

Study Programme: Computing and Control Engineering (module: Computer Engineering and Computer Communications)			
Course Unit Title: Foundations of Computer Networks			
Course Unit Code: E23BN			
Name of Lecturer(s): Ilija Bašičević			
Type and Level of Studies: Undergraduate			
Course Status (compulsory/elective): Compulsory			
Semester (winter/ summer): winter			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 4			
Prerequisites: Programming in C language			
Course Aims: Students gain fundamental knowledge about computer networks and are able to design and realize simple communication programs.			
Learning Outcomes: Knowledge about basic notions, standards and technologies in the field of computer networks, and the ability design and realize simple communication programs.			
Syllabus: Basic notions and definitions (structure of computer network, types of networks, network topologies, the Internet). Open system architecture (application layer, presentation layer, session layer, transport layer, network layer, data link layer, physical layer). Local area networks. Media access control protocols. Routing in computer networks. Flow control and congestion control. Internet Protocol. TCP protocol. Domain name system.			
Required Reading: 1. A. Tanenbaum, D. Wetherall, Computer Networks			
Weekly Contact Hours:	Lectures: 2	Practical work: 2	
Teaching Methods: Lectures: Tutorials. Computer practice. Consultations.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	Points
Exercises	30	Exam	40
Project	30		

