

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Wireless Internet Access</b>		Code <b>1010805141010812347</b>
Field of study <b>Electronics and Telecommunications</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>2 / 4</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>elective</b>
Cycle of study: <b>Second-cycle studies</b>	Form of study (full-time,part-time) <b>part-time</b>	
No. of hours Lecture: - Classes: <b>15</b> Laboratory: <b>15</b> Project/seminars: -		No. of credits <b>2</b>
Status of the course in the study program (Basic, major, other) <b>major</b>		(university-wide, from another field) <b>from field</b>
Education areas and fields of science and art <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>2 100%</b> <b>2 100%</b>
<b>Responsible for subject / lecturer:</b>  dr hab. inż. Paweł Szulakiewicz, prof. nadzw. email: szulak@et.put.poznan.pl tel. 61 6653870 Faculty of Electronics and Telecommunications ul. Piotrowo 3A 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Students have basic knowledge concerning signal theory, radiocommunications, wireless channels and digital communication systems (K1_W06, K1_W15, K2_W06)
2	<b>Skills</b>	Students are able to compare and professionally judge digital communication systems from the point of view of their parameters, modulation types and technologies(K1_U21)
3	<b>Social competencies</b>	Students understand limitations of their knowledge and necessity of professional approach to engineering problems solving. (K1_K01, K1_K02)
<b>Assumptions and objectives of the course:</b> The objective of the course is to teach students the methods of wireless access to internet and to teach them how to analyse and solve problems concerning wireless systems and networks. Students have to know how to solve problems concerning the WiFi network (IEEE 802.11)design and deployment. They have to understand the wireless technologies used in this network.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b> 1. Students know how to design the WiFi network - [K2_W06] 2. Students know how to analyse and design wireless networks which enable access to the internet - [K2_W06]		
<b>Skills:</b> 1. Students are able to design and deploy the WiFi network - [K2_U13] 2. Students are able to analyse and solve technical problems concerning transmitters, receivers, MAC and physical layers of the selected wireless networks. - [K2_U13]		
<b>Social competencies:</b> 1. Students understand the necessity to study amendments to the IEEE 802.11 and other standards which enable the wireless access to the internet - [K2_K02] 2. Students understand the challenges to new methods of wireless access to the internet - [K2_02]		
<b>Assessment methods of study outcomes</b>		
Permanent check of problems solving in the class and in the laboratory.		

<b>Course description</b>		
Laboratory of the design and analysis of the 802.11 network. Solving problems concerning modulations, encoding, decoding, MAC protocols and other technical matters of the wireless networks.		
<b>Basic bibliography:</b> 1. WiFi network guide 2. Selected scientific papers given by the teacher.		
<b>Additional bibliography:</b>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. Laboratory	15	
2. Problem solving	15	
3. Self study	35	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	55	2
Contact hours	30	1
Practical activities	30	1