Study programmes: Master studies - Informatics	
Course name: R341 - Design of programming languages	
Lecturers: Milena Vujošević Janičić and other lecturers of the Department for Computer Science	
Status: Optional	
ECTS: 8	
Attendance prerequisites: No prerequisites	
Course aims: Acquiring knowledge about basic concepts of programming languages (variables, data, functions ...) and of different realizations of these concepts in various programming languages, including programming language Java.	
Course outcome: After the course, students have adopted most important programming language concepts and are able to use them successfully. Also, they understand how these concepts are implemented in different programming languages and are able to use them in different contexts.	
Course content: Definitions and characteristics of programming languages. Programming language Java and its characteristics. Interfaces. Concurrent programming. Threads in Java. Distributed programming. Component programming. Functional programming languages. Languages for modeling.	
Literature: 1. D. A. Watt: Programming language design concepts, John Wiley and sons, 2004. 2.R.Sebesta: Concepts of programming languages, Addison Wesley, (10. ed.), 2012. (the lecturer can choose another appropriate literature)	

Number of hours: **7**	Lectures: **2**	Tutorials: **3**	Laboratory: **-**	Research: **2**

Teaching and learning methods: Frontal/Group work/Practical work.			
Assessment (maximal 100 points)			

Course assignments	points	Final exam	points
Lectures	-	Written exam	-
Exercises / Tutorials	-	Oral exam	-
Colloquia	25	Written-oral exam	50
Essay / Project	25		