to achieve project goals	<ul style="list-style-type: none"> <li>✓ Lectures</li> <li>✓ Hands-On Labs</li> <li>✓ Group Discussions</li> <li>Research Projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Exam, Quizzes, Homework assignments</li> <li>▪ Practical Work</li> </ul>
PLO.S3	✓ Develop strong organizational and project management skills, including task prioritization, time management, and efficient use of resources.		
PLO.S6/S7	✓ Analyze and evaluate the performance of Scrum-managed software development projects, considering challenges such as changing requirements, budget constraints, and time limitations.		

## 2. Assessment Tasks for Students

	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Practical Work (written or oral)	Weekly	00 %
2	Quizzes, Homework assignments	Random	00 %
3	First mid Term	-	00 %
4	Final Exam	6	100 %

## E. Student Academic Counselling and Support

<b>Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:</b>
1- Office hours 2- Blackboard interface

## F. Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	1. Schwaber, K., & Sutherland, J. (2020). <i>The Scrum Guide: The Definitive Guide to Scrum: The Rules of the Game</i> . Scrum.org 2. Layton, M. (2017). <i>Agile Project Management for Dummies</i> . John Wiley & Sons.
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	3. <b>Cohn, M.</b> (2010). <i>Succeeding with Agile: Software Development Using Scrum</i> . Addison-Wesley Professional.
<b>Essential References Materials</b>	PC DATA-SHOW
<b>Electronic Materials</b>	1. <b>Scrum.org</b> : <i>Official Scrum Training &amp; Certification Resources</i> 2. <b>Agile Alliance</b> : <i>Agile methodologies, case studies, and white papers</i> ( <a href="http://agilealliance.org">agilealliance.org</a> )
<b>Other Learning Materials</b>	NA

### 3. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	<b>classroom board software ...</b>
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	<b>data show;</b>

### 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

<b>Council / Committee</b>	Computer Engineering Council
<b>Date</b>	11/09/2023