

MATHEMATICAL METHODS AND MODELS FOR MARKETING DECISION MAKING

**COURSE SYLLABUS ABSTRACT
of higher education institution**

Speciality 1-28 01 02 – Digital Marketing

	STUDY MODE					
	full-time		Part-time		Part-time (shortened program)	
Year	3		4		3	4
Semester	5	6	7	8	6	7
Lectures, hours	34	34	6	8	4	8
Practical classes (seminars), hours	34	34	10	10	6	10
In-class test (semester, hours)			7(2 hours)	8(2 hours)	6(2 hours)	7(2 hours)
Exam, semester	5	6	7	8	6	7
Contact hours	68	68	44		36	
	136					
Independent work, hours	154		146		94	
Total course duration in hours / credit units	144/4	146/4	290/8		290/8	
	290/8					

1. Brief content of the academic discipline: obtaining by students of theoretical knowledge and practical skills of forecasting, planning and making marketing decisions using mathematical methods, models and software.

2. Learning outcomes: the learner must

know: basic concepts and approaches in the field of mathematical modeling of marketing situations; main methods of analysis and forecasting of market conditions; tasks of optimizing marketing decisions of a strategic and tactical nature at enterprises.

be able to: set and solve optimization problems that arise in the marketing activities of the enterprise; develop forecasts and optimal plans for the marketing activities of the enterprise for short, medium and long-term periods based on the use of mathematical models; solve problems of optimizing marketing decisions in conditions of certainty, uncertainty and risks;

possess: methods of forecasting demand and market conditions; tools for modeling marketing situations; methods for solving mathematically formalized problems in the field of marketing

3. Competences being formed: be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems (AC-1), be proficient in systemic and comparative analysis (AC-2), have research skills (AC-3), be able to work independently (AC-4), be proficient in interdisciplinary approach to solving problems (AC-6), be able to learn, improve their skills throughout their lives (AC 9), use the basic laws of natural sciences in their professional activities (AC-10), organize their work on a scientific basis, independently evaluate the results of their activities (AC-14), possess the qualities of citizenship (SPC-1), be capable of social interaction (SPC-2), be able to interpersonal communications (SPC-3), be capable of criticism and self-criticism (SPC-5), be able to work in a team (SPC- 6), analyze the market situation and forecast demand using mathematical and software tools (PC 1), develop a marketing strategy (define the market and segment it, select target segments, positioning and develop a marketing mix) (PC-2), plan the range and range of products, manage a trademark (brand) in order to increase sales (PC-3), develop pricing strategies, price forms and models, discount policies (PC-4), plan and organize activities to promote products and organizations with the help of advertising, public relations, personal selling and sales promotions (PC-5), create and / or optimize a system of distribution channels division of products, networks of intermediaries and / or branded trade (PC-6).

4. Requirements and forms of current and intermediate certification

The module-rating system is used. Intermediate certification: assessment of work in practical classes, tests. Current certification: exam.