Course Unit Descriptor

Study Programme: Mechatronics			
Course Unit Title: Fundamentals in Programming			
Course Unit Code: H109			
Name of Lecturer(s): Stevan Stankovski, Ivana Šenk			
Type and Level of Studies: Bachelor level			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): summer			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 6			
Prerequisites: None			
Course Aims: The goal of the course is acquisition of knowledge and skills in contemporary techniques of programming and algorithmic problem description.			
Learning Outcomes: The outcome of the subject is understanding programming techniques and algorithmic problem description.			
Syllabus: Information, data, processing and presentation of data, algorithm. The concept of the program system and the areas of computer applications. Algorithmic procedure of data processing in solving engineering problems. Operating systems and techniques used. Introduction to computer networks and the techniques of using computer networks. Internet services and techniques for their use. Programming techniques through one, visually oriented third generation language.			
Required Reading: Relevant literature in English, tbd			
Weekly Contact Hours: 6	**Lectures: 3**	**Practical work: 3**	
Teaching Methods: Teaching is conducted through lectures and exercises. During the exercises the student is required to do practice-oriented tasks. Knowledge testing is carried out through two tests and the final exam, while before that student has to do all the exercises provided. The final exam is in written form.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points
Group assignment		Examination Assignment	
Exercises			
Test			
Test			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			