

BIAŁYSTOK UNIVERSITY OF TECHNOLOGY								Faculty of Engineering Management		
Field of study		Erasmus						Level and form of study		first degree/second degree
A group of modules /specialty								Education profile		
Course name		Innovative entrepreneurship						Course code	IS-FM-00116S	
								Course type	elective	
Course form(s) and number of hours		L	C	LC	P	SW	FW	S	Semester	summer
		15	15						ECTS credits	4
The programme is valid from								2025/2026		
Introductory courses										
Course objectives		Innovative entrepreneurship								
Framework programme content		<p>This course prepares students for a future career as entrepreneurs and founders of new firms with using innovative tools. They gain practical insights into aspects of running a business that are particularly salient during the early development of a new company. Students will be able to: understand the fundamental conditions for pre-entrepreneurship; characteristic of successful entrepreneurs; international versus domestic entrepreneurship; design a business plan; distinguish between different sources of financing and assess which best fit the requirements of the new entrepreneurial venture; perform an environmental analysis and formulate a business strategy for the new venture; plan for the internationalisation of the new venture through foreign market entry. Plan for the launching and developing new business ventures inside established corporations. The ability to combine theoretical knowledge of business project modeling with practical justification of individual elements of the CANVAS model with AI tools.</p>								
Other information about the course		<p>content of the course refers to the principles of sustainable development the course is related to the scientific activity conducted at the University</p>								
Calculation:	Student workload related to:						Total number of hours	including contact	including practical	
	participation in lectures						15	15		
	participation in other forms of activities						15	15	15	
	participation in an examination						0	0		
	participation in consultations						4	4	2	
	completion of professional training						0	0	0	
	preparation for passing a lecture/an examination						30			
	preparation for practical classes						36		36	
Total number of hours:						100	34	53		
Total number of ECTS credits:						4	1,4	2,1		
Expected discipline learning outcomes								Knowledge	Skills	Social competence
Objectives and framework content prepared by								Date:		
Implementation in the academic year								2025/2026		
Programme content	Course forms I									
	1	Introduction to Innovative Entrepreneurship: transformative role of artificial intelligence (AI) in modern business environments (2h)								
	2	Provide an overview of entrepreneurship principles in sustainable business environments (2h)								
	3	The definitions of innovation, innovativeness and innovative enterprise (2h)								
	4	Cover foundational concepts of AI, including machine learning, natural language processing, and computer vision, with emphasis on their applications in entrepreneurship (2h)								
	5	Innovative company – goals, activities and resources (2h)								
	6	Business environment institutions supporting the introduction of innovations (2h)								
	7	Determinants of enterprise innovation (2h)								
	8	Sources of financing innovations (2h)								
	9	Innovation processes in the enterprise (2h)								
	10	Open innovation and UDI (2h)								
	11	Change management in the enterprise: strategic, marketing and operational management (2h)								
	12	Human resource management supporting the introduction of innovation (2h)								
	13	The enterprise innovation models. Risk Management of the innovative enterprises (2h)								
	14	Case Studies and Best Practices of innovative enterprises (2h)								
	15	Written test (2h)								
	Course forms II									
	1	Innovative enterprises - based on Canvas Model (2h)								
	2	Understanding AI Technologies for Innovative entrepreneurship (2h)								
	3	Identifying Entrepreneurial Opportunities with AI (2h)								
4	Analyzing of consumer behavior, and generate innovative business ideas (2h)									
5	AI-driven Business Models: Introduce various business models empowered by AI, such as subscription-based									
6	Ethical and Social Implications of Innovative Entrepreneurship (2h)									
7	Case Studies and Best Practices innovative enterprises (2h)									
8	Present real-world case studies of successful entrepreneurial ventures, highlighting key strategies, challenges faced, and lessons learned (2h)									
9	Plan for the launching and developing new business ventures inside established corporations (2h)									

	10	Risk Management of the CANVAS model (2h)
	11	Analyze the risks associated into entrepreneurial ventures and strategies for mitigating these risks, such as
	12	Capstone Project: Culminate the course with a capstone project where students conceptualize and develop a business plan integrating AI technologies, demonstrating their understanding of entrepreneurship (2h)
	13	Practical justification of individual elements of the CANVAS model with AI tools.
	14	Project presentation (2h)
	15	Written test (2h)
Teaching methods (on-site classes)	L	problem-based lecture, lecture with multimedia presentation
Teaching methods (online classes)	C	project, game, homeworks' assessment, activity during classes
	L	problem-based lecture, lecture with multimedia presentation
	C	project, game, homeworks' assessment, activity during classes
Forms of crediting	L	Written test
	C	project, game, homeworks' assessment, activity during classes
Conditions of crediting	L	50-59%: 3,0; 60-69%:3,5; 70-79%: 4,0; 80-89%: 4,5; 90-100%: 5,0
	C	average of the written test and the project:3,0-3,4: 3,0 3,5-3,9; 3,5; 4,0-4,4: 4,0; 4,5-4,8: 4,5; 4,9-5,0: 5,0

Outcome symbols	Expected learning outcomes	Expected learning outcomes defined for the field of study		
		Knowledge	Skills	Social competence
Knowledge: the student knows and understands				
E1	the general rules for the creation and development of enterprises			
E2	student knows how to apply for innovative business ideas			
Skills: the student can				
E3	describe the sources of entrepreneurship and the operating rules of the organization			
E4	be able to use basic AI tools in practice			
E5	describe the basic concepts and principles of the enterprise sources			
Social competence: the student is ready to				
E6	involved in making decisions and strives to identify priorities within			
Outcome symbols	Methods of verification of learning outcomes	Course form subject to verification		
E1	written test, presentation	W, C		
E2	written test, presentation	W, C		
E3	written test, presentation	W, C		
E4	written test, presentation	W, C		
E5	written test, presentation	W, C		
E6	written test, presentation	W, C		
E7	written test, presentation	W, C		
E8		W, C		
Basic references	1	S.F.A. Hussain, Utilizing AI and Smart Technology to Improve Sustainability in Entrepreneurship, IGI Global,2024		
	2	B. R. Barringer, Entrepreneurship: Successfully Launching New Ventures, Global Edition, Pearson 2018		
	3	H. Neck, C.P. Neck, L. Murray, Entrepreneurship: The Practice and Mindset, Sage Pubn, 2024		
	4	W. Czemieli-Grzybowska, M. Walicka, Sztuczna inteligencja w zarządzaniu kapitałem przedsiębiorstwa w dobie Przemysłu 5.0, Akademia Zarządzania, 2023, vol. 7, nr 4, s.109-125.		
Supplementary references	1	Czemieli-Grzybowska Wioletta, Bąkowski Michał, Forfa Magdalena, Overcoming the Challenge of Exploration: Organizational Readiness of Technology Entrepreneurship on the Background of Energy Climate Nexus, Energies, 2024, vol. 17, nr 23, s.1-17, Numer artykułu:5999.		
	2	W. Czemieli-Grzybowska, Trendy zrównoważonej przedsiębiorczości technologicznej opartej na sztucznej inteligencji, Akademia Zarządzania, 2023, vol. 7, nr 4, s.126-138.□		
	3	S. Tanev,H. Blackbright, Artificial Intelligence and Innovation Management, Word Scientific, 2024		
Course coordinator	PhD Wioletta Czemieli-Grzybowska	Date:	04.03.2025	