COURSE SHEET

Course name	**Service platforms and applications for Next Generation Networks**
Acronym	SPAN

Level:

1. (BSc)	2. (MSc)
	X

Field of study:

Electronics and Telecommunications	Control Engineering and Robotics	Informatics
X		

Person responsible for the course:

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List of Topics - Lecture

No	Topic	Level of knowledge A	B	C	skills D	E	No of hours
1.	The importance of service platforms in the context of NGN	X					1
2.	IMS as an example of NGN service architecture	X					0,67
3.	The role of the IMS service control layer for providing services		X				0,67
4.	Interworking with application layer in IMS for providing services		X				0,33
5.	Technologies of IMS application layer developement	X					0,67
6.	The role of component-oriented architectures in applications for NGN	X					1
7.	Java EE environment in programming applications for NGN		X				1
8.	JAIN SLEE in the context of applications for NGN		X				0,67
9.	Service execution environment (SLEE Container)		X				0,67
10.	JAIN SLEE components and component interfaces		X				1
11.	Standard components (Event and Activity) and their role in JAIN SLEE		X				0,33
12.	SBB (Service Building Blocks) for providing services in JAIN SLEE		X				1
13.	The notion of event and event handling in JAIN SLEE		X				1
14.	Communication with environment through Resource Adaptors and Resource API		X				1
15.	Standard functionalities of application server		X				0,66
16.	Application of standard Java API for service functionality extension		X				1
17.	Elements of JAIN SLEE environment management (JMX)		X				0,33
18.	Specificity of JAIN SLEE application programming		X				1
19.	Analysis of JAIN SLEE application in different telecommunication areas			X			1
20.	Analysis of exemplary JAIN SLEE applications			X			1
21.	SIP Servlets in the context of applications for NGN		X				1
22.	SIP Servlet Container		X				1
23.	Application router		X				1
24.	SIP Servlet API and applications developed with SIP Servlet API		X				1
25.	Specificity of SIP Servlet application programming			X			1
26.	Analysis of exemplary SIP Servlet applications			X			1
27.	Mobicents as an example of platform for NGN application development			X			1
28.	Architecture for providing Parlay/OSA services		X				1
29.	Applications using Parlay/OSA API		X				1
30.	Application of Parlay X Web Services		X				1
31.	Specificity of Parlay/OSA application programming			X			1
32.	Analysis of exemplary Parlay/OSA applications			X			1

| 33. | Operation systems of mobile devices | | X | | | | 1 |
| 34. | Specificity of application programming for mobile platforms in the context of applications for NGN | | | X | | | 1 |

<div align="right"><i>Total</i>   <u>30</u></div>

List of Topics - Project

| No | Topic | Level of knowledge | | | skills | | No of hours |
		A	B	C	D	E	
1.	Installation and configuration of IMS environment					X	2
2.	Installation and configuration of applications server - Mobicents platform					X	2
3.	Installation and configuration of application development environment					X	1
4.	Application development for NGN				X		2
5.	Analysis of exemplary projects				X		2
6.	Preparation of project foundations for developed application					X	2
7.	Implementation of project tasks					X	2
8.	Development and testing of project application					X	2

<div align="right"><i>Total</i>   <u>15</u></div>