

**Major Field of
Comprehensive
Examination**

Informatics systems and networks, construction and performance modelling

Syllabus

Construction and performance of info-communication systems, design of networks, wired and wireless networks. Types of data transmission between computers and measure devices, communication methods, computer science aspects of measuring systems. Modeling of info-communication systems, performance evaluation tools.

Bibliography

1. **K. Begain, G. Bolch G., H. Herold:** Practical Performance Modeling, Kluwer Academic Publisher, 2001
2. **J.N. Daigle:** Queueing Theory for Telecommunications, Addison-Wesley, 1992
3. **F. Gebaldi:** Analysis of Computer and Communication Networks, Springer Science and Business Media, New York, 2009
4. **J.F. Hayes, T.V.J. Babu:** Modeling and Analysis of Telecommunication Networks, Wiley-Interscience, Hoboken, 2004
5. **L. Lakatos, L. Szeidl, M. Telek:** Introduction to Queueing Systems with Telecommunication Applications, Springer, New York, 2013.
6. **M. Schwartz:** Telecommunication Networks: Protocols, Modeling and Analysis. Addison-Wesley, 1987
7. **A.S. Tanenbaum:** Computer Networks, 4th Edition, Prentice-Hall, 2003