PLAN OF STUDIES

Curriculum - **MSc II level full-time English**

Field of study : : **Electronics and Telecommunications**

Electronics and Telecommunications

Poznan University of Technology

Faculty of Electronics and Telecommunications

Ite	Course title	ECTS	No. of exams	Total no. of hours	including: Lectures LE	Exercises E	Labs LA	Projects P	Courses per semester: Semester ZERO LE	E	LA	P	Semester I LE	E	LA	P	Semester II LE	E	LA	P	Semester III LE	E	LA	P	Semester IV LE	E	LA	P	Semester V LE	E	LA	P	Semester VI LE	E	LA	P	Semester VII LE	E	LA	P	Semester VIII LE	E	LA	P	Semester IX LE	E	LA	P
									No. of hours per week																																								
1	Telecommunications systems	5	1	60	30	30			2	2																																				
2	DSP	5		60	30		30		2		2																																				
3	Elective course 0.4	5	1	60	30	30			2	2																																				
	Digital communication systems																																													
	Foudations of wireless communications																																													
4	Elective course 0.2	5	1	60	30		30		2		2																																				
	Fundamentals of multimedia																																													
	Processsing and compression of audiovisual signals																																													
5	Elective course 0.3	5	1	60	30	30			2		2																																				
	Simulation of Telecom. Sys. in C++ or Matlab																																													
	Introduction to programming with Java script																																													
	Application on numerical methods in telecommunication																																													
6	Elective course 0.1	5	1	60	30	30			2	2																																				
	Communication Networs																																													
	Computer Networks																																													
7	Selected topics in mathematics	6	1	90	45	45							3	3																																
8	Numerical methods	2		30	15	15							1	1																																
9	Foreign/Polish language	2		30		30								2																																
10	Information and coding theory	5	1	60	30	30							2	2																																
11	Advanced signal processing algorithm	5	1	60	30	30							2	2																																
12	Information network management	3	1	45	15	15	15						1	1	1																															
13	Mobile systems	3	1	45	30	15							2	1																																
14	Multimedia systems	2		30	15		15						1		1																															
15	Satellite navigation systems	2		30	30								2																																	
	PRACTICAL PLACEMENT																																													
16	Optimization methods	2		30	15	15											1	1																											
17	Telecommunication network design	4	1	45	30	15											2	1																											
18	Programmable digital systems	4	1	45	15		30										1		2																											
19	Optical fiber comm. Systems	4	1	45	30		15										2		1																											
21	Workshop	1		30				30												2																											
22	Diploma seminar	20		15			15																1																							
	Total		13	990	480	330	150	30	12	6	6		14	12	2		6	2	3	2			1																							
				Hours per week					24				28				13				1																											
				Exams per semester					4				5				5																															

Notation :

- exams marked with dark field
- elective courses valid in a given semester are marked in red, with yellow field

Notes :

- crediting of all classes that do not end with exams is based on current control of achievements during the semester, or on final test

Internships

after sem.	duration	type of internship
I	4	diploma

Valid since: 1.02.2010

Dean

PLAN OF STUDIES

Curriculum - **MSc II level full-time English**

Field of study : **Electronics and Telecommunications**

Specialty - Information and Communication Technologies

Poznan University of Technology

Faculty of Electronics and Telecommunications

Item	Course title	ECTS	No. of exams	Total no. of hours	including: Lectures LE	Exercises E	Labs LA	Projects P	Courses per semester: Semester ZERO				Semester I				Semester II				Semester III				Semester IV				Semester V				Semester VI				Semester VII				Semester VIII				Semester IX			
									No. of hours per week																																								
									LE	E	LA	P	LE	E	LA	P	LE	E	LA	P	LE	E	LA	P	LE	E	LA	P	LE	E	LA	P	LE	E	LA	P	LE	E	LA	P	LE	E	LA	P	LE	E	LA	P
			13	990	480	330	150	30	12	8	4		14	12	2		6	2	3	2			1																							
31	Elective course 2.1	5	1	60	30		30										2		2																											
	Security in communication networks																																													
	Electronics Computer Aided Design																																												
	Programming of AVR microcontrollers																																												
	Spread spectrum systems																																												
32	Elective course 2.2	5	1	60	30		30										2		2																											
	Digital technology of audio and speech																																													
	Wireless system design																																												
	Advanced transmission techniques																																													
	Audio compression and processing																																												
	Data transmission in digital subscriber loops																																													
	WWW technologies																																													
33	Elective course 2.3	5		60	30	15	15										2	1	1																											
	Biometrics and video surveillance																																													
	Systems of surveillance and security																																													
	Advanced coding techniques																																													
34	Elective course 3.0	2	1	30	15		15														1		1																							
	Broadband Networks																																													
	Advanced transmission technics in wireless																																													
	IP Telephony																																													
35	Elective course 3.1	3	1	45	30		15														2		1																							
	IP Telephony																																													
	Digital television																																													
	Multimedia techniques and systems																																													
	Advanced data compression																																													
	Practical design of comm. networks																																													
	Sensor networks																																													
	Line of sight radio systems																																													
	Software defined and cognitive radio																																													
36	Elective course 3.2	3	1	45	30		15														2		1																							
	Testing of digital systems																																													
	Synchronous hierarchy of digital systems																																													
	Optimization of comm.. networks																																													
	4G wireless networks																																													
37	Elective course 3.3	2		45	15		30														1		2																							
	Design of systems with FPGA																																													
	Studio techniques of audio processing																																													
	Switching Systems																																													
	Optical Networks																																													
	Multimedia tools																																													
	Sensor networks																																													
	Security in wireless networks																																													
	Total		18	1335	660	345	300	30	12	8	4		14	12	2		12	3	8	2	6		6																							
				Hours per week					24				28				25				12																											
				Exams per semester					4				5				5				3																											

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