

List of subjects for “Energy- and resource efficient processes in chemistry technology, petrochemistry and biotechnology” field of study

Major – Environment protection and natural resources management

1. History
2. Foreign language
3. Philosophy
4. Life safety
5. Physical education
6. Research
7. Mathematics
8. Physics
9. Computer science
10. Ecology
11. Analytical chemistry and physical and chemical analysis methods
12. General, inorganic and organic chemistry
13. Physical and colloid chemistry
14. Engineering drawings and computer graphics
15. Applied mechanics
16. Electrical engineering
17. Hydraulic systems and heat engineering
18. General chemistry and biotechnology
19. Human anatomy and physiology
20. Ecotoxicology
21. Environment control methods and devices
22. Mechanical transmission engineering
23. Oil and gas refining technology
24. Chemical technology processes and devices
25. Environment protection methods
26. Oil refining and petrochemistry basics
27. Technical systems and technology-related risks reliability
28. Material science
29. Research basics
30. Enterprise economics and production management
31. Applied physical education
32. Theoretical basics of environment protection
33. Information technology in ecology
34. Ecological research information support
35. Industrial ecology
36. Engineering ecology
37. Low-waste and resource-efficient technology
38. Protection of environment from production and consumer waste
39. Earth science
40. Geoecology
41. Metrology
42. Metrology and climatology basics
43. Applied ecology
44. Environmental support of enterprises
45. Industrial ecological control
46. Ecological audit of chemical and petrochemical enterprises
47. Legal basis of environmental management
48. Environmental law
49. Economics of environmental management and efficient use of resources
50. Industrial environmental management economics and forecasting
51. Eco-management and ecological audit
52. Environment protection management arrangement
53. Ecological monitoring
54. Metropolis ecology
55. Education internship (internship for getting primary professional skills, including skills for research)
56. Production internship (internship for getting professional skills and experience in the field of study)
57. Production internship (pre-diploma practice)
58. State exams
59. Elementary mathematics

Major – Primary processes in chemical industry and chemical cybernetics

1. History
2. Foreign language
3. Philosophy
4. Life safety
5. Physical education
6. Research
7. Mathematics
8. Physics
9. Computer science
10. Ecology
11. Analytical chemistry and physical and chemical analysis methods
12. General, inorganic and organic chemistry
13. Physical and colloid chemistry
14. Engineering drawings and computer graphics
15. Applied mechanics
16. Electrical engineering
17. Hydraulic systems and heat engineering
18. General chemistry and biotechnology
19. Physical and chemical basics of environment protection processes
20. Environment control methods and devices
21. Industrial ecological control
22. Mechanical transmission engineering
23. Oil and gas refining technology
24. Chemical technology processes and devices
25. Oil refining ventures engineering
26. Environment protection methods
27. Legal basis of environmental management
28. Technical systems and technology-related risks reliability
29. Research basics
30. Material science
31. Enterprise economics and production management
32. Applied physical education
33. Theoretical thermal dynamics
34. Vapor-liquid systems' thermal dynamics
35. Theoretical basics of energy- and resource efficiency on chemical engineering
36. Polymer processing technology
37. Chemical and technological processes modeling
38. Organic materials chemistry and technology
39. Organic synthesis technology
40. Heat- and mass transfer
41. Mass transfer processes with solid phase
42. Modern construction materials in petrochemistry
43. Petrochemical equipment and pipeline operation
44. Branch equipment elements construction and calculations
45. Chemical equipment calculations basics
46. Chemical industry machines and devices
47. Mass transfer processes in chemical engineering
48. Chemical and technological equipment automation
49. Chemical industry management systems and automation
50. Chemotology
51. Fuels, oils, lubricants and special fluids usage
52. Chemical and technological equipment maintenance and installation
53. Oil refining and petrochemistry equipment
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
58. Elementary mathematics