

TECHNOLOGIES OF COLLECTIVE WORK ON THE PROJECT

Credits and number of hours: 3 ECTS; 90 hours: 16 lectures, 26 laboratory, 2 hours of consultation, 46 independent work; exam

I. Description of the discipline

The discipline "Technologies of collective work on the project" is a mandatory discipline of the cycle of professional training of bachelors. The discipline has a practical focus on solving significant research (creative) problems (tasks) that require integrated knowledge, research search for their solution, structuring the content of the project, the use of research methods: identifying the research problems, hypothesizing their solution, discussion of research methods, registration of final results, analysis of the received data, summarizing, correction, formulation of conclusions and decision-making.

II. The purpose and objectives of the discipline

The purpose of the discipline: is to form in higher education knowledge and skills of modern project approach, study of technologies and tools for teamwork, project management methodology, prioritization and work with information, assessing the effectiveness of project management, teamwork, risk assessment, control.

The objectives of the discipline are to acquire the following general and special competencies:

- GC2. Ability to apply knowledge in practical situations.
- GC5. Ability to communicate in a foreign language.
- GC8. Ability to generate new ideas (creativity).
- GC9. Ability to work in a team.
- GC10. Ability to be critical and self-critical.
- GC11. Ability to make informed decisions.
- GC12. Ability to evaluate and ensure the quality of work performed.
- SC6. Ability to think systematically, apply systems analysis methodology to study complex problems of different nature, methods of formalizing and solving systemic problems that have conflicting goals, uncertainties and risks.
- SC10. Ability to apply methodologies, technologies and tools to manage the life cycle of information and software systems, information technology products and services in accordance with customer requirements.

SC15. Ability to analyze and functional modeling of business processes, construction and practical application of functional models of organizational, economic and production-technical systems, methods of risk assessment of their design.

SC17. Knowledge of basic principles, processes and procedures of IT project management.

III. Learning outcomes

PR8. Use the methodology of system analysis of objects, processes and systems for the tasks of analysis, forecasting, management and design of dynamic processes in macroeconomic, technical, technological and financial objects.

PR11. Have the skills to manage the life cycle of software, products and services of information technology in accordance with the requirements and restrictions of the customer, be able to develop project documentation (feasibility study, terms of reference, business plan, agreement, contract, contract).

PR17. Ability to manage IT projects, work in a team and apply project management software systems; ability to manage risks, prevent them in IT projects.

IV. Curriculum (discipline structure)

№	Тема дисципліни
1	Introduction to the theory of collective work on a project .. The difference between artificial and collective intelligence
2	The main stages of collective work on the project. Involvement of artificial intelligence in overcoming modern challenges
3	Typical cases of collective intelligence. Team selection. The main issues that arise during project development,
4	Challenge definition. Challenge chart, a stockholders map issue. Challenge cover
5	Data, information and ideas collection
6	Resource mobilization
7	Methods of combining, overcoming prejudices, interpretation and visualization of generated data. Collective decision making
8	Methods and techniques for prototyping changes and testing