



## Subject card

Subject name and code	Innovation Processes, PG_00040575						
Field of study	Engineering Management						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2022/2023		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	4	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Anna Lis					
	Teachers	dr hab. inż. Anna Lis dr inż. Jolanta Łopatowska					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	0.0	30
	E-learning hours included: 0.0						
	Procesy innowacyjne 2023 - Moodle ID: 28816 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28816">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28816</a>						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	Number of study hours	30	6.0	14.0	50		
Subject objectives	The aim of the course is to familiarize with the topic of innovation management and to understand the essence of innovation sources for the implementation of innovation processes in enterprises.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W06] has a basic knowledge of methods and tools for conducting research and analyses related to particular areas of the enterprise's operations and its environment	Has knowledge of how to diagnose the innovation capacity of firms			[SW1] Assessment of factual knowledge		
	[K6_W03] has a basic knowledge of the relationship both within the organisation and between the organisation and the environment	student uses the concepts of legal and ethical aspects of management and the protection of industrial property and copyright			[SW3] Assessment of knowledge contained in written work and projects		
	[K6_U04] forecasts phenomena and processes in the organisation, including technical and innovative processes	Can anticipate innovative and technical processes			[SU2] Assessment of ability to analyse information		
	[K6_K03] initiates creative and entrepreneurial activities in the organization using the knowledge of engineering management	Inspires creative activities in the organization associated with the introduction of innovation in products, processes and organization			[SK5] Assessment of ability to solve problems that arise in practice		
Subject contents	Lectures: Introduction; Definitions of innovation; Types of innovation; Sources of innovation; Obtaining innovation from outside the organization; Methods of generating ideas for innovation; Design Thinking; Blue ocean strategy; Disruptive innovation concept; Final exam						
	Project: Market opportunity identification, trend analysis, preliminary market analysis, new product idea, idea generation and selection, blue ocean strategy, disruptive innovation, design product specification, morphological analysis, house of quality, final new product concept, final presentations						

Prerequisites and co-requisites	No requirements		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Written exam	60.0%	50.0%
	Project	100.0%	50.0%
Recommended reading	Basic literature	<p>Antoszkiewicz, J. (2008). Innowacje w firmie: praktyczne metody wprowadzania zmian. Wydawnictwo POLTEXT.</p> <p>Zarządzanie innowacją (2006). Harvard Business Review, Wydawnictwo HELION, Gliwice.</p> <p>Scott A. D. et al. (2010). Przez innowację do wzrostu. Jak wprowadzić innowację przełomową. Wolters Kluwer Polska, Warszawa.</p> <p>De Bono, E., &amp; Krzemień-Rusche, J. (2008). Sześć myślowych kapeluszy. Helion.</p> <p>Kosieradzka, A. (2013). Metody i techniki pobudzania kreatywności. Edu-Libri, Kraków-Warszawa.</p>	
	Supplementary literature	<p>Pomykalski Andrzej: Zarządzanie innowacjami. Wydawnictwo Naukowe PWN, Warszawa-Łódź, 2001;</p> <p>Baruk Jerzy: Zarządzanie wiedzą i innowacjami. Wydawnictwo Adam Marszałek, Toruń, 2009;</p> <p>Niedzielski Piotr (i inni): Innowacyjność w działalności przedsiębiorstw. Kompendium wiedzy. Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin, 2007;</p> <p>Jasiński Andrzej H.: Innowacje i transfer techniki w procesie transformacji, Difin, Warszawa, 2006;</p> <p>Wirkus Marek, Lis Anna (red.), Zarządzanie projektami badawczo-rozwojowymi, Difin, Warszawa 2012;</p> <p>Wirkus Marek, Lis Anna (red.), Planowanie i rozwój nowych produktów, CeDeWu, Warszawa 2015</p> <p>Santarek Krzysztof (red.): Transfer technologii z uczelni do biznesu. Tworzenie mechanizmów transferu technologii, PARP, Seria Innowacje, Warszawa, 2008</p>	
	eResources addresses		
Example issues/ example questions/ tasks being completed	The narrow and broad approach in defining innovation.		
Work placement	Not applicable		