

ABSTRACT OF THE MODULE (COURSE)

1. **The module name (course name)** – Theoretical mechanics 2
2. **Identification code in syllabus** – «ДИСЦ.Б.М6»
3. **Educational program track** – 15.03.01. “Mechanical engineering”
4. **Educational program specialization** – “Technology, equipment and automation of machinery production”
5. **Course degree** – Bachelor
6. **Research unit** – Mechanical engineering department
7. **Lecturer** – V. S. Lyukshin, E-mail lwsfoa@rambler.ru
8. **Outcomes of module (course) studying**

As a result of completing a course of “Theoretical mechanics 2” students should:

Be aware of:

- Basic knowledge of Science and Mathematics fundamental for professional activity;
- Methods of casting and solving engineering problems.

Know how:

- To apply basic knowledge of Mathematics, Liberal arts and Economics into their professional activity consciously;
- To apply the obtained knowledge into casting and solving engineering problems using appropriate methods.

Be knowledgeable about:

- The scientific principles fundamental for professional activity;
- Methods of investigational study.

9. Curriculum content:

- Basic patterns of rigid body motion;
- Introduction to Dynamics. Particle dynamics;
- Mechanical system. General theorems of Dynamics;
- Analytical Dynamics.

10. Course 2 semester 4 number of credits 3

11. Prerequisite:

- “Mathematics”
- “Descriptive geometry. Engineering graphics.”

12. Corequisite:

- “Physics”
- “Construction materials engineering”.

13. Type of assessment (examination, credit) – a credit, a grading credit for the course-work

By V. S. Lyukshin