

COURSE SHEET

<i>Course name</i>	Telecommunication Services Design
<i>Acronym</i>	TSD

Level:

1. (BSc)	2. (MSc)
X	

Field of study:

<i>Electronics and Telecommunications</i>	<i>Control Engineering and Robotics</i>	<i>Informatics</i>
X		

Person responsible for the course:

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List of Topics - Lecture

No	Topic	Level of					No of hours
		knowledge			skills		
		A	B	C	D	E	
1.	Creation of new services in terms of network, technology, information and telecommunication services convergence		X				1
2.	Intelligent network services		X				1
3.	Realization of teleservices as an applications in the context of programming interfaces standardization		X				0,67
4.	Client-server model for design of services in information networks		X				0,33
5.	Programming of network communication with socket interface			X			1
6.	Standards of Application Programming Interface (API) for telecommunication services design		X				0,67
7.	Common ISDN API (CAPI) for designing services in ISDN network		X				0,5
8.	Telephony Application Programming Interface (TAPI) in MS Windows as an universal interface for designing services		X				0,33
9.	TAPI architecture		X				1
10.	Basic interfaces and functions offered by TAPI objects		X				1
11.	Realization of TAPI application with structural C API			X			1
12.	Realization of TAPI application with Component Object Model (COM) API			X			1
13.	Realization of TAPI application with Java language (Java TAPI)		X				1
14.	Multimedia services – cooperation of TAPI and Media API		X				1
15.	Interaction of TAPI with voice and video group conference applications		X				0,33
16.	Real-time Communications (RTC) Client API in MS Windows as an interface for IP communication services design		X				0,5
17.	Extension of service capabilities by inclusion of text messages – Mail API (MAPI), voice – Speech API (SAPI)		X				1
18.	Realization of Interactive Voice Response (IVR) and Voice Mail services		X				0,34
19.	Realization of Call Centers		X				0,33
20.	Exemplary TAPI application			X			1
Total							<u>15</u>

List of Topics - Project

No	Topic	Level of	No of hours
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		<i>knowledge</i>			<i>skills</i>		
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
1.	Description and distribution of individual projects.				X		1
2.	Specification of service.						1
3.	Specification of application for services realized on the basis of different network technologies.				X		2
4.	Specification of socket interface application for network communication programming.				X		2
5.	Specification of COM API objects for realization of designed service.					X	2
6.	Specification of TAPI functions for realization of designed service.					X	2
7.	Utilization of existing application for realization of designed service (reuse method).				X		2
8.	Specification of changes and extensions of existing application.					X	2
9.	Collection of realized projects and examination of developed programs functionality and execution correctness.				X		1
Total							<u>15</u>