Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF112-B	Introduction to Programming	1	2	0	2	3	4

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	This course aims to provide students with general programming and algorithmic thinking skills through the fundamental concepts of the C programming language. In this context, the main topics covered include an introduction to programming with C, structured program development, control structures, functions, input/output operations, arrays, file handling, and pointers. Students have the opportunity to apply the knowledge they acquire in the course through programming exercises conducted in the laboratory as well as through assignments.
Content	Week 1 – Basic concepts and introduction to C programming Week 2 – Variable types, initialization, and type conversions Week 3 – Loops and control structures Week 4 – Functions Week 5 – Scope of variables and function return types Week 6 – One-dimensional and multi-dimensional arrays Week 7 – Pointers Week 8 – Midterm exam Week 9 – Character arrays and string operations Week 10 – Structures Week 11 – Dynamic memory management Week 12 – Formatted file reading and writing Week 13 – Character-based file reading and writing Week 14 – Program execution, debugging, and command-line arguments
References	1. Notes: http://kikencere.gsu.edu.tr/course/view.php?id=17 2. H. M. Deitel & P . J. Deitel, "C: How to Program" 3. Ben Klemens, “21st Century C”, O’Reilly Media

Theory Topics

Week	Weekly Contents
1	Basic concepts and introduction to C programming
2	Variable types, initialization, type conversions
3	Loops and control structures
4	Functions
5	Scope of variables, function return types
6	One-dimensional and multi-dimensional arrays
7	Pointers
8	Midterm exam
9	Character arrays and string operations
10	Structures
11	Dynamic memory management
12	Formatted file reading and writing
13	Character-based file reading and writing

Week	Weekly Contents
14	Program execution, debugging, and command-line arguments