

## COURSE GUIDE

<u>Subject name</u>	<b>Process and product innovation</b>
<u>Course of study</u>	<b>Quality and Production Management</b>
<u>The form of study</u>	<b>Full-time</b>
<u>Level of qualification</u>	<b>First</b>
<u>Year</u>	<b>IV</b>
<u>Semester</u>	<b>VII</b>
<u>The implementing entity</u>	<b>Department of Logistics and International Management</b>
<u>The person responsible for preparing</u>	<b>dr inż. Aneta Pachura</b>
<u>Profile</u>	<b>General academic</b>
<u>ECTS points</u>	<b>2</b>

### TYPE OF TEACHING – NUMBER OF HOURS PER SEMESTER

LECTURE	CLASS	LABORATORY	PROJECT	SEMINAR
<b>15</b>	-	-	-	-

### COURSE AIMS

- C1. Presentation and discussion of basic issues related to process and product innovation in enterprises.
- C2. Characteristics of innovative processes with particular emphasis on the management process, creation and practical implementation of technical innovations in the technoglobal environment.

### ENTRY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Student can explain the basics of the company's operations and management.
2. Student has general knowledge about the global socio-economic conditions.
3. Student knows the basic principles of the functioning of economic processes.
4. Student is able to analyze and make conclusions about the socio-economic phenomena.
5. Student presents the basics of a simplified description of socio-economic phenomena.

### LEARNING OUTCOMES

- EU1. Student has knowledge on the basic interpretation and meaning of innovative activity and technical innovations in the enterprise as well as in the technoglobal environment.
- EU2. Student is able to indicate contemporary trends of innovative projects development and implementation in industry.
- EU3. Student is able to recognize innovative processes in the technoglobal environment in the context of economic processes.
- EU4. Student is able to analyze the features of the technical innovations' development and implementation, including identification of structure and environment.

### COURSE CONTENT

Type of teaching – LECTURE	Number of hours
W1. The introduction to process and product innovation. Conditions for credit receiving.	1
W2. The concept, classification and meaning of technical innovations.	1
W3. Idea, structure and model approach of the innovative process.	2
W4. Characteristics of concept of technical innovation development. Outline of closed and open innovation.	2
W5. Specificity of technical innovation management from the perspective of networks, technological competitiveness and technoglobalism.	3
W6. Conceptualization, development and implementation of innovative projects.	2
W7. Development of process and product innovation in selected European Union	1

countries.	
W8. European Union policy in the field of technical innovation.	1
W9. Analysis of contemporary conditions for the development of process and product innovation in the technoglobal environment.	1
W10. Participation of business environment institutions in the development of process and product innovation - final conclusions. Final test and course credit.	1

### TEACHING TOOLS

1. Books and monographs.
2. Audiovisual presentation.

### WAYS OF ASSESSMENT (F – FORMATIVE, P – SUMMATIVE)

- P1. Final test.

### STUDENT WORKLOAD

Form of activity		Average number of hours for realization of the activity		
		[h]	ECTS	ECTS
Contact hours with the teacher	Lecture	15	0.6	1.4
Preparation for final test		15	0.6	
Final test		5	0.2	
Getting acquainted with the indicated literature		13	0.52	0.52
Consultation		2	0.08	0.08
<b>TOTAL NUMBER OF HOURS / ECTS POINTS FOR THE COURSE</b>		<b>50</b>	<b>2</b>	

### BASIC AND SUPPLEMENTARY RESOURCE MATERIALS

#### Basic resources

1. Knosala R. Innovations in Management and Production Engineering. Opole, Oficyna Wydaw. Polskiego Towarzystwa Zarządzania Produkcją, 2013.
2. Mazurkiewicz D., Rudawska A. (eds.) Inspirations for Innovations: the Causes and Effects of Progress in Production Engineering. Lublin, Politechnika Lubelska, 2016.
3. Vanhaverbeke W. Managing Open Innovation in SMEs. Cambridge, Cambridge University Press, 2017.
4. Salampasis D., Mention A.L. (eds.) Open Innovation: Unveiling the Power of the Human Element. Singapore, World Scientific, 2017.
5. Woźniak J. Innovation Management: Theory and Practice. Lodz, University of Technology Press, 2015.

#### Supplementary resources

1. Gardetti M.G., Muthu S.S. (eds.) Sustainable Luxury, Entrepreneurship, and Innovation. Singapore, Springer Nature, 2018.
2. Kaplan S. The Business Model Innovation Factory: How to Stay Relevant When the World is Changing. Hoboken, John Wiley and Sons, Inc, 2012.
3. Pachura A. Innovation and change in networked reality. Polish Journal of Management Studies, 2017 Vol. 15 No 2, s. 173-182, <http://www.pjms.zim.pcz.pl/files/Innovation-andChange-in-Networked-Reality.pdf>.
4. Pachura A. 2015. Innovativeness of an enterprise in the context of technology globalization. Polish Journal of Management Studies, Vol. 12 No 1, s. 143-153, <http://pjms.zim.pcz.pl/PDF/PJMS121/Innovativeness%20of%20an%20Enterprise%20in%20the%20Context%20of%20Technology%20Globalisation.pdf>.

### TEACHERS (NAME, SURNAME, E-MAIL ADDRESS)

dr inż. Aneta Pachura, [aneta.pachura@wz.pcz.pl](mailto:aneta.pachura@wz.pcz.pl)

### MATRIX OF LEARNING OUTCOMES REALISATION

Learning outcome	Reference of given outcome to outcomes defined for whole program (PRK)	Course aims	Course content	Teaching tools	Ways of assessment
EU1	K_W02, K_W03, K_U02, K_U06, K_K02	C1	W1, W2, W5, W8	1, 2	P1
EU2	K_W02, K_W03, K_U02, K_U06, K_K02	C2	W3, W4, W5, W7	1, 2	P1
EU3	K_W02, K_W03, K_U02, K_U06, K_K02	C2	W3, W4, W5, W7	1, 2	P1
EU4	K_W02, K_W03, K_U02, K_U06, K_K02	C1, C2	W6, W9, W10	1, 2	P1

### FORM OF ASSESSMENT - DETAILS

	grade 2	grade 3	grade 4	grade 5
EU1	Student does not has knowledge on interpretation and meaning of innovative activity and technical innovations in the enterprise as well as in the technoglobal environment.	Student has basic knowledge on interpretation and meaning of innovative activity and technical innovations in the enterprise as well as in the technoglobal environment.	Student has knowledge on interpretation and meaning of innovative activity and technical innovations in the enterprise as well as in the technoglobal environment also can carry out a simplified comparative analysis.	Student has knowledge on interpretation and meaning of innovative activity and technical innovations in the enterprise as well as in the technoglobal environment also can carry out a simplified comparative analysis and independently make generalized conclusions.
EU2	Student can not to indicate contemporary trends of innovative projects development and implementation in industry.	Student is able to indicate on the elementary level, contemporary trends of innovative projects development and implementation in industry.	Student is able to indicate contemporary trends of innovative projects development and implementation in industry with elements of comparative analysis.	Student is able to indicate contemporary trends of innovative projects development and implementation in industry with elements of comparative and he can to conduct a comparative analysis of the concepts with independent inference.
EU3	Student can not to recognize innovative processes in the technoglobal environment in the context of economic processes.	Student is able to recognize on the elementary level, innovative processes in the technoglobal environment in the context of economic processes.	Student is able to recognize innovative processes in the technoglobal environment in the context of economic processes with elements of comparative analysis.	Student is able to recognize innovative processes in the technoglobal environment in the context of economic processes with elements of comparative and he can to conduct a comparative analysis of the concepts with independent inference.
EU4	Student can not to analyze the features of the technical innovations' development and	Student is able to analyze the features of the technical innovations' development and	Student is able to analyze the features of the technical innovations' development and	Student is able to analyze the features of the technical innovations' development and implementation, including

	implementation, including identification of structure and environment.	implementation, including identification of structure and environment.	implementation, including identification of structure and environment and make their detailed characteristics.	identification of structure and environment and perform multidimensional characteristics, along with self-inference.
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**ADDITIONAL USEFUL INFORMATION ABOUT THE COURSE**

1. Information where presentation of classes, instruction, subjects of seminars can be found, etc. - presented to students during first classes, if required by the formula classes are sent electronically to the e-mail addresses of individual dean groups.
2. Information about the place of classes - Information can be found on the website of the Faculty of Management.
3. Information about the timing of classes (day of the week / time) - Information can be found on the website of the Faculty of Management.
4. Information about the consultation (time + place) - Information can be found on the website of the Faculty of Management..