

SIMULATION AND OPTIMIZATION OF BUSINESS PROCESSES IN INDUSTRY

ANNOTATION

TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-25 80 01 «Economics»

Profiling «Economic development of industrial and transport organizations»

	Form of higher education	
	Full-time (daytime)	Part-time (abbreviated)
Course	1	1
Semester	1	1
Lectures, hours	18	4
Practical (seminar) classes, hours	18	4
Abstract (semester)	-	1
Pass, semester	1	1
Classroom hours per academic discipline	36	8
Independent work, hours	72	100
Total hours per academic discipline / credit units	108/3	

1. **Brief content of the discipline:** essence and basic concepts of discipline; graphical methods for modeling and managing production business processes; network methods for modeling and managing business processes in industry; business process modeling tools.

2. **Learning outcomes. As a result of mastering the academic discipline, the student must:**

- **know:** the main business processes in the organization; technology, methods and tools for improving business processes; principles of construction, structure and technology of using software tools for modeling SADT (IDEF0); IDEF3 process modeling; modeling DFD data flows; ARIS modeling of business processes of various types of enterprise activities (production and technological, organizational and managerial; design and development, research and development);

- **be ability to:** conduct research and analysis of business systems in order to identify business processes; carry out the description of business processes in the form of appropriate formal models; conduct research and analysis of business processes in order to formulate proposals for their improvement; determine the optimal parameters of business processes for the implementation of measures to improve the efficiency of business processes in industry;

- **possess:** methods for modeling business processes in industry; approaches to solving problems of analysis and parametric optimization of business processes in industry; business process modeling tools.

3. **Formed competencies:** SC -5 be able to model and optimize business processes in industry.

4. **Requirements and forms of current and intermediate certification.** Modular rating system is used. Intermediate certification: protection of an individual task and pass. Current certification: pass.