BSc diploma subject proposals 2015/16

Profile: Teleinformation Networks

- 1. Analysis of the OpenDayLight environment for the realiza-tion of the SDN conception
- 2. Software Package to PIRT
- 3. Assessment of the Internet traffic self-similarity in the PG network
- 4. Laboratory based on NETFPGA cards
- 5. Review of optical switches solutions
- 6. Conception of ASON/GMPLS architecture and its application in optical networks realizations
- 7. Analysis of quality parameters for ASON/GMPLS optical network architecture
- 8. Analysis of optical resources reservation based on ADVA Optical Networking devices
- 9. Convergent telecommunication network based on Platan Proxima and DGT Millenium telephone exchanges
- 10. Analysis of queuing system models for IMS/NGN architecture
- 11. Ceph storage architecture
- 12. Analysis of the performance of DPDK library
- 13. Software implementation of joint fingerprinting and decryption method
- 14. Software analyzer of statistical properties of binary series
- 15. Software implementation of visual cryptography methods
- 16. Software analyzer of DCT coefficients statistical properties for JPEG images
- 17. Laboratory for IP QoS DiffServ network evaluation on CISCO routers
- 18. Laboratory for IAX protocol evaluation
- 19. Signaling System no. 7 in VoIP telecommuniation servers
- 20. Transport of Signaling System no. 7 over VoIP network
- 21. Application of OSN servers in internetwork gateways

- 22. Syslog server for telecommunication equipment
- 23. Virtualisation of telecommuniaction servers
- 24. Erlang Open Telecommuniaction Platform
- 25. Software analysis of phase fluctuation for interface E1 signals
- 26. Selective measurement of signal level by using of data from digital oscilloscope
- 27. Evaluation of the suitability of copper access network for xDSL systems
- 28. Requirements for quality of "triple play" services in copper access network
- 29. Realization of TV distribution service in laboratory access network FTTB/C