INTRODUCTORY INTERNSHIP
(course title)

INTERNSHIP COURSE SYLLABUS
ABSTRACT

6-05-0715-03 Cars, tractors, mobile and technological complexes
(speciality code and name)

Computer engineering
(concentration)

	STUDY MODE
	full-time
Year	1
Semester	2
Total course duration in hours / credit units	216/6

1. Internship course outline (aims and objectives)

The purpose of the practice is to study the design and technical characteristics of cars, the device of individual components, aggregates, systems and mechanisms of vehicles, the acquisition of skills in disassembly and assembly of vehicle mechanisms and control of self-propelled machines, the acquisition of social and personal competencies necessary for work in the professional field.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

– designs and technical characteristics of cars;
– arrangement of individual components and assemblies of vehicles;
– design and technical characteristics of internal combustion engines;
– arrangement of individual systems and mechanisms of vehicles.

be able to:

– to search for information about the device of individual components and assemblies of vehicles;
–to search for information about machines and their technical characteristics.

to possess skills:

– search for information about the studied technical objects;
– performing simple locksmith operations.

3. Competencies

УК-9 To master the basics of research activities, to search, analyze and synthesize information

УК-10 To solve standard tasks of professional activity based on the use of information and communication technologies

БПК-1 Use the basic concepts and methods of linear algebra, analytical geometry, mathematical analysis, differential and integral calculus, analysis of functions of one and several variables, apply the acquired knowledge to solve problems of theoretical and practical orientation

БПК-2 To use the basic concepts and laws of physics, the principles of experimental and theoretical study of physical phenomena and processes, apply the knowledge gained to solve problems of theoretical and practical orientation

БПК-7 Use methods of graphic representation of objects on a plane and in space, create drawings of parts and assemblies, design and develop design documentation in accordance with the requirements of a Unified system of design documentation

БПК-8 To use the basic concepts of methods of obtaining structural materials, surface treatment methods, to apply them in the manufacture of parts of cars, tractors and electric vehicles

БПК-9 To apply in practice physical and mathematical methods for calculations of mechanisms, machines and structures, to analyze and develop their kinematic and dynamic schemes

БПК-10 To carry out calculations for strength, rigidity, stability of structures

БПК-11 To select and determine the composition and basic properties of materials by brands for the production of cars, tractors and electric vehicles

БПК-12 Use methods of research, construction, analysis of kinematics and dynamics of mechanisms and machines, calculate mechanical systems of cars, tractors, mobile and technological complexes

БПК-13 Use the basic concepts of technical regulatory legal acts that ensure the accuracy of manufacturing and product quality, technical and information compatibility, interchangeability in accordance with the level of development of science, technology and technology, use appropriate measuring instruments and devices

БПК-14 Apply the basic laws of pneumatics and hydraulics in the design of cars, tractors, mobile and technological complexes

БПК-15 Use calculation methods that confirm the operability of the designed structures, develop and issue design documentation for the designed products

БПК-16 To use the methodological foundations of machine manufacturing technology, to develop technological processes for manufacturing and assembling components of cars, tractors, mobile and technological complexes

БПК-17 Uses the basic methods, methods and means of obtaining, storing, processing information, computer skills as a means of information management, working with information in computer networks and applying basic programming technologies in a high-level algorithmic language

4. Form of midcourse evaluation

The form of intermediate certification. The intermediate certification in practice is a differentiated credit. The final grade is defined as the sum of the rating control of the internship (up to 60 points), intermediate certification (up to 40 points).