

## **BSc diploma subject proposals 2016/17**

### **Profile: Teleinformation Networks**

- 1. Software Defined Networks conception implementation analysis**
- 2. Mobile application for PIRT**
- 3. Software for structure parameter determination of DWDM optical switches**
- 4. Analysis of queuing system models for IMS/NGN architecture**
- 5. Analysis of design methods for elements of IMS/NGN architecture**
- 6. Software analyzer of statistical properties of binary series**
- 7. Software analyzer of vectors of JPEG images steganalitic features**
- 8. Software implementation of Hill cipher and its modifications**
- 9. Application for demonstration of merged and iterated codes**
- 10. Review and implementation of basic symbol timing recovery methods**
- 11. Implementation and testing of spectrum estimator utilizing short-time Fourier transform phase for its performance improvement**
- 12. The application demonstrating steganographic techniques for images**
- 13. The application demonstrating digital fingerprinting techniques for images**
- 14. Application of OSN servers in internetwork gateways**
- 15. Laboratory for analysis and evaluation of selected link layer protocols**
- 16. Application of software containers environment in virtualization of telecommunication servers**
- 17. Capabilities of Erlang Open Telecommuniacion Platform**
- 18. Methods for evaluation of the quality a real time clock synchroni-zation in the network IP**
- 19. Technique of broadband access G.Fast in copper lines**
- 20. Software analysis of the phase fluctuations for the signals in the E1 interface**
- 21. Laboratory for VoIP based on Datera Call-Ex system**

## **22. The realization of connections in multidomain automatically switched optical network**