HIGHER MATHEMATICS

COURSE SYLLABUS ABSTRACT
of higher education institution
speciality

Specialty 1-25 01 07 Economics and management at the enterprise

	STUDY MODE	
	full-time	part-time (shortened program)
Year	1	1
Semester	1, 2	1, 2
Lectures, hours	84	18
Practical classes (seminars), hours	84	16
In-class control work (semester, hours)		1 (2 h) 2 (2 h)
Credit, semester	1	1
Exam, semester	2	2
Contact hours	168	38
Independent study, hours	156	286
Total course duration in hours / credit units	324/9	

1. Course outline: vector algebra and matrix calculus, analytic geometry, mathematical analysis, differential and discrete equations, numerical and power series, mathematical programming.

2. Course learning outcomes. Upon completion of the course, students will be expected to:

know*:* basics of vector calculus; methods of analytical geometry; mathematical apparatus of functions of one and many variables; differential and integral calculus; fundamentals of differential equations; numerical and power series; methods for solving extreme problems;

be able*:* solve problems of matrix algebra, analytical geometry and mathematical analysis, analyze problems with economic content; explore optimization problems by mathematical programming methods using computer technologies;

possess*:* a technique for applying the methods of matrix algebra, analytical geometry, differential and integral calculus to solving mathematical and economic problems.

3. Competencies

Generated competencies codes	Names of competencies to be formed
BPC -1	Use basic mathematical concepts and calculation methods for the analysis and modeling of economic processes

4. Requirements and forms of midcourse evaluation and summative assessment

№	Type of valuation funds	Number of sets
1	Test for the credit (electronic test)	1
2	Exam test	1
3	Individual tasks	6
4	Control work (electronic test)	3
5	In-class control work (electronic test)	2
6	Knowledge Assessment Test	21