MSc diploma subject proposals 2017/18

Specialization: Teleinformation Networks and Systems

1. **Simulation model of the service system with selfsimilar traffic**
2. **Analysis of the switching networks in optical networks with the Dynamic Flexible Frequency Grid**
3. **Methods of the measurement of QoE parameters**
4. **Implementation of virtual environment based on the ADVA FSP 150-ProVMe**
5. **Analytical traffic model of a multidomain IMS/NGN including service and transport stratum**
6. **Design of a multidomain IMS/NGN architecture elements**
7. **Review and research of features extractors for steganalysis**
8. **Symbol timing synchronization in QAM demodulator**
9. **Fractional delay filter structures**
10. **Use of meta-heuristic algorithms in design of VFD filters implemented in DFT domain**
11. **Evaluation of the quality a real time clock synchronization in the GEPON access network area**
12. **Analysis of next-generation passive optical network transmission capabilities**
13. **Techniques to maximize the bandwidth of optical links in the optical transport network**