



# Course Specification

— (Bachelor)

**Course Title:** Project

**Course Code:** CSC 1498

**Program:** Bachelor in Computer Science

**Department:** Computer Science

**College:** Faculty of Computers and Information Technology

**Institution:** Tabuk University

**Version:** 1.0

**Last Revision Date:** 27 July 2022



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## A. General information about the course:

### 1. Course Identification

**1. Credit hours: 3**

#### 2. Course type

- A.  University  College  Department  Track  Others
- B.  Required  Elective

**3. Level/year at which this course is offered: ( Level 7 / 4<sup>th</sup> year)**

#### 4. Course general Description:

This course aims to measure the level of understanding of the work taken during the bachelor's degree through the analysis of real-life computer based problem and implement a concepts related to Computer Science.

#### 5. Pre-requirements for this course (if any):

Software Engineering(CSC1301), Advanced Web Design (CIT1303), and Database Systems(CIT1305)

#### 6. Co-requisites for this course (if any):

N/A

#### 7. Course Main Objective(s):

Up on the completion of this course the student will:

1. Identify, formulate, research literature and analyze complex computing problems
2. Utilize and apply essential facts, concepts, principles, theories, and practices relating to solution of a specific complex computer science problems.
3. Demonstrate understanding of computer science and project management principles and apply these to their own work
4. Design solution to specific problem in computer science (specify the problem requirements, analyze the problem, design the solution for the problem and create the models of the analysis and design)
5. Increase practical skills to implement a specific solution.
6. Increase self-learning skills to solve technical problems.



7. Apply ethical principles and commit to professional ethics, responsibilities and norms of computer science practice.
8. Work effectively as a member of a development team and under guidance.
9. Improve the ability to write a technical report effectively and to present a specific topic to a range of audiences.

## 2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100%
2	E-learning		
3	Hybrid <ul style="list-style-type: none"> <li>• Traditional classroom</li> <li>• E-learning</li> </ul>		
4	Distance learning		

## 3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	0
3.	Field	0
4.	Tutorial	0
5.	Others (specify)	0
<b>Total</b>		<b>45</b>

## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			



Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.1	Define a specialized domain related to computer systems.	K1	<ul style="list-style-type: none"> <li>● Presentation</li> <li>● Using case study to extract requirement for a system</li> <li>● Group Discussions</li> </ul>	<ul style="list-style-type: none"> <li>● Group discussions evaluation</li> <li>● Homework (Tasks distributions)</li> </ul>
1.2	Recognize the needed tools and resources for problem solution and project development.	K2, K3		
1.3	Recognize the required methods of project management.	K1, K3		
1.4	Describe the management process for project implementation, testing and debugging.	K2, K4		
<b>2.0</b>	<b>Skills</b>			
2.1	Identify, formulate, research literature and analyze complex computer-based problems.	S1, S2	<ul style="list-style-type: none"> <li>● Presentation</li> <li>● Assign team project for the team under instructor supervision.</li> <li>● Group Discussions</li> <li>● Tutorial on the tool</li> </ul>	<ul style="list-style-type: none"> <li>● Group discussions evaluation</li> <li>● Homework (Tasks distributions))</li> </ul>
2.2	Create different plans needed for the project to utilize and manage different resources	S2, S3		
2.3	Create the analysis and design models using suitable tools for a specific computer-based problem.	S3		
2.4	Analyze and compare different methods used in system modeling and select the suitable one to use according to its impact and value.	S1, S2, S5		
2.5	Design, implement, evaluate, and document a computer-based system, process, component, or program to meet desired needs	S3		



Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
2.6	Use appropriate tools and techniques to define a project, create a project plan and monitor projects.	S4		
<b>3.0</b>	<b>Values, autonomy, and responsibility</b>			
3.1	Apply ethical principles and commit to professional ethics, responsibilities, and norms of computer science practice.	V1,V2	<ul style="list-style-type: none"> <li>• Group Discussions</li> <li>• Presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Group discussions evaluation</li> <li>• Report</li> </ul>
3.2	Understand working in groups in a business environment.	V1		
3.3	Appraise , criticize and share ideas with team members	V2		
3.4	Communicate and work effectively, ethically, and professionally in a group to accomplish specific goals.	V2		

### C. Course Content

No	List of Topics	Contact Hours
1.	<b>Project Selection</b>	3
2.	<b>Feasibility study and Planning</b>	3
3.	<b>Literature Review and Background Study</b>	3
4.	<b>Requirements collection and Specification of the problem (Part 1):</b> Requirement analysis and context diagram.	3
5.	<b>Requirements collection and Specification of the problem (Part 2):</b> Model and finalize the requirements.	3
6.	<b>Create the analysis models of the problem</b>	3
7.	<b>Create the Design models of the problem</b>	3
8.	<b>Implementation of the proposed solution and design (Part 1):</b> Database system	3
9.	<b>Implementation of the proposed solution and design (Part 2):</b> Relations between tables and integrity.	3



10.	<b>Implementation of the proposed solution and design (Part 3):</b> Implementation of GUIs of the system	3
11.	<b>Implementation of the proposed solution and design (Part 4):</b> Implement the interoperability	3
12.	<b>Testing the coding using standard methods</b>	3
13.	<b>Debugging and Finalization the implementation</b>	3
14.	<b>Documentation and presentation preparation and reviewing (Part 1):</b> Prepare report	3
15.	<b>Documentation and presentation preparation and reviewing (Part 2):</b> Prepare presentation	3
<b>Total</b>		<b>45</b>

#### D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
<b>Supervisor assessments</b>			
1	Supervisor evaluation include group and individual assessment of ( The problem scope, the proposed solution, the process , the documentation of the project) according to an evaluation form provided by the unit of projects at the college	Week(1-16)	40%
<b>Independent committee examination (Final Exams)</b>			
2	A committee evaluation include group and individual assessment of ( The problem scope, the proposed solution, the process , the documentation of the project) according to an evaluation form provided by the unit of projects at the college	Week 16	60%

\*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

#### E. Learning Resources and Facilities

##### 1. References and Learning Resources

<b>Essential References</b>	Necessary readings and documents for the study project will be recommended by the supervisors.
<b>Supportive References</b>	
<b>Electronic Materials</b>	
<b>Other Learning Materials</b>	

##### 2. Required Facilities and equipment



Items	Resources
<b>facilities</b> (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lectures room (10 Seats) equipped with a white board, smart board,
<b>Technology equipment</b> (projector, smart board, software)	Data-Shows and Whiteboard in lectures.
<b>Other equipment</b> (depending on the nature of the specialty)	TBA

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of Teaching	Faculty, Program Leaders, and Advisory Board	Both Direct and Indirect
	Students	Indirect
Effectiveness of Students Assessment	Faculty, Program Leaders, Advisory Board, and Independent Opinion	Both Direct and Indirect
Quality of Learning Resources	Faculty, Students, and Advisory Board	Indirect
The Extent to which CLOs have been Achieved	Faculty, Program Leaders, Advisory Board, and Independent Opinion	Direct (as in section B) and Indirect/Surveys
	Students	Indirect
Other	-	-

**Assessors** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## G. Specification Approval

<b>COUNCIL /COMMITTEE</b>	
<b>REFERENCE NO.</b>	
<b>DATE</b>	

