

Białystok University of Technology, Faculty of Mechanical Engineering									
Field of study	<i>Mechatronics</i>							Degree level and programme type	<i>second-cycle (MSc, Eng) full-time studies</i>
Specialization/ diploma path	<i>Common course</i>							Study profile	<i>academic</i>
Course name	<i>Innovative entrepreneurship and technology transfer</i>							Course code	<i>IS-FME-00263S</i>
								Course type	
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	Semester	<i>summer</i>
	15	15						No. of ECTS credits	3
Entry requirements	-								
Course objectives	<i>Getting students acquainted with basic terms in the field of innovation, innovation processes and technology transfer. Getting students acquainted with the principles and laws of functioning of innovative enterprises. Developing skills of analysing and evaluating processes taking place in enterprises. Developing skills of creating innovations and technology transfer as well as creating business models of innovative projects. Discussing examples of innovation creation methods.</i>								
Course content	<i>Lecture: Definition of innovation, types and sources of innovation. Innovation diffusion. Innovation models. Definition of technology transfer, types and forms of technology transfer. Technology transfer sources. Technology transfer versus innovative activity of businesses. Technology transfer in innovation models. Sources of inspiration for innovative projects. Innovation creation methods. Phases of the implementation of an innovative business project. Business model versus business plan. Business plan and business model elements. Sources of financing of innovative projects. International technology transfer. Classes: Creating a business model for an innovative project (customer segments, value proposition, channels, relationships with customers, revenue streams, key resources, key activities, key partners and cost structure).</i>								
Teaching methods	<i>Information and problem lecture; Classes</i>								
Assessment method	<i>Lecture: one test; Classes: one test</i>								
Symbol of learning outcome	Learning outcomes Students who successfully complete the course:							Reference to the learning outcomes for the field of study	
LO1	<i>understand basic concepts of innovation and technology transfer</i>							<i>MK2_W08</i>	
LO2	<i>recognise and classify business model elements</i>							<i>MK2_W09, MK2_U12</i>	
LO3	<i>can apply sources of inspiration and methods of creating innovations</i>							<i>MK2_U12</i>	
LO4	<i>identify basic skills necessary to create innovative undertakings and to act in an entrepreneurial way</i>							<i>MK2_U12</i>	
LO5	<i>are ready to think and act applying methods of creating innovations, including innovations for social needs</i>							<i>MK2_K02, MK2_K04, MK2_K05</i>	
Symbol of learning outcome	Methods of assessing the learning outcomes							Type of tuition during which the outcome is assessed	
LO1	<i>Lecture: one test</i>							<i>L</i>	
LO2	<i>Lecture: one test; Classes: one test</i>							<i>L, C</i>	
LO3	<i>Classes: one test</i>							<i>C</i>	
LO4	<i>Classes: one test</i>							<i>C</i>	
LO5	<i>Lecture: one test; Classes: one test</i>							<i>L, C</i>	
Student workload (in hours)								No. of hours	
<i>Participation in lectures</i>								<i>15</i>	

Calculation	Participation in classes	15
	Preparation for passing the lecture	23
	Preparation for classes	15
	Preparation for passing the classes	2
	Participation in consultations	5
TOTAL:		75
Quantitative indicators		
		HOURS
		No. of ECTS credits
Student workload – activities that require direct teacher participation		35
Student workload – practical activities		34
Basic references	<ol style="list-style-type: none"> 1. Matusiak K.B., <i>Innowacje i transfer technologii. Słownik pojęć. Polska Agencja Rozwoju Przedsiębiorczości. Warszawa 2008.</i> 2. Drucker P.F, <i>Innowacje i przedsiębiorczość, Praktyka i zasady. Wydawnictwo ekonomiczne., Warszawa 1992.</i> 3. Cieślak J., <i>Przedsiębiorczość dla ambitnych. Jak uruchomić własny biznes, Wydawnictwa Akademickie i profesjonalne, Warszawa 2008.</i> 4. Skowronek Mielczarek A., <i>Małe i średnie przedsiębiorstwa. Źródła finansowania, Wydawnictwo: C.H. BECK, Warszawa 2007.</i> 5. Osterwalder A. , Pigneur Y., <i>Tworzenie modeli biznesowych, One Press , 2013.</i> 	
Supplementary references	<ol style="list-style-type: none"> 1. Piaseczny J., <i>Biznes Plan. Problemy i metody. Wyd. WSPiZ im. L. Koźmińskiego, Warszawa 2002.</i> 2. Santarek K., <i>Transfer technologii z uczelni do biznesu. PARP, Warszawa 2008.</i> 3. Christensen Clayton M., <i>Przełomowe innowacje. Wydawnictwo Profesjonalne PWN. Warszawa 2010.</i> 4. Brown T., <i>Change by design: How design thinking transforms organizations and inspires innovation, Harper Business, New York 2009.</i> 5. Osterwalder A., Pigneur Y., Bernarda G., Smith A., <i>Projektowanie propozycji wartości, ICAN, 2016.</i> 	
Organisational unit conducting the course	<i>Department of Mechanics and Applied Computer Science</i>	Date of issuing the programme
Author of the programme	<i>Izabela Senderacka, PhD</i>	24.04.2019
<i>L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work, S – seminar</i>		