Study programmes: Bachelor studies - Informatics	
Course name: R241 - Compiler construction	
Lecturers: Filip Marić and other teachers of the Departments of Computer science	
Status: Elective	
ECTS: 6	
Attendance prerequisites: P100, P101, P102, R120, R220, R240	
Course aims: Gaining general and specific knowledge on implementation aspects of compiler construction.	
Course outcome: After the course the student has mastered the basic methods related to construction of compilers for programming languages and the methods for implementing some specific tasks during compilation.	
Course content: Implementation of algorithms over finite automata and transducers (Thompson's construction, determinisation, minimalization, input subsystem of lexical analyzer, transition tables). Implementation of bottom-up syntaxic analyzer. Construction of LALR(1) tables and parsers. Symbol tables. Calculation of attributes. Intermediate code generation. Memory allocation.	
Literature: 1. Д. Витас: Преводиоци и интерпретатори, Математички факултет, Београд, 2006. 2. A. Aho; R. Sethi; J. Ullman: Compilers - Principles Techniques and Tools, Addison-Wesley, 2006. 3. J. R. Levine et al: lex and yacc, O'Reilly Associates, 1992. (наставник може изабрати другу одговарајућу актуелну литературу)	

Number of hours: 5	Lectures: 2	Tutorials: 3	Laboratory: –	Research: –

Teaching and learning methods: Frontal, group, and practical.

Assessment (maximal 100 points)			
Course assignments	**points**	**Final exam**	**points**
Lectures	10	Written exam	-
Exercises / Tutorials	-	Oral exam	-
Colloquia	20	Written-oral exam	50
Essay / Project	20		