

Index	Summer Practice Project Title	Short Description of the project	Technical Requirements to complete the task	Department	Coordinator	Details (number of students, hours/day, period available)
1	Single RAN platform configuration	Understand different types of Hardware configurations and there particularities Multy techno key concepts and radio principles SRAN HW equipment installation and commissioning	ETC	Mobile Networks	lonel PETRUT	3-5 students 6-8h/day
2	SWAT lab view	Implement a lab view	Php, mysql, java	Mobile Networks	Catalin DUMITRIU	2 students 4-6h/day
3	Web interface for squid	Implement a web interface for managing squid application	php, mysql, java	Mobile Networks	Szilard SELLEI	1 student 4-6h/day
4	Centralized & Automatic updates tool	Implement a web application for automatic/centralize scripting tool for updates	php, mysql, Linux (Redhat)	Mobile Networks	Ovidiu AVRAM	2 students 4-6h/day
5	2G/3G/4G TEST ON SINGLE RAN EQUIPMENT	GSM / WCDMA / LTE key concepts, architecture & radio principles SRAN HW equipment installation and commissioning How to deal with SW bugs and customer issues? TEST principles & way of work (types of tests, automation, tools,...)	ETC AC (preferably 3rd/4th year of studies)	Mobile Networks	Cristian ERDEI Adrian GABOR	7-10 students 6-8h/day
6	FN Relocation - IS/IT part	Help LAB support team during the relocation with hardware and software configuration and start-up of IT equipments	Windows XP, 7, Windows server 2012, WSUS, EPO, Linux (CentOS) administration	Fixed Networks	Fiath Eugen	2 students, 4-6-8 hours/day, 2 weeks - 2 months
7	FN - Relocation - Platform scan	Platforms card scanning after startup at ELM and update parc application with the last platform configuration.	Windows	Fixed Networks	Raul Smeu	1 student, 4h/ day, 2 weeks - 1 month
8	cRFS lab inventory	equipments & platforms asset / SN tracking in cRFS projects	technical skills focused on details.	Mobile Networks	Leonard Dorogostaisky	2 students / 4 weeks.
9	Frequency map per technology	Define map with all the configurations / lab with frequency used. Create scripts to be run per a weekly base which should collect used frequencies and highlight discrepancies with defined map.	focused on details. scripting - 2 students Basic RF understanding (eager to learn) - 4 students	Mobile Networks	Leonard Dorogostaisky	6 students / 4 weeks.
10	New Labs installing	increase / aquire new knoledge on cRFS HW installing during July time frame	technical skills available in July/ August includes moderate lifting equipments and cabling	Mobile Networks	Leonard Dorogostaisky	2 students
11	Running CRT campaigns during summer holidays	Start training beginning of July for CRT automated test running during summer holidays. Execute CRT campaigns during August / September	fast learning technical skills available in July / August / September	Mobile Networks	Leonard Dorogostaisky	4 students x 3 months
12	GitLab metrics - reporting	GitLab metrics - capture info from GitLab, load data in DB, create reports on different levels for review, code change and committed, duration of actions	Web development, Linux scripting, SQL	Mobile Networks	Roberto Albu Roxana Dan	3-4 students 4h/day
13	Generic process follow-up and reminder	Implementation of a generic solution for process follow-up and reminder & reporting	Web development, Linux scripting, SQL	Mobile Networks	Roberto Albu Roxana Dan	3-4 students 4h/day
14	CI performance testing for WebElementManager	Implementation of generic solution for CI performance testing of SBTS WebElementManager	Scripting, Webdevelopment, SQL	Mobile Networks	Roberto Albu Roxana Dan	3-4 students 4h/day
15	Internal road map in Nokia Romania	Improve MN Ro map, introduce graphical route, generate fastest route, lovely route, show meeting room status on map, heat map, get to know me	Web development, Linux scripting, SQL	Mobile Networks	Roberto Albu Roxana Dan	3-4 students 4h/day
16	TC On-boarding game - web app - register, follow-up, badges, metrics, levels, quests, roles	Improve Onboarding process in TC - introduce a webapp and game	Web development, Linux scripting, SQL	Mobile Networks	Roberto Albu Roxana Dan	3-4 students 4h/day
17	Angular, Node.js in Web application	web application	JavaScript	Mobile Networks	Eugen NEDELCU	1 - 6h/day - Iunie/Iulie
18	Apache POI	import/export form xls	Java	Mobile Networks	Eugen NEDELCU	1 - 6h/day - Iunie/Iulie
19	Robot framework	automation and python	Python	Mobile Networks	Eugen NEDELCU	1 - 6h/day - Iunie/Iulie
20	Virtual Machines 2 RAMSES	Aim of the project is to extend the features of the current secure access solution that support teams are using to access remotely the Customer Networks for technical assistance, monitoring, network operation, engineering & integration, etc. Objective is to centralize on Virtual Machines using the existing RAMSES environment, the various VPNs and Tunnels that today our engineers are administering individually on their terminals.	Electronics & Telecommunication Faculty OS RH R6/R7 Virtual Machines Tunneling / IPsec Network Security	Applications&Analytics-Payment & Charging L2 Technical Support Center	Karoly JULA	6 hours / day June-July Number of students: 2
21	VQIP Tech Advisor (VITA)	The aim of the project is to create an application to help the technical support team in determining the possible root causes of the issue reported by customer and to advice what needs to be requested for starting the investigation; The objective: to create an interactive web application based on project requirements	Automation and Computers Faculty Unix/Linux basic PHP, MySQL, bash scripting,	Application&Analytics-Communication & Collaboration / - Technical Support	Marius DRAGULESCU	6 hours / day June-July Number of students: 1
22	Introduction in SMP (Service Management Platform) - CDP (Connected Devices Platform)	Using our SMP-CDP(HDM) platform we want to implement the downgrade and upgrade of a firmware version from one of our ResidentialGateways (RG).	Linux, Java, XML	Applications & Analytics-Professional Services	Alin Dostoniu	6 hours / day June-July Number of students: 2
23	What happens with my application after I finish developing it.	This project should follow the steps that happen with a project when it is sold to a customer. Students will create their own java/c++/c# app or will be provided with one which will then be deployed on a "production" environment and allow others to use the application	basic networking, basic linux, basic mysql/oracle db, java/c++ optional	Applications & Analytics-Professional Services	Emanuel Oniga	6 hours / day June-July Number of students: 2
24	Engage in Core Network Component & Radio Access Network integration	Daily/planned tasks delivered on the core network for Bouygues Telecom. Management and configuration of remote network elements. Handle onsite survey, installation, testing, commissioning and maintenance of GSM/CDMA equipment.	General telecom principles knowledge / ETC student French (medium) skills	Global Services	Remus Petre Irina Giea	Number of students : 3 Hours/ day : 6
25	Nokia2G, 3G, 4G/ ZTE 3G/ Ericsson 3G/ Siemens 2G alrms monitoring + handling	Monitoring the E+ network in Telefonica Germany. Handled all the Alarms received in our Monitoring tool in the Radio Access Network for differents vendors.	Basic Telecom knowledge. German (basic) + English (medium) skills	Global Services	Alin Milos	Number of students : 5 Hours/ day : 6
26	Transmission related incidents handles	PDH, SDH, IP tickets handling.	Basic Telecom knowledge. German (medim) + English (medium) skills	Global Services	Alin Milos	Number of students : 2 Hours/ day : 6
27	Introduction to telecom RAN and CORE subsystems	The student will be able to understand how RAN and CORE subsystems work in the telecom environment, identify main equipment and their functions	Technical studies / English mandatory	Global Services	Alex Paraschivu	Number of students : 2 Hours/ day : 6
28	Mobile Network Performance and Optimization	After implementing of 2G/3G and 4G Network, the Quality of Service becomes one of the most important concern for the Mobile Operators around the World. During the Internship the students will learn to identify Low Quality of Services provided to the end customers, and to optimize them using specific tools and methods. Some of the most important Key Performance Indicators that will be approached are: Drop Call Ratio/ Hand Over Failure Ratio/ Average Traffic/ Congestion/etc.	Architecture of mobile networks (2G/3G/4G); 2G/3G/4G Network Protocols; Good Understanding of :TMDA/FMDA/WCDMA/Signal Processing	Global Services	Bogdan Hantanu	Number of students : 12 Hours/ day : 6

29	Web Interfaces, Services & Components designed for dedicated Databases	Creating a real time webdashboard dedicated to the operational teams. Notifications and statistic views based on the daily/weekly/monthly tickets created.	Javascript, Php , Sql	Global Services	Gabriel Pistoiescu	Number of students : 3 Hours/ day : 6
30	Coordinating the resolution of major outages in the telecom networks	Incident Management, Outage Management, SLA management, Technical Network overview, Control and coordinate teams involved in resolution of network outage	Basic Telecom, Communication & Negotiation skills, English mandatory, German is a plus	Global Services	Valentin Biris	Number of students : 2 Hours/ day : 6
31	Fixed Core & Access Network management	Monitoring the operational network, providing diagnosis of the faults in the network, coordinating the field teams to restore the services within agreed SLA's. Internship program provides high level technical experience on Fixed Core and Access networks.	Basic Telecom knowledge, Signaling protocols, TCP/IP, SDH & TDM basic overview.	Global Services	Mircea Liuba	Number of students : 7 Hours/ day : 6
32	IP technology in modern telecommunication networks	The student will be trained on the job and then integrated in NI and Care team, allowing him/her to apply practically at a basic level the existing and acquired knowledge in order to integrate new equipment, perform very basic troubleshooting activities, up-date network topology diagrams with the scope to maintain, grow and document a live IP network.	General telecom principles knowledge, basic IP knowledge	Global Services	Mircea Crutu	Number of students : 4 Hours/ day : 6