

Nr. modul	Modul	Tutore	ore predare	ore eval.	Data
0	Basics of telecommunications technologies and standards – main definitions and High Level Architectures	Marius IORDACHE	4		
1	Advanced telecommunication technologies and standard – Radio Access Networks: GSM, UMTS, LTE, WiFi & Fix Access Network: FTTH/GPON	Vlad Sorici	18	2	
1,1	Architecture of 2G/3G/4G Radio Acces Networks. Functions of Network Elements	Gabriel PAPUC	2		
1,2	Site - Design and Layout	Codrut SAVULESCU - HUawei	9		
1,3	Power budget	Codrut SAVULESCU - HUawei			
1,4	Radio interface in 2G/3G/4G Access Network- description	Codrut SAVULESCU - HUawei			
1,5	Procedures, flows, signaling : call setup , handover intra and inter 2G/3G/4G Access Network	Codrut SAVULESCU - HUawei			
1,6	Capacity of the 2G/3G/4G Access Networks - voice / data	Codrut SAVULESCU - HUawei			
1,7	Indicatorilor de performanta si aplicatii practice in GSM si UMTS/LTE	Codrut SAVULESCU - HUawei			
1,8	Wi-Fi Service Provider	Vlad SORICI	4		
1,9	FTTx/GPON architectures	G.Marcu - HUawei	3		
1,1	Tests			2	
2	Advanced telecommunication technologies and standards – Transmission Networks: PDH, SDH, MW Ethernet, FO WDM, FSO/E band	Elena Oproiu	16	2	
2,1	MW&WDM technologies	Nokia	6		
2,2	Transmission Network Architectures	Elena Oproiu	1		
2,3	Design and optimization of a mw transmission network	Elena Oproiu	2		
2,4	Radio packet technology	Elena Oproiu	2		
2,5	MW transmission network performance	Elena Oproiu	2		
2,6	Optical Networks	Daniel Tichiu	3		
2,7	Tests			2	
3	Advanced telecommunication technologies and standards – IP, MPLS, SDN & NFD	Marius Iordache	12	2	
3,1	Networking - Routing	Marius IORDACHE	2		
3,2	Networking - Switching	Marius IORDACHE	2		
3,3	QoS	Marius IORDACHE	1		
3,4	IP/MPLS Networks	Cristian Custura	2		
3,5	Segment Routing – IP networks evolution	Marius Iordache	2		
3,6	IP network evolution – SDN and NFV	Nokia	3		
3,7	Tests			2	
4	Advanced mobile communication technologies and standards – Core Networks	Lucian ISPAS	16	2	
4,1	Circuit Switch Technology - Advanced description, procedures, flows, signalling	Lucian ISPAS	4		
4,2	IMS Advanced Voice – VoLTE & VoWiFi	Ionut Liviu CIULEI	4		
4,3	Packet switch	Cristian Panes	4		
4,4	Next generation HLR (SDM): description, functionalities: HLR, EPC HSS, IMS HSS.	Ion VOICU - ZTE	4		
4,5	Tests			2	
5	Advanced mobile communication technologies and standards – Multimedia & Smart services	Georgian FINICHIU	16	2	
5,1	Introduction in VAS ecosystem; architecture of a VAS service	George SOARE	0,5		
5,2	mVAS : Voice Mail	George SOARE	1		
5,3	LBS : description of the service; high level arhitecture	George SOARE	1		
5,4	mVAS : Intro Multi VAS, SMSC	Marius GLOD	2		
5,5	SIM cards & SIM Toolkit applets	Georgian FINICHIU	1,5		
5,6	Machine 2 Machine: architecture & use cases	Georgian FINICHIU	1		
5,7	Smart Home automation	Georgian FINICHIU	1		
5,8	mVAS : USSD and WAP gateways evolution	Oana STANICA	1		
5,9	mVAS enablers : MMS - Architecture, service flows and features	Alex IONESCU	1		
5,1	Mobile Device Management – Platforms & Functionalities	Alex OPREA	1		
5,11	Orange TV services over DTH & OTT – technical presentation	Alex IONESCU	1,5		
5,12	Ericsson Networked Society	Octav BALLIF - Ericsson	3,5		
5,13	Tests			2	
6	Advanced telecommunication technologies and standards – Business Intelligent Platforms & Services	Irina APOSTOL	12	2	
6,1	Business Analysis - Bridging Business Needs and IT Solutions	-	2		
6,2	IT Systems supporting Customer Rating, Charging, Billing and Invoicing Functions	-	2		
6,3	IT Tools and Mechanism enabling the Customer Relationship Management	-	2		
6,4	Online Technologies and Applications	-	2		
6,5	IT Technologies used in Business Reporting	-	2		
6,6	Custom Developments Digitizing Processes across the Organization	-	2		
6,7	Tests			2	
7	Network Planning and network resources management	Gabriel PAPUC	10	2	
7,1	General Considerations Regarding Evolution Criteria of The Mobile Networks	Gabriel PAPUC	2		
7,2	Dimensioning of Radio Access Networks & Transmission Network	Gabriel PAPUC	2		
7,4	Tools. Case study	Gabriel PAPUC	4		
7,5	Dimensionarea retelelor FTTH GPON	Bogdan HEBEAN - NEXANS	2		
7,6	Tests			2	
8	Mobile Devices & Mobile Applications	Mihai Luca	10	2	
8,1	Mobile devices	Mihai Luca	2		
8,2	IoT Applications Development	-	2		
8,6	Android Applications Development	Eduard Popovici - ETTI	6		
8,10	Tests			2	
9	CyberSecurity	Tiberiu Tabac	7	1	
9,1	Network Security Attack Types and Attack Vectors	SRI/Cyberint	2		
9,2	National and International Regulations and Directives Regarding CyberSecurity	SRI/Cyberint	1		
9,3	Cyber Attack Prevention & Combat Methods of Cyber Attacks: Architecture & Recommendations	Tiberiu Tabac	2		
9,4	Cyber Attack Prevention & Combat Methods of Cyber Attacks: Functionalities, Reports and hands on	Fortinet	2		
9,5	Tests			1	
10	IT&C New Trends: Technology, Architecture, Services	Cristian PATACHIA	15	2	
10,1	Next Generation Emergency Services	Marius Iordache	2		
10,2	Big Data & API Monetization - Case Study	Cristian PATACHIA	2		
10,3	Internet of Things si Programabilitate	Bogdan Doinea - Cisco	2		
10,4	Internet of Things hands on based open platforms/sw	Mihai Buf	2		
10,5	Smart Territories: Smart Cities, Agritech, Retail	Andrei Ergheliegiu	3		
10,6	New features - 5G networks	Catalin Taslaon	4		
10,7	Tests			2	
11	The Economics of Telecom Networks	Nicolae OACA - ANCOM	8	1	
11,1	Telecom Market	Nicolae OACA - ANCOM	4		
11,2	European and International Regulations in The Telecom Field	Nicolae OACA - ANCOM	4		
11,3	Tests			1	
12	Soft skills & Patents and Inventions	Gabriel PAPUC	8	5	
12,1	Patents and Inventions	Gabriel PAPUC	4		
12,2	Soft skills	Carmen ANASTASESCU	4		
12,3	Test Soft skills	Carmen ANASTASESCU		4	
12,4	Test brevete			1	

Total ore predare 152
Total ore evaluare 20
Total Ore 172