ECONOMICS OF PRODUCTION
(course title)

COURSE SYLLABUS ABSTRACT
of higher education institution speciality

1-70 02 01 Industrial and Civil Engineering

(speciality code and name)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	4	5	3
Semester	7	9	5
Lectures, hours	30	8	-
Practical classes (seminars), hours	30	8	-
Course paper, semester	7 (30/1)	9 (30/1)	5 (30/1)
Exam, semester	7	9	-
Contact hours	60	16	2
Independent study, hours	40	84	-
Total course duration in hours / credit units	100/3		-

1. Course outline

The purpose of the discipline is the acquisition by students of comprehensive knowledge about the principles and laws of the functioning of a construction organization as an economic system, about the methods of planning and managing the activities of the enterprise in order to increase its efficiency. The objectives of the discipline are to study the features of the current stage of the development of the country's economy, to get students the necessary theoretical knowledge on the economic aspects of modern construction production, to contribute to the development of sustainable practical skills in calculating the price of construction products, the ability to competently analyze and evaluate real production situations, to justify proposed solutions aimed at improving the economic efficiency of construction and installation works, as well as in the development of systematic economic thinking.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know: features of the current stage of development of the country's economy; the main directions and prospects of economic development of the construction complex of the Republic of Belarus; regulatory and legislative framework in the field of economics; the essence of the main economic categories and concepts (fixed assets, working capital, material and labor resources, labor productivity, cost, profit, profitability, economic efficiency, etc.); economic fundamentals of production and economic activities of organizations; scientific foundations and ways of increasing production efficiency, saving all types of resources; the essence of economic relations of construction participants.

be able to: use regulatory and technical documentation; make calculations for the work performed; perform technical and economic calculations and economically justify the decisions made within the framework of future professional activity; perform calculations of the economic efficiency of investments in construction, etc.; form a system of indicators and use modern technologies for collecting and processing information in order to evaluate the activities of the organization; analyze the production and economic (economic) activities of its division and use the results of the analysis.

possess: skills of collecting and processing the necessary data necessary for the development of plans and justification of management decisions; methods of assessing the availability, movement, efficiency of the use of the main economic resources of the enterprise; methods of depreciation of fixed assets; methods of calculating the economic efficiency of the main aspects of the production and economic activities of the enterprise; methods of evaluating the activities of the organization; methods of identifying reserves to improve the efficiency of the organization.

3. Competencies

Codes of competencies	The names of the competencies being formed
AC-1	Be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems
AC-2	Possess system and comparative analysis
AC-3	Possess research skills
AC-4	Be able to work independently
AC-5	Be able to generate new ideas (have creativity)
AC-6	Possess an interdisciplinary approach to solving problems
AC-7	Have skills related to the use of technical means, information management and computer work
AC-8	Have oral and written communication skills
AC-9	Be able to study, improve their skills throughout their lives
SPC-1	Possess the qualities of citizenship
SPC -2	Be capable of social interaction
SPC -3	Have the ability to interpersonal communication
SPC -4	Possess health-saving skills
SPC-5	Be capable of criticism and self-criticism
SPC -6	Be able to work in a team
PC-10	Design structural schemes of buildings and structures of various functional purposes as part of a group of specialists or independently
PC-11	Develop projects for the organization of construction, projects for the production of works and technological maps for certain types of work
PC-12	Perform calculations and construction of building structures using computer-aided design methods
PC-13	To evaluate the effectiveness of the use of various means of mechanization in the design of technology and organization of construction and installation works
PC-14	To determine the current directions of scientific research in the field of construction in order to introduce effective building materials, structures and technologies into practice
PC-15	Organize work on the preparation of abstracts, scientific articles and applications for inventions in the field of industrial and civil engineering
PC-16	To carry out patent and information search, to assess the patentability and patent purity of technical solutions in the field of industrial and civil engineering To carry out patent and information search, to assess the patentability and patent purity of technical solutions in the field of industrial and civil engineering
PC-17	To carry out innovation and inventive activities in the field of construction as part of a team of specialists or independently
PC-18	Organize and carry out production activities for the construction of buildings and structures in accordance with the project documentation and current regulatory documents
PC-19	To set tasks and reasonably choose methods for optimizing production processes in the construction of buildings and structures
PC-20	Analyze operational information about the processes of work at the facility and develop solutions for their optimization
PC-21	To carry out operational quality control of construction and installation works in accordance with the design and regulatory documentation
PC-22	Formulate and implement measures to improve the quality of construction products, reduce energy intensity and material costs when performing construction and installation work
PC-23	Monitor compliance with occupational health and safety standards during the construction of buildings and structures
PC-24	To search, systematize and analyze information on the prospects for the development of the construction industry, innovative technologies, projects and solutions
PC-25	Define the goals of innovation and how to achieve them in the field of construction
PC-26	Work with scientific, technical, legal literature in the field of industrial and civil engineering
PC-27	Develop a feasibility study of the effectiveness of new structural solutions of buildings and structures
PC-28	Conduct experimental studies of new building structures and materials in order to introduce them into production

4. Requirements and forms of midcourse evaluation and summative assessment.

The following forms are used to diagnose competencies:
- written;
- oral-written.

To assess the level of knowledge of students, the following diagnostic tools are used:
- oral and written survey during practical classes;
- carrying out control work on individual topics;
- protection of completed individual tasks;
- interview during individual and group consultations;
- term papers with their oral defense;
- passing the exam.