

Course code																																							
Type and description	EC elective subjects from the discipline of Information and communication technology																																						
ECTS credit	1																																						
Course name	Development trends in computer networks																																						
Course name in Polish	Kierunki rozwoju sieci komputerowych																																						
Language of instruction	English																																						
Course level	8 PRK																																						
Course coordinator	dr hab. inż. Michał Morawski																																						
Course instructors	dr hab. inż. Michał Morawski																																						
Delivery methods and course duration	<table><tr><td></td><td>Lecture</td><td>Tutorials</td><td>Laboratory</td><td>Project</td><td>Seminar</td><td>Other</td><td>Total of teaching hours during semester</td></tr><tr><td>Contact hours</td><td>0</td><td>0</td><td>0</td><td>5</td><td>0</td><td>0</td><td>5</td></tr><tr><td>E-learning</td><td>no</td><td>no</td><td>no</td><td>no</td><td>no</td><td>no</td><td>no</td></tr><tr><td>Assessment criteria (weightage)</td><td>0</td><td>0</td><td>0</td><td>100%</td><td>0</td><td>0</td><td>100%</td></tr></table>								Lecture	Tutorials	Laboratory	Project	Seminar	Other	Total of teaching hours during semester	Contact hours	0	0	0	5	0	0	5	E-learning	no	no	no	no	no	no	no	Assessment criteria (weightage)	0	0	0	100%	0	0	100%
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Course objective	Recognizing of current directions of the development of the network related to technologies to optimize data transfers, provide robustness, and cybersecurity																																						
Learning outcomes	<p>After finishing the course, the participant:</p> <p>1. The ability of an application of the most recent accomplishments concerning network technologies</p> <p>2.The ability of an implementation of the external (AI, game theory, control systems, etc.) achievements in networking and vice-versa</p> <p>3. Conducting tests of networks (algorithms governing a data transfer) both in nominal and in perturbed conditions.</p>																																						
Assessment methods	Assessment of the project - 100%																																						
Prerequisites	Fundamental knowledge concerning IP networks, and protocols governing transmission																																						
Course content with delivery methods	<p>1. Selection of recent achievements found in IEEE Communication Surveys & Tutorials.</p> <p>2. An application of the part of the selected issue.</p> <p>3. Critical evaluation of the obtained results – presentation.</p>																																						
Basic reference materials	<p>RFC repository</p> <p>IEEE Communications Surveys & Tutorials (IF > 20)</p>																																						
Other reference materials	Journals concerning networks, e.g., IEEE Trans. on Networking, Computer Communication, Computer Networks, etc.																																						
Average student workload outside classroom	15 h																																						

Comments	winter semester
Last update	July 2020