DISCRETE MATHEMATICS
(name of discipline)
OUTLINE
TO THE WORKING PROGRAM OF THE DISCIPLINE

Specialization 6-05-0611-04 "Electronic Economy"

Specialization: Electronic Marketing

	Form of higher education		
	Full-time (full-time)	**Correspondence**	**Correspondence shortened**
Course	1	2	
Semester	2	3	
Lectures, hours	16	4	
Laboratory, hours	16	4	
Test, semester	2	3	
Classroom hours in the educational discipline	32	8	
Self-work, hours	76	100	
Total hours of the discipline / credit units	108/3		

1 Summary of the content of the discipline

Providing students with basic knowledge of modern discrete and applied mathematics and the formation of the fundamental basis for successful study of disciplines of the specialty.

2 Learning outcomes

The student, who has studied the discipline, must

Know: basic concepts of the theory of sets and relations; operations of algebra of logic; criteria of completeness of Boolean function systems; problems of analysis and synthesis of logical circuits; use of binary dynamic logic; basic methods of combinatorics: methods of recalculation, method of derivative functions; various graph representations and operations over graphs; ways of finite automata, methods of synthesis and minimization of abstract automata

To be able to: build discrete models of various information processes, apply combinatorial methods when solving problems on counting the number of elements in finite sets, apply various graph representations to solve practical problems.

To have skill: basic methods of work with the discrete information and to be able to apply them in professional activity; skills of mathematical modeling by means of discrete devices of information and computing processes and control processes.

3. Competencies to be formed

Learning of the given discipline should provide formation of the following competences: BPC-3: Formalize and solve applied problems in the sphere of info-communication technologies with the help of discrete mathematics methods.

4. Requirements and forms of current and intermediate attestation.

Defence of laboratory works, intermediate progress control, credit.