Course Name : Introduction to Algorithms and Programming							
Course Code	**Course Type**	**Regular Semester**	**Lecture (hours/week)**	**Seminar (hours/week)**	**Lab. (hours/week)**	**Credits**	**ECTS**
CMP 111	A	Fall	3.00	1.00	0.00	3.50	5.00

Lecturer	Edlir Spaho, MSc
Assistant	
Course language	Albanian
Course level	Bachelor
Description	
Objectives	
Core Concepts	

Course Outline

Week	Topic
1	Introduction to Computers and C++
2	Introduction to C++ Programming, Flowcharts, Algorithms and Pseudo codes
3	Variables Declaration, Data Types, Operators and Expressions
4	Formatting of Data in C++
5	Conditional Structures
6	Repetitive Structures (Loops)
7	Vectors and Matrices
8	Midterm Exam
9	Operations with Vectors and Matrices
10	Functions
11	Functions and Recursion
12	Functions with Vectors and Matrices
13	Enumerations
14	Files in C++
15	Review and Projects Presentation
16	Final Exam

Prerequisites	The student must attend the course at a minimum rate of 75%.
Literature	• Agni Dika - Bazat e programimit ne C++, 2005 • Deitel H. and Deitel P., “C How to Program”, 5th Edition, Prentice Hall, 2007
References	

Course Outcome

1	Students will be able to understand principles of structuring Flowcharts and Algorithms.
2	Students will be able to program in C++ by using conditional structures, loops, functions, vectors, matrices and files.
3	Students will be able to use different programming techniques to build modular programming with high efficiency.
4	Students will be equipped with necessary terminology and techniques to pursue other subsequent subjects such as Object Oriented Programming as well as other programming languages.
5	Students will be able to understand and use the key elements of C++ Programming Language

Course Evaluation

In-term Studies	Quantity	Percentage
Midterms	1	20
Quizzes	0	0
Projects	1	20
Term Projects	0	0
Laboratory	2	10
Class Participation	1	10
Total in-term evaluation percent		**60**
Final exam percent		**40**
Total		**100**

ECTS Workload (Based on Student Workload)

Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	3	42
Duties	3	5	15
Midterms	1	5	5
Final Exam	1	10	10
Other	0	1	0
Total Work Load			**136**
Total Work Load / 25 (hours)			**5.44**
ECTS			**5.00**