

## List of subjects for “Fundamental computer science and information technology” field of study

1. History
2. Foreign language
3. Philosophy
4. Life safety
5. Physical education
6. Economics
7. Physics
8. Mathematics
9. Computer science
10. Finite graph theory and its applications
11. Programming
12. Database
13. Engineering drawing and computer graphics
14. Mathematical logic
15. Network technology
16. Information security basics
17. System analysis
18. System modeling basics
19. Optimization and decision making in technical systems
20. Database management systems
21. Algebra and number theory
22. Discrete mathematics
23. Additional mathematics chapters
24. Object-oriented programming
25. Information system interface design
26. Software engineering and testing
27. Information system engineering
28. Special mathematics chapters
29. Mathematical models and decision making methods
30. Research
31. Research basics
32. Applied physical education
33. Information system architecture
34. Function analysis
35. Algorithms and complexity
36. Information system management
37. Computer-aided instruction
38. Data analysis
39. Object CASE-technology
40. Complex program systems engineering
41. Mathematical basics of information protection
42. Cryptography basics
43. IT projects management
44. Introduction to software engineering
45. Work with applications in client/server architecture
46. Web technology
47. Concurrent and distributed computing
48. API programming
49. Education internship (internship for getting primary professional skills, including skills for research)
50. Production internship (internship for getting professional skills and experience in the field of study)
51. Production internship (pre-diploma practice)
52. State exams