

## List of subjects for “Rocket systems and astronautics” field of study

1. History
2. Foreign language
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 and electronics
14. Material science and construction materials technology
15. Engineering drawing and computer graphics
16. Machine engineering technology basics
17. Fluid and gas mechanics
18. Vocational profession
19. Knowledge and skills systematization in professional activity
20. Chemistry
21. Thermal dynamics and heat transfer
22. Introduction to rocket and space equipment
23. Fluid flow, gas and aerodynamics
24. Control systems engineering
25. CAD basics
26. Rocket design basics
27. Rocket ballistics
28. Rocket engines
29. Rocket production process
30. Rocket assembly
31. Construction robustness
32. Hydraulic drive for aircrafts
33. Applied physical education
34. Machine engineering production equipment
35. Numerical control machine tool
36. Goods testing and quality control
37. Rocket and space equipment testing and reliability control
38. Elements of pneumatic and hydraulic systems and aircraft automatic equipment
39. Aircraft pneumatic drive
40. Special machine-tool attachment design engineering
41. Assembly fixture design engineering
42. Automated design engineering of technological processes in rocket and space equipment
43. Solid modeling of rocket and space equipment
44. Composite construction technology
45. Nanotechnology in rocket production
46. Thermal-protection material in rocket and space equipment
47. Thermal conditions of aircrafts
48. Education internship (internship for getting primary professional skills, including skills for research)
49. Production internship (internship for getting professional skills and experience in the field of study)
50. Production internship (pre-diploma practice)
51. State exams