



## Project “Enhancing capacity of universities to initiate and to participate in clusters development on innovation and sustainability principles” (UniClaD)

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# 1 MECHANISM FOR REGULATING THE INNOVATIVE DEVELOPMENT OF THE NATIONAL ECONOMY ON THE BASIS OF SUSTAINABILITY

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## 2 Learning outcomes of the whole course

The main tasks of studying the academic discipline are theoretical and practical training of students on the following issues: studying the essence and significance of the process of regulation of innovative development; mastering theoretical knowledge and practical skills in developing a strategy to ensure the innovative development of subjects of the national economy; acquiring the skills to substantiate and use innovative approaches in the management of subjects of innovative development of the national economy; determine the role and place of innovative management in the system of strategic management of economic activity within the state; to find out the theoretical foundations of innovative management in the field of financial and economic security of the national economy; to investigate the information provision of innovative management; analyze the organizational foundations of innovation management; determine the specifics of motivation and stimulation of innovative development of subjects of the national economy; characterize and develop a management strategy for the innovative development of the national economy; determine the optimal structure of sources of funding for innovative activities; to analyze methodological support for monitoring and evaluation of the implementation of the management strategy of innovative development; find out the peculiarities of managing threats to innovative development; determine the directions of the mechanism of state regulation of the innovative development of the national economy based on the principles of stability and sustainability.

The student is able



**know:**

- theoretical and methodological principles of innovation management as a mechanism of effective management of innovations;
- the system of regulatory and legal support for innovative development in Ukraine and its problems;
- types of innovations and their main characteristics;
- peculiarities of implementation of the levers of the special economic toolkit of innovative management;
- the nature of innovation processes at different stages of the life cycle of innovation;
- principles of modern management of innovative processes;
- the mechanism of formation of innovative strategies and their connection with the general strategy of the development of the national economy;
- general principles of organization and implementation of innovative management in foreign countries;
- modern concepts of cluster development of territories;
- Sustainable Development Goals (SDGs) (Global Millennium Goals).

**be able:**

- on the basis of the use of general scientific and special methods, distinguish the innovation management system into separate subsystems in order to identify problems and find ways to increase the efficiency of its functioning;
- to develop a set of specific tools for regulating innovative development, taking into account their features, situational characteristics of a single territory within the national economy;
- draw up innovative strategies for the development of subjects of the national economy using strategic management methods and find optimal levers for their implementation based on the practical use of special economic tools of innovative management;
- to build logical and structural schemes of information and investment support for innovative projects, to look for their weak links and to develop proposals for improving subsystems of support for innovative projects;
- conduct economic and financial substantiation of the selection of certain innovative projects using the methodology of financial and project analyses;
- apply the acquired theoretical knowledge to solve practical problems and the ability to meaningfully interpret the obtained results;
- to initiate innovative projects that make it possible to rethink the existing and provide a significant increase in new systemic knowledge and/or modernization of professional practice, and the solution of complex socially significant problems using research and innovation methods and demonstrate leadership and full autonomy during their implementation;
- to ensure the innovative development of economic systems based on the assessment of their innovative potential, justification and implementation of effective management solutions for the development of the economy based on innovative principles and using the positive experience of applying the concepts of territorial clustering.



### 3 Overall structure of the course

Unit	Form of activity	Form of activities	Task
Unit 1. The essence and basic concepts of the theory of innovation and innovation management (2 hours)	Lecture, independent work	<u>Analytical work</u> with articles included in the scientometric databases Scopus , WoS on the topic of the lectures, their abstracts up to 1 page each	Essay
Unit 2. State regulation of innovative processes in the national economy (4 hours)	Lecture, independent work		Essay
Unit 3. Strategic management of innovative development of the national economy (2 hours)	Lecture, discussion	Presentation work on the presentation of good practices in the implementation of projects aimed at the innovative development of the national economy. Work on improving projects (1 good practice before each lesson)	Cases
Unit 4. Peculiarities of stakeholder analysis and management in conditions of deepening innovation processes (4 hours)	Lecture, discussion		Cases
Unit 5. Strategies for ensuring the innovative vector of the development of the national economy (4 hours)	Lecture, discussion		Cases
Unit 6. Innovative processes in the national economy (2 hours)	Lecture, discussion		Cases
Unit 7. Management of innovative projects : creation and support (6 hours)	Lecture, discussion		Cases
Unit 8. Innovative activity: good / bad practices (7 hours)	Simulation	<u>Simulation game</u> : Development, implementation and monitoring of an investment project aimed at innovative development of individual territorial units of the national economy	Project
Unit 9. Provision of innovative forms of management of the innovative development of the national economy (4 hours)	Simulation		Project
Unit 10. Modern innovative methods and tools for ensuring the innovative development of the national economy (4 hours)	Simulation		Project



## 4 Unit description

### 4.1 Description of Unit 1

<p><b>Unit 1. The essence and basic concepts of the theory of innovation and innovation management</b></p>	<p><b>Estimated duration for students:</b> 120 minutes</p>
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Basic concepts of innovation.</li> <li>• Classification of innovations.</li> <li>• The essence and content of innovative management.</li> <li>• Functions of innovative management.</li> <li>• Managers in the field of innovation.</li> <li>• Decisions in innovative management and methods of their adoption.</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know theoretical and methodological principles of innovation management as a mechanism of effective management of innovations; be able on the basis of the use of general scientific and special methods, distinguish the innovation management system into separate subsystems in order to identify problems and find ways to increase the efficiency of its functioning.</p>

#### Director's plan

Analytical work with articles included in the scientometric databases Scopus , WoS on the topic of the lectures, their abstracts up to 1 page each

#### Assessment / Certificate of Performance

Self-assessment quiz, survey,



## 4.2 Description of Unit 2

<p><b>Unit 2. State regulation of innovative processes in the national economy</b></p>	<p><b>Estimated duration for students:</b> 240 minutes</p>
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• The role of the state in ensuring innovation processes.</li> <li>• The importance of innovative activity for the formation of modern</li> <li>• Models of economic growth of the national economy of Ukraine.</li> <li>• Ways of state influence on the efficiency of innovation processes. Methods of state support for innovative activity.</li> <li>• National innovation system. The current state and prospects for the development of innovative activity in Ukraine</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know the system of regulatory and legal support for innovative development in Ukraine and its problems; be able to develop a set of specific tools for regulating innovative development, taking into account their features, situational characteristics of a single territory within the national economy.</p>

### Director's plan

Analytical work with articles included in the scientometric databases Scopus , WoS on the topic of the lectures, their abstracts up to 1 page each

### Assessment / Certificate of Performance

Self-assessment quiz, survey,

## 4.3 Description of Unit 3

<p><b>Unit 3. Strategic management of innovative development of the national economy</b></p>	<p><b>Estimated duration for students:</b> 120 minutes</p>
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• The concept of management of innovative development</li> <li>• Principles of formation of the organizational and economic mechanism of management of innovative development</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know types of innovations and their main characteristics; be able to draw up innovative strategies for the development of subjects of the national economy using strategic management methods and find optimal levers for their implementation based on the practical use of special economic tools of innovative</p>



	management.

### Director's plan

Presentation work on the presentation of good practices in the implementation of projects aimed at the innovative development of the national economy using video examples. Work on improving projects

### Assessment / Certificate of Performance

Self-assessment quiz, survey, project

## 4.4 Description of Unit 4

<b>Unit 4. Peculiarities of stakeholder analysis and management in conditions of deepening innovation processes</b>	<b>Estimated duration for students:</b> 240 minutes
<b>Content:</b> <ul style="list-style-type: none"> <li>• Methodological foundations of efficiency assessment</li> <li>• Assessment of feasibility of investments in risk conditions</li> <li>• Methodological foundations of innovative risk assessment</li> <li>• Comprehensive evaluation of the effectiveness of innovative activity</li> </ul>	<b>Competences:</b> The learner is able to know peculiarities of implementation of the levers of the special economic toolkit of innovative management; be able to build logical and structural schemes of information and investment support for innovative projects, to look for their weak links and to develop proposals for improving subsystems of support for innovative projects.

### Director's plan

Presentation work on the presentation of good practices in the implementation of projects aimed at the innovative development of the national economy using video examples. Work on improving projects.

### Assessment / Certificate of Performance

Self-assessment quiz, survey, project

## 4.5 Description of Unit 5

<b>Unit 5. Strategies for ensuring the innovative vector of the development of</b>	<b>Estimated duration for students:</b> 240 minutes
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<b>the national economy</b>	
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• The essence of the strategy of innovative activity.</li> <li>• Stages of developing an innovative strategy.</li> <li>• The process of implementing and implementing an innovative strategy.</li> <li>• Organization of management of innovative activities.</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know peculiarities of implementation of the levers of the special economic toolkit of innovative management; be able to build logical and structural schemes of information and investment support for innovative projects, to look for their weak links and to develop proposals for improving subsystems of support for innovative projects.</p>

### Director's plan

Presentation work on the presentation of good practices in the implementation of projects aimed at the innovative development of the national economy using video examples. Work on improving projects.

### Assessment / Certificate of Performance

Self-assessment quiz, survey, project

## 4.6 Description of Unit

<p><b>Unit 6. Innovative processes in the national economy</b></p>	<p><b>Estimated duration for students:</b> 120 minutes</p>
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Model of the innovation process: stages, stages, performers.</li> <li>• Cybernetic model of the innovation process.</li> <li>• Modified model of innovative development of the enterprise.</li> <li>• Interrelationship of technological development, marketing and production processes.</li> <li>• Innovation as a process of complex interactions in strategic conditions development and formation of the competitive environment of the enterprise.</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know the nature of innovation processes at different stages of the life cycle of innovation; principles of modern management of innovative processes.</p>



### Director's plan

Presentation work on the presentation of good practices in the implementation of projects aimed at the innovative development of the national economy using video examples. Work on improving projects.

### Assessment / Certificate of Performance

Self-assessment quiz, survey, project

## 4.7 Description of Unit

<b>Unit 7. Management of innovative projects : creation and support</b>	<b>Estimated duration for students:</b> 360 minutes
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• The essence and main types of innovative projects.</li> <li>• Justification of the feasibility of implementing an innovative project.</li> <li>• Monitoring of the innovative project and its assessment methods.</li> <li>• Methods of evaluating the effectiveness of innovative projects</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know principles of modern management of innovative processes; the mechanism of formation of innovative strategies and their connection with the general strategy of the development of the national economy; be able to conduct economic and financial substantiation of the selection of certain innovative projects using the methodology of financial and project analyses; apply the acquired theoretical knowledge to solve practical problems and the ability to meaningfully interpret the obtained results</p>

### Director's plan

Presentation work on the presentation of good practices in the implementation of projects aimed at the innovative development of the national economy using video examples. Work on improving projects.

### Assessment / Certificate of Performance

Reflection on good practices of implementation of innovative projects based on stability and sustainability, including the experience of using clustering tools





## 4.8 Description of Unit

<p><b>Unit 8. Innovative activity: good / bad practices</b></p>	<p><b>Estimated duration for students:</b> 420 minutes</p>
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• The European experience (Austria, Italy, Spain, Lithuania, Poland).</li> <li>• American experience.</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know the mechanism of formation of innovative strategies and their connection with the general strategy of the development of the national economy; general principles of organization and implementation of innovative management in foreign countries; modern concepts of cluster development of territories; Sustainable Development Goals (SDGs) (Global Millennium Goals); be able to initiate innovative projects that make it possible to rethink the existing and provide a significant increase in new systemic knowledge and/or modernization of professional practice, and the solution of complex socially significant problems using research and innovation methods and demonstrate leadership and full autonomy during their implementation; to ensure the innovative development of economic systems based on the assessment of their innovative potential, justification and implementation of effective management solutions for the development of the economy based on innovative principles and using the positive experience of applying the concepts of territorial clustering</p>

### Director's plan

Video example on each practice (good + bad experience). Group Work in simulation type.

### Assessment / Certificate of Performance

Development, implementation and monitoring of an investment project aimed at innovative development of individual territorial units of the national economy



## 4.9 Description of Unit

<p><b>Unit 9. Provision of innovative forms of management of the innovative development of the national economy</b></p>	<p><b>Estimated duration for students:</b> 240 minutes</p>
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Modern organizational forms of implementation of innovations.</li> <li>• Market subjects of innovative activity.</li> <li>• Organizational forms of integration of science and production</li> <li>• International scientific and technical cooperation.</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know the mechanism of formation of innovative strategies and their connection with the general strategy of the development of the national economy; general principles of organization and implementation of innovative management in foreign countries; modern concepts of cluster development of territories; Sustainable Development Goals (SDGs) (Global Millennium Goals); be able to initiate innovative projects that make it possible to rethink the existing and provide a significant increase in new systemic knowledge and/or modernization of professional practice, and the solution of complex socially significant problems using research and innovation methods and demonstrate leadership and full autonomy during their implementation; to ensure the innovative development of economic systems based on the assessment of their innovative potential, justification and implementation of effective management solutions for the development of the economy based on innovative principles and using the positive experience of applying the concepts of territorial clustering</p>

### Director's plan

Group Work in simulation type

### Assessment / Certificate of Performance

Development, implementation and monitoring of an investment project aimed at innovative development of individual territorial units of the national economy



## 4.10 Description of Unit

<p><b>Unit 10. Modern innovative methods and tools for ensuring the innovative development of the national economy</b></p>	<p><b>Estimated duration for students:</b> 240 minutes</p>
<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Practical principles of innovation monitoring</li> <li>• Analysis of the effectiveness of scientific, technological and innovative activities</li> <li>• Ensuring innovative development of the enterprise on the basis of stability and sustainability</li> <li>• Prospects for the development of the enterprise's innovative activity in the context of the Global Development Goals</li> </ul>	<p><b>Competences:</b></p> <p>The learner is able to know the mechanism of formation of innovative strategies and their connection with the general strategy of the development of the national economy; general principles of organization and implementation of innovative management in foreign countries; modern concepts of cluster development of territories; Sustainable Development Goals (SDGs) (Global Millennium Goals); be able to initiate innovative projects that make it possible to rethink the existing and provide a significant increase in new systemic knowledge and/or modernization of professional practice, and the solution of complex socially significant problems using research and innovation methods and demonstrate leadership and full autonomy during their implementation; to ensure the innovative development of economic systems based on the assessment of their innovative potential, justification and implementation of effective management solutions for the development of the economy based on innovative principles and using the positive experience of applying the concepts of territorial clustering</p>

### Director's plan

Group Work in simulation type

### Assessment / Certificate of Performance

Development, implementation and monitoring of an investment project aimed at innovative development of individual territorial units of the national economy