



## Subject card

Subject name and code	Innovation Processes, PG_00040530						
Field of study	Engineering Management						
Date of commencement of studies	October 2019	Academic year of realisation of subject			2021/2022		
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	Part-time studies	Mode of delivery			blended-learning		
Year of study	3	Language of instruction			Polish		
Semester of study	5	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Zakład Zarządzania Innowacjami -> Katedra Inżynierii Zarządzania i Jakości -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Anna Lis				
	Teachers		dr hab. inż. Anna Lis				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	8.0	0.0	0.0	8.0	0.0	16
	E-learning hours included: 8.0						
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	16		6.0		28.0	50
Subject objectives	The aim of this course is to introduce students to topical issues in innovation management: in intra- and inter- firm contexts.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[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		
	[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_U04] forecasts phenomena and processes in the organisation, including technical and innovative processes	Can formulate a vision for the company and generate innovations on this basis			[SU2] Assessment of ability to analyse information		
	[K6_W03] has a basic knowledge of the relationship both within the organisation and between the organisation and the environment	Has knowledge of inter-organizational cooperation in the field of innovation			[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects		
Subject contents	<p>Lectures: Introduction; Definitions of innovation; Types of innovation; Innovation strategies; The innovation proces; Diffusion of innovation; Models of innovation; Sources of innovation; Methods for generating ideas for innovation; Organization of R&amp;D sector in Poland; Institutions supporting innovation; Exam</p> <p>Project: Opportunity identification, PEST analysis, Decoding of vision, Brainstorming, Selection and evaluation, Blue Ocean Strategy, Morphological method, Quality Function Deployment, Ishikawa diagram and Pareto analysis, Market research, Balanced Scorecard, Innovation strategy, Presentations of projects</p>						
Prerequisites and co-requisites	No requirements						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Exam	60.0%	50.0%
	Projekt	100.0%	50.0%
Recommended reading	Basic literature	Pomykalski Andrzej: Zarządzanie innowacjami. Wydawnictwo Naukowe PWN, Warszawa-Łódź, 2001; Baruk Jerzy: Zarządzanie wiedzą i innowacjami. Wydawnictwo Adam Marszałek, Toruń, 2009; Niedzielski Piotr (i inni): Innowacyjność w działalności przedsiębiorstw. Kompendium wiedzy. Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin, 2007; Jasiński Andrzej H.: Innowacje i transfer techniki w procesie transformacji, Difin, Warszawa, 2006; Wirkus Marek, Lis Anna (red.), Zarządzanie projektami badawczo-rozwojowymi, Difin, Warszawa 2012, Wirkus Marek, Lis Anna (red.), Planowanie i rozwój nowych produktów, CeDeWu, Warszawa 2015	
	Supplementary literature	Santarek Krzysztof (red.): Transfer technologii z uczelni do biznesu. Tworzenie mechanizmów transferu technologii, PARP, Seria Innowacje, Warszawa, 2008; Antoszkiewicz Jan D: Innowacje w firmie: praktyczne metody wprowadzania zmian. Wydawnictwo POLTEXT, Warszawa, 2008; Zarządzanie innowacją. Harvard Business Review, Wydawnictwo HELION, Gliwice, 2006; Anthony Scott D. (i inni): Przez innowację do wzrostu. Jak wprowadzić innowację przełomową. Wolters Kluwer Polska, Warszawa, 2010	
	eResources addresses		
Example issues/ example questions/ tasks being completed	The narrow and broad approach in defining innovation.		
Work placement	Not applicable		