VYTAUTAS
MAGNUS
UNIVERSITY
M C M X X I I

TITLE OF THE COURSE:	FUNDAMENTALS OF PROGRAMMING
Course code:	INFN1003
Course group:	C
Faculty:	Faculty of Infortimatics
Study program:	Informatics Systems
Level:	Bachelor
Semester:	Autumn
ECTS credits:	6
Language of instruction	English
Course lecturer/s:	Vida Statkevičienė
Short course description:	The course will cover basic terminology of structural programming, input/output control, decision control, repetition, subroutines, analyses of the data in one and two-dimensional arrays, elementary strings and file processing. After finishing the course students will be able to develop algorithms and write computer instructions to solve problems, will learn programming in C++ language. Teaching methods are: lectures and laboratory works.
Course content:	- Introduction. Microsoft Visual Studio; • Basics of C++ language. Variables. Data types. Mathematical operations; • Basic Input/Output; • Loops; • Arrays; • Analysis and calculations with elements of two-dimensional array; • Functions; • Working with text files; • Structures; • Explaining the constructions of an algorithms for calculations (sum, average, number of positives, etc.), finding the minimum or the maximum, the sum of elements by criteria; - Explaining the constructions of an algorithms for searching, sorting, interchanging

Grading and evaluating student work in class and/or at the final exam:	17 % - midterm 33 % - practical works 50 % - exam
Required reading and additional study material	*VMU Moodle course material;* Starting Out with C++, From Control Structures through Objects, Brief, 8ed, Tony Gaddis, Addison Wesley, 2016. *Free resources on Internet:* *http://www.cplusplus.com* *http://learncpp.com*
Additional information (if applicable)	-