

Course title	Code	semester	T+U	credit	ECTS
Object Oriented Programming 1		3	3+2	4	6
Prerequisite Courses	None				
Language of the Course	English				
Course Level	Undergraduate				
Type of Course	Compulsory				
Course Coordinator					
Instructors					
Course Assistants					
The aim of lesson	This course teaches how to abstract class objects with their properties and behaviors. By understanding how to program real-world objects, students apply the concepts of wrapping, inheritance, and polymorphism, the three important components of object-oriented programming, using UML and C++.				
Course Content	Introduction of data types, expressions and commands, function and scope rules, class definition, inheritance, polymorphism, name loading, templates, exception handling, input/output, object-oriented concepts using UML and C++ language.				
Course Learning Outcomes	<p>Students who successfully complete this course;</p> <ol style="list-style-type: none"> 1. Explaining a programming method that models the real world using UML 2. Applying the concepts of wrapping, inheritance, and polymorphism 3. Using function and operator loading 4. Using exception handling 5. Implementing function and class templates 				
Weeks	Topics				
one	Introduction to Object Oriented programming				
2	Object Oriented Approach and UML				
3	Switching from C to C++				
4	Classes and data abstraction				
5	Classes and data abstraction				
6	Operator installation				
7	Heritage				
8	Heritage				
9	Virtual functions and polymorphism				
10	Virtual functions and polymorphism				
11th	Input/Output				
12	Templates				
13	Exception handling				
14	File processing				
15	review				
General Competencies					
Able to develop projects by using object-oriented methodology in programming					
resources					
W. Savitch , “Problem Solving with C++”, Addison-Wesley Publishing, 6th Edition.					
Evaluation System					
The dates, days and hours of the Midterm Exam, Quiz, Final Exam and Evaluations will be announced later, according to the decision of the Faculty Administrative Board.					

WITH PROGRAM LEARNING OUTCOMES COURSE LEARNING OUTCOMES RELATIONSHIP TABLE											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
LO1	5	5	5	5	4	4	4	5	5	4	4
INCR EASE 2	5	4	4	4	4	3	3	3	5	4	5
INCR EASE 3	5	5	5	4	5	3	3	3	3	3	3
INCR EASE 4	5	4	4	3	5	4	3	3	3	3	3
LO5	5	4	4	4	5	3	3	3	3	3	3
LO: Learning Outcomes OP: Program Outcomes											
Contri bution Level	1 Very Low		2 Low		3 Medium		4 High		5 Very High		

Relation of Program Outcomes and Related Course

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
Object Oriented Programming 1	5	4	4	4	5	3	4	4	3	4	3