



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									
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	<p>Basic literature</p> <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., & Krzemień-Rusche, J. (2008). Sześć myślowych kapeluszy. Helion.</p> <p>Kosieradzka, A. (2013). Metody i techniki pobudzania kreatywności. Edu-Libri, Kraków-Warszawa.</p>				
	<p>Supplementary literature</p> <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	<p>Adresy na platformie eNauczanie:</p> <p>Procesy innowacyjne 2023 - Moodle ID: 28816 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28816</p>			
Example issues/example questions/tasks being completed	The narrow and broad approach in defining innovation.				
Work placement	Not applicable				