

### List of subjects for “Nanoscale engineering” field of study

1. Foreign language
2. History
3. Philosophy
4. Life safety
5. Physical education
6. Enterprise economics and production management
7. Physics
8. Mathematics
9. Computer science
10. Ecology
11. Applied mechanics
12. Metrology
13. Electrical engineering
14. Material science and construction materials technology
15. Engineering drawing and computer graphics
16. Chemistry
17. Nanotechnology and nanomaterials
18. Research
19. Research methodology
20. Intellectual property protection
21. Physical and colloid chemistry
22. Tribophysics
23. Material physics
24. Methods for material and processing technology selection
25. Corrosion and material prevention
26. Steel and alloys material science
27. Powder metallurgy technology
28. Technological processes physics
29. Applied physical education
30. Machine engineering technology basics
31. Computational physics
32. Methods of material analysis, control and testing
33. Radiation technology in nanoscale systems
34. Medical equipment production technology
35. Biomedical nanotechnology
36. Ultrasound material processing
37. Crystallography
38. Biophysics and biomaterials
39. New materials for medical equipment
40. Blank design engineering and production
41. Nanoscale systems synthesis
42. Polymer and composition materials
43. Nanoscience basics
44. Heat treatment theory
45. Electronic microscopy
46. Mathematical theory for experiment planning and analysis
47. Thin-film coating production
48. Computer-aided design and pre-production
49. Probe microscopy
50. Technological processes mathematical modeling
51. Nanotechnology in catalytic processes
52. Analytical support of research
53. Introduction to field of study
54. Education internship (internship for getting primary professional skills, including skills for research)
55. Production internship (internship for getting professional skills and experience in the field of study)
56. Production internship (pre-diploma practice)
57. State exams