

Course title:	Programming languages I (C programming language)
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Course code	Course status	Semester	Number of ECTS credits	Lecture hours
132003119	Mandatory	III	6	3+0+2

Study program: Basic applied studies, ELECTRICAL ENGINEERING, study program: Computer engineering (studies last for 6 semesters, 180 ECTS credits).	
Prerequisites: No prerequisites required.	
Course aims: To introduce students to basics of programming and algorithm theory, memory representation of elementary type of variables, C programming language syntax, input/output, function libraries, interaction between program and operating system, computer graphics, work with hardware.	
Teacher(s) and assistant(s): Ph.D. Milutin Ostojić - teacher Ph.D. Gojko Joksimović - assistant Mr Boris Marković - assistant	
Teaching method: Lectures, exercises, studying and doing home exercises. Consultations.	
Course synopsis:	
Preliminary weeks I week II week III week IV week V week VI week VII week VIII week IX week X week XI week XII week XIII week XIV week XV week XVI week Final week XVIII-XXI week	Preparation and semester enrolment. Introduction. Basic algorithms. Memory representation of data. C programming language syntax. Variables and operators. Communication with program (techniques and input/output (I/O) statements). Control flow statements. Functions. First test Free week Pointers and arrays. Strings. Structures. Files. Advanced I/O. Second test Dynamical memory allocation. Hardware and communication with operating system. Computer graphics – 2D and 3D graphics. Final exam Administrative procedures. Additional lessons, correction of the final exam and administrative procedures.
STUDENT WORKLOAD	
<p style="text-align: center;"><u>per week</u></p> Working hours: 6 credits x 40/30 = 8 hours. Working hours structure: 3 hours for teaching 2 hours for exercises 3 hours for individual work, including consultations.	<p style="text-align: center;"><u>per semester</u></p> Teaching and the final exam: (8 hours) x 16 = 128 hours. Necessary preparation (before semester): 2 x (8 hours) = 16 hours. Total work hours for the course: 6 x 30 hours = 180 hours Additional hours for preparing correction of the final exam, including the exam taking: up to 36 hours. Work hours structure: 128 hours (lectures) + 16 hours (preparation) + 36 hours (additional work)
Lessons attendance is mandatory for students, as well as doing exercises, home exercises and both tests.	
Literature: M. Ostojić, B. Marković, B. Biberdžić: "Programski jezik C" – handouts.	
The forms of knowledge testing and grading:	
<ul style="list-style-type: none"> - Home exercises carry 5x1 points. - Each test carries 22.5 points (45 points total). - Final exam carries 50 points. Student gets the passing grade by collecting 51 points at least (subject to correction).	
Special remarks for the course: The lessons and exercises are organized in two student groups.	

Teacher(s) who provided the information: Ph.D. Milutin Ostojić

Remark: Additional information at <http://www.bm.users.cg.yu/>