

## INFORMATICS

(course title)

### COURSE SYLLABUS ABSTRACT of higher education institution speciality

1-37 01 07 «Vehicle Service»

(speciality code and name)

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	1	1
Lectures, hours	50	8
Laboratory classes, hours	52	6
In-class test (semester, hours)		1 (2 h)
Exam, semester	1	1
Contact hours	102 (8)	16
Independent study, hours	114	200
Total course duration in hours / credit units	216/6	216/6

#### 1. Course outline

The academic discipline includes the study of the main modern operating systems and software environments, application packages for scientific and engineering calculations, computer design and construction, the study of the basics of programming, mathematical modeling methods, general issues of algorithmization and the acquisition of problem solving skills using computer technology.

#### 2. Course learning outcomes

Upon completion of the course, students will be expected to know:

- composition, purpose and structure of modern computer facilities;
- composition, purpose and main components of the Microsoft Windows operating system;
- functionality of word and spreadsheet processors, basic principles of working with them;
- functionality of the main programs for scientific and technical calculations;
- functionality of the main programs for creating drawings and graphic models;
- basics of algorithmization of applied problems.

be able to:

- work in the Microsoft Windows operating system environment;
- work with a Microsoft Word text processor in a Windows environment;
- solve specialty problems using Microsoft Excel spreadsheet;
- work in the graphical environment of AutoCAD;
- develop algorithms and programs in VBA.

possess:

- methods of computer modeling of technical systems and technological processes;
- programming methods, the use of standard programs for solving problems of professional activity.

#### 3. Competencies

BPC-4 Have the ability to solve the calculation and search problems of professional activity with the help of information technology.

#### 4. Requirements and forms of midcourse evaluation and summative assessment

written form: control polls;

oral-written form: reports on laboratory work with their oral defense, exam.