Discipline

Automation of Infromation and Control Processes

Higher Education Level	*first (bachelor)*
Status of Discipline	*selective*
Volume	150 hours / 5 credits ECTS
Language	*English*
Subject of studying	The task of the discipline is to acquire the skills of structural, target, functional, information and object-oriented analysis of various organizational systems from the point of view of management automation problems, as well as the acquisition of skills in the use of multi-criteria selection methods in the design of automated management systems. Emphasis is placed on functional modeling of systems based on IDEF0, IDEF1x technology; mastery of the UML language and CASE design tools, study of decision-making methods in the conditions of a multi-criteria environment
Why it is interesting/should be studied (purpose)	The purpose of the educational discipline is to provide students with the basic knowledge and skills necessary for the analysis and design of means of automating information and management processes in complex systems of the technical and organizational spheres
How to use acquired knowledge and skills (competencies)	1. The ability to use basic knowledge of the main national, European and international legal acts in the field of automation systems of industrial facilities in order to constantly improve one's professional activity. 2. The ability to use the achievements of science and technology in professional activities, to argue the choice of methods for solving specialized tasks in the analysis and synthesis of computer automation systems. 3. The ability to implement and use hardware and software-algorithmic tools to increase the accuracy and reliability of industrial automation systems
Prerequisites	Prerequisites for studying this discipline: Higher mathematics. Fundamentals of modeling. Mathematical basis of digital systems. Methods of computing and computer programming. Object-oriented design of automation systems
Co-Requisites	The discipline supports the following courses: Design of control systems. Digital control systems. Sections of the bachelor's qualification work
Type of classes, Testing	Types of classes: lectures, laboratory classes Forms of obtaining education: full-time, part-time Forms of testing: exam
Department	301 – Aircraft Control Systems
Faculty	№ 3 – Aircraft Control Systems

Teacher		Name	**Olena Havrylenko**
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Links to electronic course materials	**https://drive .google.com/drive/folders/1QsAY mKl mXxTPoVx 8znUdkIa9LMj5JYRt**		
Link to the syllabus	https://khai.edu/files/uploads/vibirkovi/bakalavri/div3-2024/s_b_nmk-2_automation_of_inf_and_manag_proc_div-3.pdf		