

MATHEMATICS

(course title)

COURSE SYLLABUS ABSTRACT of higher education institution specialit

1-36 01 06 Equipment and technology of welding production
(speciality code and name)

	Form of higher education		
	Full-time (daytime)	Correspondence	Correspondence abbreviated
Year	1,2	1, 2	1
Semester	1, 2, 3	1, 2, 3	1, 2
Lectures, hours	136	18	14
Practical classes (seminars), hours	136	12	12
In-class test (semester, hours)		1, 2, 3 / 6	1, 2 / 4
Exam, semester	1, 2, 3	1, 2, 3	1, 2
Contact hours	272	36	30
Independent study, hours	160	396	402
Total course duration in hours / credit units	432/12	432/12	432/12

1. Course outline

Linear algebra and analytic geometry, vector algebra, introduction to mathematical analysis, differential and integral calculus of functions of one and many variables, differential equations, numerical and functional (power) series, probability theory and elements of mathematical statistics.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know: basic concepts, definitions and methods of linear and vector algebra, analytic geometry, differential and integral calculus, theory of numerical and functional (power) series, theory of differential equations, probability theory;

be able to: analyze and apply theoretical knowledge in solving typical educational tasks and tasks of increased complexity, draw reasonable conclusions;

possess: discipline tools in solving practical problems that may arise in the study of natural science disciplines and in solving applied engineering and construction problems.

3. Competencies

BPC-1. Passes the basic concepts and apply the methods of linear algebra, analytic geometry, differential and integral calculus, analysis of functions of one and several variables to solve applied problems.

4. Requirements and forms of midcourse evaluation and summative assessment

Current assessment: PIT - protection of an individual task; CW - control work; ICP - intermediate control of progress. Intermediate assessment: exam. Assessment of the level of knowledge of the student and the formation of competencies in all forms of control is carried out on a ten-point scale.