



Silhouette of the educational component

Program of the discipline



Innovative entrepreneurship and startup project management

Code and name of the specialty

113 Applied mathematics

Institute

Computer science and information technology

Educational program

Intelligent data analysis

Department

Computer math and data analysis

Level of education

Master's level

Type of discipline

General, Mandatory

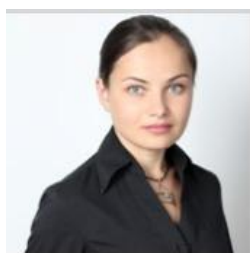
Semester

1

Language of instruction

English

Teachers, developers



Protsai Nataliia

Nataliia.Protsai@khpi.edu.ua

PhD, Associate Associate Professor, Ph.D., Associate Professor of the Department of KMAD NTU "KhPI". Author and co-author of more than 20 scientific and scientific-methodological works. Leading lecturer in the course "Innovative Entrepreneurship and Startup Project Management", "Project", "Methods and technologies of working with Big Data", "Mathematical models and methods of knowledge representation"

[More about the lecturer on the department's website](#)



Serhiy Kovtun

kovtun.serhii.a@gmail.com

Postgraduate student

General information

Abstracts.

The course "Innovative Entrepreneurship and Startup Project Management" is aimed at studying the key aspects of creating and managing successful startups in the modern business environment. Participants in this course will have the opportunity to learn the strategies and tools necessary to develop and implement innovative business ideas in practice.

Purpose and objectives of the discipline

The purpose of the course "Innovative Entrepreneurship and Startup Project Management" is to provide participants with a deep understanding of the processes of creating and developing successful startups, as well as to develop project management skills in the innovation industry. This discipline aims to prepare students for the challenges and opportunities offered by innovative entrepreneurship and provides them with the tools and knowledge to achieve successful results in the world of startups and new technologies.

Class format

Lectures, practical classes, consultations. The final control is a test.

Competencies

GC1: Ability to exercise rights and responsibilities as a member of society, understanding the values of a civil (free democratic) society and the need for its sustainable development, the supremacy of law, and human rights and freedoms in Ukraine.

GC3: Ability for continuous learning, acquiring new knowledge and skills, including in areas other than professional ones.

GC4: Ability to identify, pose, and solve problems in professional activities.

GC8: Effective communication skills, taking into account the goals and situation of communication.

GC 9 Ability to prepare and make public presentations of the results obtained, prepare scientific and technical publications based on the results of research, including in a foreign language.

GC 10 Ability to carry out professional research, design and production activities in an international environment.

GC 11 Ability to interact socially and professionally and cooperate in a team, teamwork.

SC6: Ability to organize the work of a team of performers to conduct research and project development, make reasonable and economically justified organizational and managerial decisions.

SC7: Ability to search, study, and analyze scientific and technical information, domestic and foreign experience related to the application of mathematical methods for the study of processes and systems.

SC8: Ability to participate in the preparation of scientific and technical reports on completed project or research work and in the implementation of the results of conducted research and development.

SC9: Ability for effective professional written and oral technical and scientific communication in the subject area in Ukrainian and one of the common European languages.

Learning outcomes

LO9: Demonstrate interpersonal skills, effective communication with specialists and society, ability to work in groups and teams, conflict and stress management.

LO11: Demonstrate skills of professional communication, oral and written communication in Ukrainian and at least one other European language.

Scope of the discipline

The total volume of the discipline is 90 hours (3 ECTS credits): lectures - 16 hours, practical classes - 16 hours, independent work - 58 hours.

Prerequisites for studying the discipline (prerequisites)

To successfully complete the course, you must have knowledge and practical skills in computer science and mathematics.

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Features of the discipline, teaching methods and technologies

In practical classes and during independent work, a project approach and teamwork, peer-to-peer learning, gamification of the educational process, case analysis, and appropriate reflection are used. Training work and brainstorming sessions, self-assessment and mutual reflection during project work are constantly conducted.

Program of the discipline

Topics of lecture classes

Topic 1: Introduction to innovative entrepreneurship and startups

An overview of the basic concepts and principles of innovative entrepreneurship.

The importance of interaction and a common goal to achieve startup goals.

Topic 2. Creating a startup: from idea to realization

The process of forming a business idea and preparing to create a startup.

Identifying the target audience and assessing market potential.

Topic 3. Managing the resources of an innovation project

Methods of managing innovative projects and resources.

Allocation of human, technical, and financial resources for a startup.

Topic 4. Marketing and startup strategy

Developing a marketing plan for a startup.

Defining a development strategy and market positioning.

Topic 5. Financial management and appropriation of investments

Managing startup finances and developing financial forecasts.

Methods of attracting investment for a startup.

Topic 6: Innovative development and technological infrastructure

The impact of innovative development on business processes.

The role of technological infrastructure in the startup ecosystem.

Topic 7. Briefly about hiring the right people.

Topics of practical classes

Topic 1: Implementation of tools for planning and executing tasks in a startup

Use of modern tools for task and project management.

An overview of collaboration technologies to increase productivity.

Topic 2. Stimulation and motivation in a startup team

Consideration of individual and group methods of stimulation and motivation of startup project participants.

Use of tools to support motivation in teamwork.

Topic 3. Ensuring the effectiveness of a startup team in a changing environment

Researching strategies for adapting and maintaining the effectiveness of a startup team in times of change and challenge.

Consideration of methods for assessing and developing individual and group skills of team members.

Topic 4. Developing a marketing plan for a startup

The process of creating a strategic marketing plan for a startup project.

Identifying the target audience and developing marketing strategies.

Topic 5. Marketing strategy and positioning of a startup

Study of methods for determining competitive advantage and market positioning.

Development of marketing campaigns and communication strategy for a startup.

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Topic 6. Customer acquisition and management in a startup environment
Strategies for acquiring and retaining customers in a startup.
Use of marketing tools to attract new users and increase loyalty.

Topics of laboratory work

Laboratory work within the discipline is not provided

Independent work

The course provides for the study of additional topics within the course. The results of the work are formalized in the relevant documentation with all the necessary references. Students are also recommended additional materials (videos and articles) for independent study and analysis

Literature and educational materials

1. "Project Management: A Systems Approach to Planning, Scheduling, and Controlling" by Harold Kerzner, March 2022, 880 Pages. <https://www.wiley.com/en-us/Project+Management%3A+A+Systems+Approach+to+Planning%2C+Scheduling%2C+and+Controlling%2C+13th+Edition-p-9781119805373>
2. "The Fast Forward MBA in Project Management: The Comprehensive, Easy-to-Read Handbook for Beginners and Pros, 6th Edition" by Eric Verzuh, January 2021, 544 Pages, <https://www.wiley.com/en-us/The+Fast+Forward+MBA+in+Project+Management:+The+Comprehensive,+Easy+to+Read+Handbook+for+Beginners+and+Pros,+6th+Edition-p-9781119700760>
3. "A Project Manager's Book of Templates" by Cynthia Snyder Dionisio, November 2022, 256 Pages. <https://www.wiley.com/en-us/A+Project+Manager%27s+Book+of+Templates-p-9781119864516>
4. "Project Management for the Unofficial Project Manager" by Kory Kogon, Suzette Blakemore, and James Wood, 2019, 240 Pages, <https://booklion.lviv.ua/en/keruvannia-proektamy-dlia-neofitsiinykh-proekt-menedzheriv>
5. "The Project Manager's Guide to Mastering Agile: Principles and Practices for an Adaptive Approach" by Charles G. Cobb, March 2023, 608 Pages, <https://www.wiley.com/en-br/The+Project+Manager's+Guide+to+Mastering+Agile:+Principles+and+Practices+for+an+Adaptive+Approach,+2nd+Edition-p-9781119931355>
6. "Effective Project Management: Traditional, Agile, Extreme" by Robert K. Wysocki
7. "Project Management in Practice" by Samuel J. Mantel Jr. Meredith, Scott M. Shafer, and Margaret M. Sutton 2016 <https://www.perlego.com/book/1646054/project-management-in-practice-pdf?>
8. "The Project Management Tool Kit: 100 Tips and Techniques for Getting the Job Done Right" by Tom Kendrick, 2017
9. "Intercom on Product Management" by Intecom 2017

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Evaluation system

Criteria for assessing student performance and distribution of points

100% of the final grade consists of the results of the evaluation in the form of a project defense (55%) and ongoing evaluation (45%).

The current evaluation consists of mutual evaluation of students among themselves, self-evaluation and evaluation of the head of the CP

Rating scale

The sum of points	National assessment	ECTS
90-100	Excellent	A
82-89	Good	B
75-81	Good	C
64-74	Satisfactory	D
60-63	Satisfactory	E
35-59	Unsatisfactory (further study is required)	FX
1-34	Unsatisfactory (requires repetition of the course)	F

Academic ethics standards and course policy

The student must adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KPI": show discipline, good manners, goodwill, honesty, responsibility. Conflict situations should be openly discussed in study groups with the teacher, and if it is impossible to resolve the conflict, they should be brought to the attention of the Institute's management.

Regulatory and legal support for the implementation of the principles of academic integrity of NTU "KPI" is available on the website: <http://blogs.kpi.kharkov.ua/v2/nv/akademichna-dobrochesnist/>

Approval

Silabus has been approved

Date of approval, signature _____, **Head of the Department**
31.08.2023

Olena AKHIEZER

program

Date of approval, signature _____, **Guarantor of the educational**

31.08.2023

Leonid LYUBCHYK

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