



**AMERICAN UNIVERSITY  
OF CYPRUS**

<b>Course Code</b> CSC102	<b>Course Name</b> Programming Principles 1	<b>ECTS Credit</b> 7.5
<b>Pre-Requisite</b>	<b>Course Type</b> Compulsory	<b>Language of Instruction</b> English
<b>Year of Study</b> 1 <sup>st</sup> / 1 <sup>st</sup>	<b>Level of Course</b> BSc/1st Cycle	<b>Mode of Delivery</b> On Campus

**Course Objectives:**

The aim of the course is to introduce the basic ideas of problem solving and programming, using the principles of top-down design, step-by-step improvement and pumping using methods. Students acquire practical programming language experience by constructing and executing integrated programs that solve simple algorithmic problems. Basic types of data, in/out contracts and control structures are presented

**Learning Outcomes:**

Upon successful completion of the course, students will be able to:

- Design, compile, and execute a simple program
- Define primitive data types, key statements, and write programs that include selection structures and repeat structures
- Define, apply and use methods/functions
- Declare and manipulate tables as well as design drawings using tables
- Identify and use indicators
- They find solutions to key programming problems

**Teaching Methodology:**

Lectures 42 hours, Labs 30 hours

**Course Content**

- Introduction to programming languages.
- Control structures (selection structures and repeating structures).
- Methods / Functions
- Introduction to the tables
- Indicators
- Characters & Fonts
- Problem solving

**Assessment Methods:**

Final Exam, Mid-Term/Lab Exam, Assignment

**Required Textbooks/Reading:**

<b>Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Year</b>
C How to program	Deitel P., Deitel H.	Pearson International	2016
C++ HOW TO PROGRAM	Deitel & Deitel	Pearson	2016