



<b>The Faculty of:</b>	Faculty of Electrical and Computer Engineering
<b>Field of study:</b>	Electrical Engineering
<b>Speciality:</b>	
<b>Study degree (BSc, MSc):</b>	First circle full time studies

### COURSE UNIT DESCRIPTION

<b>Course title:</b>	Computer networks - basis
<b>Lecturer responsible for course: dr. Kazimierz Lal</b>	
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<b>Department : Department of Electrical Engineering and Informatics</b>	

Semester	Weekly load	Type of classes				Number of ECTS credits
		L Lectures	C Theoretical Classes	Lb Laboratory	P Project	
7	3	30		15		4

Course description
<p><b>Lecture:</b>            TCP/IP protocol - version 4: IP v.4 datagram structure, IP addresses and ARP protocol, UDP and TCP segment structure, application layers protocol.</p> <p>Static and dynamic routing.</p> <p>TCP/IP protocol - version 6: IP v.6 datagram structure, datagram segmentation, addressing system, transmission stream reservation mechanism, quality of service.</p> <p>Selected network operating systems - installation and configuration.</p> <p>Directory service in computer networks.</p> <p>Security in computer networks.</p> <p>Planning, implementation and using computer network.</p>
<p><b>Classes:</b></p>
<p><b>Laboratory:</b>            Configuration and tests of selected Ethernet switches.</p>

<p>Introduction to routing problems.</p> <p>IP addresses and ARP protocol.</p> <p>Static routing.</p> <p>Dynamic routing.</p> <p>e-Directory installation and configuration.</p> <p>Credit - test.</p>
<p><b>Project:</b></p>

<p><b>Objectives of the course</b></p>
<p>Student should obtain theoretical knowledge and practical understanding of subject and skill of maintaining computer networks.</p>
<p><b>Examination method</b></p>
<p>Final examination, oral or written test on each laboratory, credit test from laboratory.</p>

<p><b>Bibliography</b></p>
<p>Sportack M.: Sieci komputerowe Księga eksperta, Wydanie II – poprawione, HELION 2004; Hunt C.: TCP/IP - Administracja sieci, RM, 2003; Scrimger R., LaSalle P., Leitzke C., Parihar M., Gupta M.: TCP/IP. Biblia, Helion, 2002; Akademia CISCO. Pierwszy i drugi rok nauki. Mikom, 2004; 3Com. Dokumentacje techniczne przełączników i ruterów; Rak T.: Tworzenie sieci komputerowej. Ćwiczenia praktyczne, HELION, 2006.</p>

<p><b>Lecturer signature</b></p>	
<p><b>Head of Department signature</b></p>	
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