

COURSE DESCRIPTION CARD

Bialystok University of Technology Faculty of Engineering Management									
Field of study	Management						Degree level and programme type	first degree/ second degree	
Specialisation/ diploma path	-						Study profile	-	
Course name	Technology management						Course code	IS-FM-00106W	
							Course type	elective	
Forms and number of hours of educational activities	L	C	LC	P	SW	FW	S	Semester	winter
		30						No. of ECTS credits	6
Entry requirements	—								
Course objectives	The aim of the course is to familiarize students with the concept of technology, selected classifications and methods of analysis, assessment and technology selection; shaping the ability to use selected methods of technology analysis and stimulating creativity in the field of designing the development process of selected technologies.								
Course content	Definitions and selected classifications of technologies. The idea of technology management. Selected methods of technology assessment. Technology development concepts. Assessment of the technological potential of the organization. Strategic management and process management of the organization and technologies. Modelling of the technology management process. Technology transfer strategies and models. Technological knowledge management. The concept of architectural innovations.								
Teaching methods	lecture, subject exercises, case studies, discussion								
Assessment method	presentation on chosen aspects related to the main subject, evaluation of case studies, evaluation of work in the classroom, evaluation of homework								
Symbol of learning outcome	Learning outcomes							Reference to the learning outcomes for the field of study	
	Knowledge: the graduate knows and understands							-	
LO1	the definitions of technology and methods of technology management							-	
LO2	the principles of designing technology development							-	
	Skills: the graduate is able to							-	
LO3	choose and apply appropriate tools and methods of technology management							-	
LO4	select appropriate analytical methods to solve engineering problems							-	
	Social competence: the graduate is ready to							-	
LO5	communicate freely with the scientific and business community							-	
LO6	work in an interdisciplinary and international team in solving engineering problems							-	

Symbol of learning outcome	Methods of assessing the learning outcomes	Type of tuition during which the outcome is assessed	
LO1	presentation, evaluation of case studies, evaluation of work in the classroom, evaluation of homework	C	
LO2	presentation, evaluation of case studies, evaluation of work in the classroom, evaluation of homework	C	
LO3	presentation, evaluation of case studies, evaluation of work in the classroom, evaluation of homework	C	
LO4	presentation, evaluation of case studies, evaluation of work in the classroom, evaluation of homework	C	
LO5	presentation, evaluation of case studies, evaluation of work in the classroom, evaluation of homework	C	
LO6	presentation, evaluation of case studies, evaluation of work in the classroom, evaluation of homework	C	
Student workload (in hours)		No. of hours	
Calculation	participation in classes	30	
	preparation for classes	25	
	work on homework's	35	
	individual work on case studies	35	
	team work on preparing a case studies	20	
	consultations attendance	5	
	TOTAL:	150	
Quantitative indicators		HOURS	No. of ECTS credits
Student workload – activities that require direct teacher participation		35	1,4
Student workload – practical activities		150	6
Basic references	<ol style="list-style-type: none"> 1. Cagnin C., Future-Oriented Technology Analysis: Strategic Intelligence for an Innovative, Economy Springer-Verlag, 2008. 2. Cetindamar D., Phaal R., Probert D., Technology management: activities and tools, Pelgrave Macmillan, 2010. 3. Porter A.L., Thomas Roper A., Cunningham S.W., Forecasting and Management of Technology. John Wiley & Sons, 2011. 4. Roper A.T. et al., Forecasting and Management of Technology, John Wiley & Sons, Inc., New York 2011. 		
Supplementary references	<ol style="list-style-type: none"> 1. Haegeman H. i in., Quantitative and qualitative approaches in Future-oriented Technology Analysis (FTA): From combination to integration?, Technological Forecasting and Social Change 2013, 80 (2), s. 386–397. 2. Leonhard G., Technology vs. humanity: the coming clash between man and machine, London: Fast Future Publishing, 2016. 		
Organisational unit conducting the course	Department of Production Management	Date of issuing the programme	
Author of the programme	Elżbieta Krawczyk-Dembicka, PhD, Eng.	02/28/2022	

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work, S – seminar