

Specification for the book of courses

Study program		Electrical Engineering and Computer Science		
Module		Common		
Type and level of studies		Undergraduate Academic Studies		
The name of the course		Final paper - Research Work		
Lecturer (for lectures)				
Lecturer/associate (for exercises)				
Lecturer/associate (for OFE)				
Number of ECTS	4	Course status (obligatory/elective)	Obligatory	
Prerequisites				
Application of basic, theoretical-methodological, scientific-professional and applied knowledge and methods to solve concrete problems. The student studies the problem, its structure and complexity, and on the basis of the conducted analysis, concludes the possible ways of solving it. By studying literature students are introduced to methods and engineering practice for solving similar tasks.				
Course objectives				
Training students to independently apply previously acquired knowledge from different areas they have studied to examine the structure of the given problem and its systemic analysis in order to draw conclusions about possible directions of its resolution. Through self-use of literature, students expand their knowledge by studying various methods and papers related to similar issues. In this way, students develop the ability to conduct analyzes and identify problems within the given issues. Practical application of acquired knowledge among students develops the ability to see the place and role of engineers in the selected area, the need for cooperation with other professions and teamwork.				
Course outcomes				
Training students to independently apply previously acquired knowledge from different areas they have studied to examine the structure of the given problem and its systemic analysis in order to draw conclusions about possible directions of its resolution. Through self-use of literature, students expand their knowledge by studying various methods and papers related to similar issues. In this way, students develop the ability to conduct analyzes and identify problems within the given issues. Practical application of acquired knowledge among students develops the ability to see the place and role of engineers in the selected area, the need for cooperation with other professions and teamwork.				
Course outline				
It is formed individually in accordance with the needs of a concrete graduate-master work, its complexity and structure. According to his affinities and preferences, the student chooses the field of study work or the subject teacher from the list of teachers in the study program, which defines the specific task. The student studies professional literature, professional and scientific papers dealing with similar topics, performs analyzes in order to find a solution for a concrete task, or perform certain experiments in the laboratory. The study includes active monitoring of primary knowledge, organization and performance of experiments, numerical simulations and statistical data processing, preparation of seminar work from the narrow scientific-scientific field, which is the topic of independent research work.				
Theoretical teaching				
It is formed individually in accordance with the needs of a concrete graduate-master work, its complexity and structure. According to his affinities and preferences, the student chooses the field of study work or the subject teacher from the list of teachers in the study program, which defines the specific task. The student studies professional literature, professional and scientific papers dealing with similar topics, performs analyzes in order to find a solution for a concrete task, or perform certain experiments in the laboratory. The study includes active monitoring of primary knowledge, organization and performance of experiments, numerical simulations and statistical data processing, preparation of seminar work from the narrow scientific-scientific field, which is the topic of independent research work.				
Practical teaching (exercises, OFE, study and research)				
Textbooks/references				
1				
2				
3				
4				
5				
Number of classes of active education per week during semester/trimester/year				
Lectures	Exercises	OFE	Study and research work	Other classes
			7	
Teaching methods				
Grade (maximum number of points 100)				
Pre-exam duties		Points	Final exam	Points
Activity during lectures			Written exam	
Exercises			Oral exam	50
Colloquia				
Projects		50		