CONSTRUCTION AND ROAD MACHINERY MAINTENANCE
COURSE SYLLABUS ABSTRACT

6-05-0715-03 – Cars, tractors, mobile and technological complexes
Computer Engineering in Construction and Road Engineering

	STUDY MODE
	Full-time
Year	4
Semester	7
Lectures, hours	34
Practical classes (seminars), hours	16
Laboratory classes, hours	34
Exam, semester	7
Contact hours	84
Independent work, hours	86
Total hours of academic discipline /	170/5

1. Course outline
The purpose of the discipline is to form students' knowledge, skills and abilities of production and technical operation of construction, road, lifting and transport machinery and equipment.
2. Course learning outcomes
Upon completion of the course, students will be expected to
know: methods of modeling construction machinery and equipment in production conditions; tools and systems for automating machine control during their technical and production operation; rules for loading and unloading various construction goods and using machinery for these purposes; the main directions of scientific and technological progress in the field of construction machinery and equipment; methods conducting scientific research and experiments in testing construction machinery and equipment; the potential of machines at minimal cost to maintain their operability;
be able to: conduct operational tests of the developed equipment and organize its installation, rational use and maintenance; analyze the conditions and modes of operation of machines and equipment, assess the level of automation and mechanization of production processes; select standard and auxiliary equipment; organize machine repairs; draft projects for the creation and reconstruction of repair enterprises; calculate the economic efficiency of the technological and design implemented to select machines or sets of machines to perform a given amount of work in specific operating conditions; to determine the cost of performing construction work;
to possess a skill: fundamentals of safe operation of PTM and SDM; scientific and theoretical knowledge for solving scientific and theoretical problems; proficiency in technical diagnostics methods; proficiency in methods of rational operation of PTM and SDM; independent work; modern experience of advanced foreign countries in the field of SDM operation.
3. Competencies. To calculate and select rational parameters of the technological equipment used in the production of building materials
4. Requirements and forms of current and intermediate certification. Requirements and forms of midcourse evaluation and summative assessment
rrent certification – survey, verbally;
Interim certification – exam, written.