

DESCRIPTION OF THE DISCIPLINE

1. PROGRAM

15.03.01 ENGINEERING

2. QUALIFICATION (DEGREE)

Bachelor

2 Qualification (degree): Mining Engineer

3. DEPARTMENT

Department «Engineering technology»

4. Number of hours:

Lectures	40
Practice:	72
Self-study	104
Term paper, Self-	
Total	216

5. GOALS AND OBJECTIVES OF THE DISCIPLINE

The discipline is aimed at preparing bachelors for studying and mastering the educational program in theoretical mechanics and solving applied problems which evolve when designing technological processes for machining and manufacturing engineering products.

6. CONTENT OF THE DISCIPLINE

Content:

Section 1. Statics. Axioms of statics. Force systems. Calculation of plane trusses. Center of gravity.

Section 2. Kinematics. Kinematics of a point. The basic types of motion of a solid: translator, rotary, plane, compound motion of a point.

Section 3. Dynamics. Dynamics of a point and mechanical system. General theorems of mechanical system dynamics. D'Alembert principle.

7. LECTURER: Candidate of Technical Sciences, associate professor Gubaidulina R.H.