

Discipline	DISTRIBUTED PROGRAMMING	code: 46a	summer semester
Specialty	Computer Systems and Technologies		
ECTS credits: 6	Form of assessment: exam		
Lecturer	Assoc. Prof. Hristo Valchanov, PhD Room 207 – 4 E Phone: +359 52 383 278; 439 E-mail: hristo@tu-varna.bg		
Department	Computer Science and Engineering		
Faculty	Faculty of Computing and Automation		
Learning objectives:			
<p>The course aims to develop students' knowledge of distributed application development. The main concepts and problems in the development of distributed programming systems are discussed. The course presents basic approaches and up-to-date technologies for building distributed applications, as well as specific programming tools for their implementation. The contents covers topics in middleware, server technologies, remote access communication protocols. Special attention is paid to object-oriented distributed technologies.</p>			
CONTENTS:			
Training Area		Hours lectures	Hours seminar exercises
Development of distributed applications and systems		4	4
Development of multi-threaded applications		4	4
Client-server technology. Server architecture.		5	5
Remote communication mechanisms. Sockets. Conversion and use to implement network services.		5	5
Remote Procedure Call (RPC)		4	4
Remote Methods Invocation. Java RMI. .Net Remoting.		4	4
Messaging systems. MPI.		4	4
TOTAL:		60 h	30
		30	30