

Level: bachelor				
Course title: Introduction to programming (I011)				
Status: obligatory				
ECTS: 9				
Requirements: none				
Learning objectives Enabling students to understand the concepts of (computer) programming, problem analysis and their implementation in a concrete procedural language.				
Learning outcomes <i>Minimal:</i> At the end of the course, successful students are expected to demonstrate understanding of the concepts of (computer) programming, ability to understand problems and the implementation of solutions in a concrete procedural language, with the use of available libraries. <i>Desirable:</i> At the end of the course, successful students are expected to demonstrate deep understanding of the concepts of (computer) programming, ability to understand and analyze problems and implement solutions using the procedural programming style.				
Syllabus <i>Theoretical instruction</i> First programming language. Structure and parts of a programme. Simple data types, enumeration type, interval type. Assignment, expressions. Control and iteration statements. Structured data types, arrays, records, sets. Procedures, functions, global modules. Procedural data type. Input and output. Introduction to algorithms. Iterative and recursive approaches. Sums and products. Introduction to abstract data types. Example implementation of an abstract data type. Implementation using arrays. <i>Practical instruction</i> Practising the understanding of basic principles of the procedural programming style. Practising control and iteration statements, as well as simple, structured, and abstract data types. Practical implementation of algorithms using an appropriate editor and compiler.				
Weekly teaching load				Other:
Lectures: 2	Exercises: 3	Other forms of teaching: 0	Student research: 0	0