

Module name: **Introduction to Programming in C**
Module ID: **IS-FEE-10061S**
Module type: **Specialization workshop**
Semester: **summer 2023/2024**

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office hours (consultations):

Tuesday, 10:30-12:00, WE-204
Thursday, 12:00-13:30, WE-204

Module content:

Week	Date	Topic
1.	29.02.2024	IDE for creating, analyzing and running C programs. The general structure of the program in C. Comments.
2.	07.03.2024	Input/output operations in language C. Variables, declarations, types and names of variables. Numerical constants. Operators and arithmetic expressions. Precedence of operators. Mathematical functions.
3.	14.03.2024	Relational (comparison) and logic operators. Logical expressions. Conditional if statement. Conditional operator?. Switch instruction.
4.	21.03.2024	Loops: for, while and do..while. Break, goto and continue statements.
5.	28.03.2024	One-dimensional arrays: declaration, initialization of array elements, operations.
6.	04.04.2024	Two- and multi-dimensional arrays, operations on arrays.
7.	11.04.2024	Strings of characters. Header file string.h.
8.	18.04.2024	Practical test no 1.
9.	25.04.2024	Structures.
10.	09.05.2024	Pointers. Dynamic memory allocation.
11.	16.05.2024	Functions, general structure of the function. Recursive function call.
12.	23.05.2024	Text files.
13.	06.06.2024	Binary files.
14.	13.06.2024	Practical test no 2.
15.	20.06.2024	(will be used as needed)

Literature:

1. Prata S., C Primer Plus (6th Edition) (Developer's Library). Addison-Wesley Professional, 2013.
2. Kernighan B.W., Ritchie D.M., The C Programming Language. 2nd Edition, Prentice Hall, 1988.
3. Online resources
 - <https://www.youtube.com/watch?v=-CpG3oATGIs> - C Programming Tutorial, Learn C Programming
 - <https://www.youtube.com/watch?v=vl794HKeXug> - C Programming, Full Course, 101 Programs explanations in detail
 - <https://www.youtube.com/watch?v=KJgsSFOSQv0> - C Programming Tutorial for Beginners

Method of assessing:

- Practical test no 1:
 - writing a computer program
 - 40% of the final grade
- Practical test no 2:
 - writing a computer program
 - 40% of the final grade
- Programs (workshops/homework)
 - programs written in class or at home
 - 20% of the final grade
- The final grade:

Result %	ECTS grade	Local grade	Definition
91 - 100	A	5	EXCELLENT - outstanding performance with only minor errors
81 - 90	B	4,5	VERY GOOD - above the average standard but with some errors
71 - 80	C	4	GOOD - generally sound work with a number of notable errors
61 - 70	D	3,5	SATISFACTORY - fair but significant shortcomings
51 - 60	E	3	SUFFICIENT - performance meets the minimum criteria
0 - 50	F	2	FAIL - some more work required before the credit can be awarded

29.02.2024

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