

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 (Spring/Summer)
ECTS credits:	6
Course description:	<p>Introduction to network protocols through practical hardware configuration:</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;• Network layer protocols using IPv4 as an example;• Applications of static and dynamic routing protocols;• VLAN, routing on-the-stick;• TCP and UDP as examples of transport layer protocols;• Network management protocols like DNS, DHCP, ARP, ICMP;• Selected application layer protocols like HTTP, email, telnet. <p>Laboratory exercises using CISCO equipment available on campus. Individual project is aimed to supply 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
Prerequisites:	-
Contact Persons:	Paweł Król, PhD Eng., pawel.krol@pk.edu.pl Kazimierz Kielkowicz, MSc Eng., kazimierz.kielkowicz@pk.edu.pl