

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 | <p>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.</p> <p>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.</p> |
| Content | <p>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</p> |
| References | <ol style="list-style-type: none">Notes: http://kikencere.gsu.edu.tr/course/view.php?id=17H. M. Deitel & P. J. Deitel, "C: How to Program"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 |

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