

Basic Information

Course name	SOFTWARE ENGINEERING							
Syllabus code	51383707							
Specialization	Electronică, Telecomunicații și Tehnologia Informației							
Credit	5							
Teacher	Vaida Mircea-Florin							
Faculty	Electronics, Telecommunication and Information Technology							
Department	Communication							
Teaching	Semester I			Semester II				
	Lecture	Applications		Lecture	Applications			
	Hours/week			Hours/week				
		S	L	P		S	L	P
	2		2					
Assessment	67% Final examination, 33% (Lab. tests, Practical work).							
Prerequisites	Basic Programming, and Algorithms, OOP in C++ and Java from first year							
References	Java References from literature and web							
Course web site	http://mercur.utcluj.ro							

Description

Aims	To use Java medium for distributed applications	
Learning Outcomes	Knowledge/understanding	To learn about: -distributed applications technologies -Java programming for graphics, I/O and distributed applications -Java Media programming
	Theoretical Skills	-Basic concepts about distributed applications -Basic elements about Java graphics, I/O, networking, multithreading and RMI programming - Java Media using JAI and JMF
	Practical Skills	-Abilities to develop Java graphics, I/O, networking, multithreading and RMI programming -Abilities to use JDK facilities and an IDE (Eclipse, NetBeans, etc.) -Abilities to develop mini-projects in Java including documentation

Introduction in parallelism and distribution. Network technology to develop distributed applications. Distributed operating systems. UML programming diagrams. Events in Java. GUI programming in Java. Input/output elements in Java. Network communication considering the client-server model. Socket (stream, datagram), URL programming. Multithreading in Java. Remote method invocation, RMI in Java. Java Media technologies. Java Advanced Imaging (JAI) model and Java Media Framework (JMF) programming.