

COURSE SHEET

Course name	Engineering of Access and Core Systems
Acronym	EACS

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					No of hours
		knowledge			skills		
		A	B	C	D	E	
1.	The structure and operation of the IP QoS router		X				1
2.	Review of IP QoS routers solutions		X				1
3.	Realization of MPLS nodes		X				1
4.	Comparing applied MPLS nodes		X				1
5.	Architecture of Softswitch		X				1
6.	Review of Softswitch solutions		X				0,5
7.	Architecture of media and signalling gateways		X				1
8.	Review of media and signalling gateways solutions		X				0,5
9.	Corporate switching nodes with VoIP		X				1
10.	Optical transmission systems (DWDM), optical link elements, amplifying and regeneration of optical signals		X				0,67
11.	Multiplexing equipment (OMUX, OADM) in optical network nodes		X				0,67
12.	Optical cross-connects in optical network nodes		X				0,67
13.	Transmission protection and resources restoration in optical DWDM networks		X				0,67
14.	SDH systems in optical network, transmission rate adaptation procedure, LCAS		X				0,67
15.	Ethernet in optical transport network (OTN), GFP		X				0,67
16.	Optical access on PON – E-PON and G-PON standards		X				1
17.	ADSL broadband access systems - generation of standards, use of systems		X				0,67
18.	VDSL broadband access systems - standards, VDSL-ADSL convergence		X				0,67
19.	Ethernet in access network with A/VDSL systems		X				0,67
Total							15