




Discipline

Automation of Information and Control Processes

Higher Education Level	<i>first (bachelor)</i>
Status of Discipline	<i>selective</i>
Volume	150 hours / 5 credits ECTS
Language	<i>English</i>
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)	<ol style="list-style-type: none"> 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	<p>Prerequisites for studying this discipline:</p> <p>Higher mathematics. Fundamentals of modeling. Mathematical basis of digital systems. Methods of computing and computer programming. Object-oriented design of automation systems</p>
Co-Requisites	<p>The discipline supports the following courses:</p> <p>Design of control systems. Digital control systems. Sections of the bachelor's qualification work</p>
Type of classes, Testing	<p>Types of classes: lectures, laboratory classes</p> <p>Forms of obtaining education: full-time, part-time</p> <p>Forms of testing: exam</p>
Department	301 – Aircraft Control Systems
Faculty	№ 3 – Aircraft Control Systems

Teacher		Name	Olena Havrylenko
		Position	Docent of dept. 301
		Academic status	Docent
		Degree	Candidate of technical science
		e-mail	o.havrylenko@khai.edu
Links to electronic course materials	https://drive.google.com/drive/folders/10sAYmKlmXxTPoVx8znUdkIa9LMj5JYRt		
Link to the syllabus			