



Subject card

Subject name and code	INNOVATION AND PRODUCT PLANNING, PG_00070737						
Field of study	Engineering Management						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2028/2029		
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		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		5.0		
Learning profile	general academic profile		Assessment form		exam		
Conducting unit	Department of Management Engineering and Quality -> Faculty of Management and Economics -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Anna Lis				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	9.0	36.0	0.0	0.0	0.0	45
	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	45		3.0		77.0	125
Subject objectives	To prepare students to identify, design and implement innovative products by using knowledge of creative and entrepreneurial practices and methods of intellectual property protection, as well as to develop attitudes of responsible and ethical decision-making in the context of creating economic, social and environmental value.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W04] possesses advanced knowledge of the principles of creative and entrepreneurial activity, enabling the identification and implementation of innovative ideas while ensuring compliance with copyright protection requirements.		Knows and understands the principles of creative and entrepreneurial thinking in the context of identifying and designing innovative products, including the fundamentals of intellectual property protection.		[SW1] Assessment of factual knowledge		
	[K6_K02] is prepared to make competent and ethical decisions to create and maintain economic, social, and environmental values, demonstrating entrepreneurial actions.		Is ready to make responsible and ethical decisions when designing innovative products, especially through active participation in teamwork, reflection on societal and environmental impact, and evaluation of economic, social and environmental value.		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_U05] designs innovative solutions for complex management processes by utilizing appropriate methods and techniques.		is able to design innovative products using appropriate methods and techniques, including creative thinking tools as well as new product planning and development methods.		[SU3] Assessment of ability to use knowledge gained from the subject [SU5] Assessment of ability to present the results of task		

Subject contents	Course content – lecture 1. Introductory lecture 2. Definitions of innovation and new products 3. Types of innovation and new products 4. Models of innovation 5. Models of new product development 6. Full product life cycle 7. Strategies for innovation 8. Sources of innovation 9. Project management in new product planning and development 10. Selected concepts of innovation and product planning 11. Methods for generating innovation ideas 12. Intellectual property protection 13. Testing new products. Course content – exercises 1. Identification of market opportunities 2. Analysis of macro and micro environment 3. Analysis of innovation potential 4. Selection of innovation strategy 5. Design of innovation using selected creative thinking methods (brainstorming, morphological method, QFD House of Quality) and innovation concepts (Design Thinking, Disruptive Innovation, Blue Ocean Strategy) 6. Design of innovation process 7. Project management 8. Protection of intellectual property 9. Testing 10. Marketing and distribution.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Open-ended Questions Test	60.0%	50.0%
	Project report	60.0%	45.0%
	Value-impact presentation	60.0%	5.0%
Recommended reading	Basic literature	1. Brown, T. (2009). Change by design: How design thinking creates new alternatives for business and society. <i>Collins Business</i> . 2. Christensen, C. M. (2015). <i>The innovator's dilemma: when new technologies cause great firms to fail</i> . Harvard Business Review Press. 3. Kim, W. C., & Mauborgne, R. (2011). Blue ocean strategy. <i>Harvard business review</i> . 4. Kim, W. C., & Mauborgne, R. A. (2014). <i>Blue ocean strategy, expanded edition: How to create uncontested market space and make the competition irrelevant</i> . Harvard Business Review Press. 5. Kubiszewska, K., Łopatowska, J., & Lis, A. (2025). Praktyczne wyzwania edukacji menedżerskiej. Zbiór case'ów dydaktycznych. 6. Pomykański, A. (2001). <i>Zarządzanie innowacjami</i> , PWE, Warszawa. 7. Wirkus, M., & Lis, A. (2012). Zarządzanie projektami badawczo-rozwojowymi. <i>Difin, Warszawa</i> . 8. Wirkus, M., & Lis, A. (2015). Planowanie i rozwój nowych produktów. CeDeWu, Warszawa.	
	Supplementary literature	1. Kaplan, R. S., Norton, D. P., Pniewski, K., Jarugowa, A., Polakowski, M., & Kabalski, P. (2001). <i>Strategiczna karta wyników: jak przełożyć strategię na działanie</i> , Wydawnictwo Naukowe PWN, Warszawa. 2. Pomykański, A. (1997). <i>Innowacje</i> . Wydaw. Politech. Łódzkiej. 3. Porter, M. E. (2008). <i>Competitive advantage: Creating and sustaining superior performance</i> . Simon and Schuster. 4. Porter, M. E., & Strategy, C. (1980). Techniques for analyzing industries and competitors. <i>Competitive Strategy</i> . New York: Free, 1. 5. Trott, P. (2008). <i>Innovation management and new product development</i> . Pearson education.	
	eResources addresses		
Example issues/ example questions/ tasks being completed	• Please list and describe at least three innovation strategies. • What is a disruptive innovation? • What are the main steps in following the Design Thinking procedure?		
Practical activities within the subject	Not applicable		

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