



COURSE TITLE:	Computer Networks
Institute/Division:	Department of Automation and Computer Engineering Faculty of Electrical and Computer Engineering
Course code:	E-CN
Erasmus subject code:	0612 Database and network design and administration
Number of contact hours	45
Course duration:	1 semester (Fall)
ECTS credits:	6
Course description:	<p>Introduction to network protocols by configuration of hardware in practice:</p> <ul style="list-style-type: none">• Introduction to communication networks – requirements and basic concepts;• Computer networks architectures, OSI and TCP/IP models;• Ethernet based protocols;• IP protocols – IPv4 and IPv6;• Routing in computer networks, concept of static programming;• Dynamic routing protocols – distance vector and link state methods;• VLAN, routing on-the-stick;• Transport layer protocols – UDP and TCP;• Network management protocols like DNS, DHCP, ARP, ICMP;• Electronic mail, wide web. Selected aspects of network security. <p>Laboratory exercises utilizing CISCO hardware available in campus. Individual project aimed to supply additional practical knowledge in the area of computer networks protocols and fundamental network administration.</p>
Course type:	Lectures (20h), Laboratory (20h), Project (5h)
Literature:	Selected reviews from scientific literature
Assessment method:	Project, laboratory exercises and exam.
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