

ENGINEERING GEODESY

COURSE SYLLABUS ABSTRACT

Specialty 7-07-0732-01 "Construction of buildings and structures"

Concentration Industrial and civil construction

	STUDY MODE	
	full-time	part-time
Year	1	1,2
Semester	1, 2	2,3
Lectures, hours	68	12
Laboratory classes, hours	32	8
In-class test (semester, hours)		2 (2ч)
Pass/fail, semester	2	3
Exam, semester	1	2
Contact hours	100	22
Independent study, hours	116	194
Total course duration in hours / credit units	216/6	

1. Course outline

The purpose of the discipline is the acquisition by students of theoretical knowledge and practical skills in solving engineering and geodetic problems that accompany construction production at all its stages.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know: – the main issues of the theory and practice of geodetic support of a complex of works in industrial and civil construction; – the methodology of geodetic measurements and processing of their results; – modern achievements of scientific and technological progress in the field of engineering geodesy (electronic total stations, satellite technologies, laser and digital devices).

be able to: – independently perform measurements using various geodetic instruments (theodolites, levels, measuring and laser tape measures, planimeters, eckers, etc.); – perform mathematical processing of the results of geodetic measurements in an automated way; - make topographic plans and profiles, be able to use them in design and construction; – understand correctly and use the results of the center works and executive assemblies under construction and completed by the construction of highways.

have the skill to: - measure and compile topographic and executive plans, profiles;- analyze topographic and geodetic support;- organization of works on geodetic support of the construction process.

3. Competencies

BOD - 4 Apply the basic rules and methods of performing geodetic measurements in construction.4. Requirements and forms of midcourse evaluation and summative assessment

4. Requirements and forms of current and intermediate certification.

Current certification:

- protection of laboratory works;
- protection of settlement and graphic work.

Intermediate certification:

- offset;
- exam.