List of subjects for "Design engineering support of machine engineering production" field of study

Major – machine engineering technology

1. World view security basics
2. Economic justification of project solutions
3. Mathematical modeling and information technology in design
4. Professional foreign language
5. Modern programming problems and software tools
6. Physics of modern technology of coating production
7. Machines dynamics
8. Modern problems of the field of study and their solutions
9. Modern problems of tool support of machine-engineering enterprises
10. Theory of automation of technological processes and production facilities
11. Intelligent control technology in technical systems
12. Technological support of quality
13. Methods of formation of periodic profiles by plastic deformation
14. Physical effects in machine engineering
15. Calculation, modeling and design of computer-controlled equipment
16. Basics of choosing a modern metal-cutting tool
17. High-precision grinding and sharpening methods
18. Modern production processes at machine-engineering enterprises
19. Accuracy of technological equipment
20. Surface hardening technology
21. Repair, installation and operation of technological equipment
22. Dimensional analysis and ensuring the accuracy
23. Selection and design of modern tooling and tools for high-precision machining
24. Production internship (internship for getting professional skills and experience in the field of study)
25. Production internship (pre-diploma practice)
26. Production internship (research)
27. State exams
28. Methodology of scientific research in machine engineering

Major – mechanical and physical-technical machining processes, machine-tools and instruments

1. World view security basics
2. Economic justification of project solutions
3. Mathematical modeling and information technology in design
4. Professional foreign language
5. Modern programming problems and software tools
6. Physics of modern technology of coating production
7. Machines dynamics
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