

## **Annotation “Machine elements and project design basics”**

The discipline " Machine elements and project design basics " is a component of the curriculum, focused on the initial preparation of students for integrated engineering activities and is part of the basic part of the professional cycle of disciplines in the courses:

15.03.01 Machine engineering

15.03.02 Technological machines and equipment;

15.03.05 Design and technological support of machine engineering production;

13.03.03 Power engineering industry.

Discipline is realized at the Department of Theoretical and Applied Mechanics of the Institute of Natural Resources of the National Research Tomsk Polytechnic University. The discipline content promotes generalization, analysis, perception of information, setting goals and choosing ways to achieve it; Development of scientific and technical thinking of the future specialist. Discipline is aimed at forming a some of general cultural and professional competencies of the graduate.

Teaching discipline provides the following organization forms of the educational process: lectures, practical classes, laboratory classes, independent student work, tests, consultations. The discipline program provides for the following types of control:

- current progress monitoring in the form of homework, monitoring of attendance and evaluation of the student's personal qualities;

- boundary control in the period of conference weeks, stipulated by the linear schedule of the educational process;

- intermediate control in the form of an exam in the 5th semester and in the form of a diff. pass in the 6th semester.

The total complexity of mastering the discipline is 6 credits (credits), 224 hours. The program of the discipline provides for lectures in the amount of 40 hours, practical lessons in the amount of 40 hours, laboratory classes in the amount of 16 hours, as well as independent student work in the amount of 128 hours