

List of subjects for “Technological machines and equipment” field of study

Major – vacuum and compressor equipment for physical installations

1. Mathematical modeling of technological processes and complexes
2. Economic justification of project solutions
3. Research basics
4. Professional foreign language
5. Staff management
6. Mathematical modeling in engineering
7. Computer-aided design of compressor, vacuum and low-temperature machines and installations
8. Monitoring, diagnostics and regulation of process equipment
9. Organization and planning of experimental studies
10. Computational gas and fluid mechanics, heat and mass transfer and computer engineering
11. Compressor equipment for mobile and stationary installations
12. Theory and methods of calculation of gas liquefaction and separation and their transportation
13. Technological equipment of vacuum and compressor installations
14. Special chapters of thermodynamics of low-temperature systems
15. Education internship (internship for getting primary professional skills, including skills for research)
16. Production internship (internship for getting professional skills and experience in the field of study)
17. Production internship (pre-diploma practice)
18. Research
19. State exams
20. Multimedia and remote technology in engineering
21. Modern problems in science and production

Major – Machines and devices for chemical industry

1. Mathematical modeling of technological processes and complexes
2. Economic justification of project solutions
3. Research basics
4. Professional foreign language
5. Staff management
6. Mathematical modeling in engineering
7. Computer-aided design of compressor, vacuum and low-temperature machines and installations
8. Monitoring, diagnostics and regulation of process equipment
9. Organization and planning of experimental studies
10. Computational gas and fluid mechanics, heat and mass transfer and computer engineering
11. Organization and planning of maintenance and repair of process equipment and facilities of petrochemical complex
12. Technological equipment for chemical and technological installations
13. Education internship (internship for getting primary professional skills, including skills for research)
14. Production internship (internship for getting professional skills and experience in the field of study)
15. Production internship (pre-diploma practice)
16. Research
17. State exams
18. Multimedia and remote technology in engineering
19. Modern problems in science and production