

<b>Faculty:</b> Information Technology	
<b>Department:</b> Computer Science	<b>Program:</b> Bachelor
<b>Academic year:</b>	<b>Semester:</b>



## Course Plan

### First: Course Information

<b>Course No.:</b> 1501495	<b>Course Name:</b> Computer Science Project	<b>Credit Hours:</b> 3	<b>Theoretical:</b> 0	<b>Practical:</b> 0
<b>Prerequisite No. and Title:</b>		<b>Section Number:</b>	<b>Lecture Time:</b>	
<b>Type Of Course:</b>	<input type="checkbox"/> <i>Obligatory University Requirement</i> <input type="checkbox"/> <i>Elective University Requirement</i> <input type="checkbox"/> <i>Obligatory Faculty Requirement</i> <input type="checkbox"/> <i>Elective Faculty Requirement</i> <input checked="" type="checkbox"/> <i>Obligatory Specialization Requirement</i> <input type="checkbox"/> <i>Elective Specialization Requirement</i> <input type="checkbox"/> <i>Ancillary course</i>			
<b>Type of Learning:</b>	<input checked="" type="checkbox"/> <i>Face-to-Face Learning</i> <input type="checkbox"/> <i>Blended Learning (2 Face-to-Face + 1Asynchronous)</i> <input type="checkbox"/> <i>Online Learning (2 Synchronous+1 Asynchronous)</i>			

### Second: Instructor's Information

<b>Course Coordinator:</b>					
<b>Name:</b>		<b>Academic Rank:</b>			
<b>Email:</b>		<b>Extension Number:</b>	<b>Email:</b>		
<b>Course Instructor:</b>					
<b>Name:</b>			<b>Academic Rank:</b>		
<b>Office Number:</b>	<b>Ext. Number:</b>		<b>E-mail:</b>		
<b>Office Hours:</b>	<b>Sunday</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>

### Third: Course Description

The Computer Science Project Course is designed to provide students with practical experience in applying the principles, methodologies, and tools learned in previous courses to real-world projects. This course emphasizes hands-on, team-based project work to simulate the challenges and dynamics of professional computing environments.

#### Fourth: Course Objectives

- Introducing the students to create comprehensive project plans, define project scope, allocate resources, and develop realistic timelines.
- Guiding the student in writing clean, modular, and maintainable code.
- Demanding the students to create documentation that includes user manuals, technical documentation, and project reports.
- Providing Students to simulate real-world project environments. Effective communication, conflict resolution, and collaboration skills will be developed.
- Creating compelling presentations, showcasing key features, and addressing questions from a diverse audience.

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#### Fifth: Learning Outcomes

<i>Level descriptor according to (JNQF)</i>	<i>CILOs Code</i>	<i>CILOs</i> If any CLO will not be assessed in the course, mark NA.	<i>Associated PILOs Code</i> Choose one PILO for each CILO*	<i>Assessment method</i> Choose at least two methods
<b>Knowledge</b>	K1	develop comprehensive project plans, including defining project scope, objectives, timelines, and resource requirements.	PK1	Supervisor evaluation ◊ Project discussant
	K2	Illustrate the ethical considerations in software development, understanding issues related to privacy, security, and intellectual property	PK3	Supervisor evaluation ◊ Project discussant
<b>Skills</b>	S1	Acquire the skills to elicit, analyze, and document user requirements, translating them into clear and concise project specifications.	PS2	Supervisor evaluation ◊ Project discussant
	S2	Design and architect software solutions that meet specified requirements, employing appropriate design patterns and best practices.	PS3	Supervisor evaluation ◊ Project discussant
	S3	Implement software solutions using appropriate programming languages and frameworks, demonstrating	PS1	Supervisor evaluation ◊

		strong coding practices and adherence to coding standards.		Project discussant
	S4	apply various testing methodologies, including unit testing, integration testing, and system testing, to ensure the quality and reliability of their software projects.	PS3	Supervisor evaluation + Project discussant
<b>Competencies</b>	C1	Communicate effectively ideas, expectations, and feedback to team members, fostering a transparent and collaborative work environment.	PC1	Supervisor evaluation + Project discussant
	C2	Acquire effective communication skills, including the ability to present and explain their projects to both technical and non-technical audiences, showcasing their understanding of the project's goals and outcomes and the importance of decision-making responsibilities.	PC2	Supervisor evaluation + Project discussant
	C3	Adapting leadership styles to different situations and team dynamics, demonstrating flexibility and resilience in the face of challenges.	PC2	Supervisor evaluation + Project discussant
	C4	adept at collaboratively conducting in-depth research as a team, demonstrating the ability to identify relevant literature, gather and analyze data, and synthesize findings to inform and enrich the development of a comprehensive group project.	PC4	Supervisor evaluation + Project discussant

\*CILOs: Course Intended Learning Outcomes; PILOs: Program Intended Learning Outcomes; For each CILO, the PILO could be the same or different.

## Sixth: Learning Resource

<b>Main Reference:</b>	<i>IT Graduation Project Documentation guidelines</i>		
<b>Author:</b> IT_ Staff	<b>Issue No.:</b> 1 <sup>st</sup>	<b>Publication Year:</b> 2024	
<b>Additional Sources &amp; Websites:</b>	<ul style="list-style-type: none"> <li>• <i>Thesis Projects: A Guide for Students in Computer Science and Information, Mikael Berndtsson·Jörgen Hansson·B. Olsson·Björn Lundell, Springer Science &amp; Business Media, 2007.</i></li> <li>• <i>Systems Analysis and Design, 9th Edition, Gary B. Shelly, Thomas J. Cashman and Harry J. Rosenblatt, ISBN-10: 0538481617 / ISBN-13: 978-0538481618, Course Technology, 2011.</i></li> </ul>		
<b>Teaching Type:</b>	<input type="checkbox"/> Classroom <input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Workshop <input checked="" type="checkbox"/> MS Teams <input type="checkbox"/> Moodle		

## Seventh: Course Structure

Week	Course Intended Teaching Outcomes (CILOs)	Topics	Teaching Procedures *	Teaching Methods**	References***
1	K1,C1,C3	Determine graduation project.	Face-to-Face	Supervisor Meeting	Documentation guideline
2	K1,K2,S1,S2, C2,C3	Gather and document the project requirements	Face-to-Face	Supervisor Meeting	Documentation guideline
3	K1,S1,S2,C1,C3	Determine the appropriate programming language and software tools for the project	Face-to-Face	Supervisor Meeting	Documentation guideline
4	K1,K2, S1,S2, S3,C1,C4	Develop a project plan that outlines tasks, timelines, and resources. Define the project scope and deliverables.	Face-to-Face	Supervisor Meeting	Documentation guideline
5	K1,S1 C1, C2, C4	Draw a (UML) diagram to illustrate the software's architectural blueprints in a diagram.	Face-to-Face	Supervisor Meeting	Documentation guideline
6	K1,S1 C1, C2, C4	Design the User Interface.	Face-to-Face	Supervisor Meeting	Documentation guideline
7-11	K1,K2,S1,S3 C1, C2,C3,C4	Coding and implementation.	Face-to-Face	Supervisor Meeting	Documentation guideline

12	K1,K2,S1,S3 C1, C2,C3,C4	Conduct various levels of testing. Identify and fix bugs and issues.	Face-to-Face	Supervisor Meeting	Documentation guideline
13	K2,S3,C2	Explaining methodology, Outlining contributions, Compare with others Results.	Face-to-Face	Supervisor Meeting	Documentation guideline
14	C1,C2,C3	Documentation and Presentation finalization	Face-to-Face	Supervisor Meeting	Documentation guideline
<b>Final Discussion</b>					

\* Teaching procedures: (Face-to-Face, synchronous, asynchronous). \*\* Teaching methods: (Lecture, video.....).

\*\*\* Reference: (Pages of the book, recorded lecture, video....).

## Eighth: Assessment Methods

Methods	Online Learning	Blended Learning	Face-To-Face Learning	Specific Course Output to be assessed									
				**If any CILO will not be assessed in the course, mark NA.									
				K1	K2	S1	S2	S3	S4	C1	C2	C3	C4
First Exam													
Second Exam													
Mid-term Exam													
Participation													
Asynchronous Activities													
Quizzes													
Assignments													
Supervisor Assessment		50		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Exam Discussion committee		50		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Total out of 100</b>		<b>100</b>											

## **Ninth: Course Policies**

- All course policies are applied to all teaching patterns (online, blended, and face-to-face Learning) as follows:
  - a. Punctuality.
  - b. Participation and interaction.
  - c. Attendance and exams.
- Academic integrity: (cheating and plagiarism are prohibited).

<b>Approval</b>	<b>Name</b>	<b>Date</b>	<b>Signature</b>
<b>Head of Department</b>			
<b>Faculty Dean</b>			