



Field of study		Chemical Engineering							
Mode of study		stationary	Level	first cycle					
Graduate's qualification		inżynier							
Area(s) of study		nauki techniczne							
Educational profile		general academic							
Module									
Course unit		Strategies for Startups							
Code		ChEn_1A_S_C26b							
Field of specialisation									
Administering faculty		External Department							
ECTS		1,0	ECTS (forms)	1,0					
Form of course credit		credits	Language	english					
Electives		10	Elective group						
Form of instruction		Code	Semester	Hours	ECTS	Weight	Credit		
lecture		W	7	15	1,0	1,00	credits		
Leading teacher		Dyba Hubert (Hubert.Dyba@zut.edu.pl)							
Other teachers									
Prerequisites									
W-1		Student knows the basics of high school mathematics.							
Module/course unit objectives									
C-1		Consolidation of knowledge related to the startups.							
C-2		Developing student's ability to recognize the basic concepts of startups.							
C-3		Improving student's awareness of the need for continuous education and professional development.							
C-4		Acquiring knowledge on startup development proces and tools. Strategies to use in consecutive stages of business venture development.							
Course content divided into various forms of instruction						Number of hours			
T-W-1		Marketing strategies for startups. Analysis of the market needs, market trends and market growth projections. Industry analysis - the roles of major industry competitors. Positioning statements. Pricing strategy. Promotion strategy. Distribution and delivery strategy. Marketing programs. Market research techniques; Forming value proposition and business model; Identyfing Minimum Viable Product; Bootstraping techniques; Defining IPR strategy; Strategies for team management					15		
Student workload - forms of activity						Number of hours			
A-W-1		Participation in lectures					15		
A-W-2		Self-study of the literature					13		
A-W-3		Consultations					2		
Teaching methods / tools									
M-1		Lecture							
Evaluation methods (F - progressive, P - final)									
S-1		F	Written test						
Designed learning outcomes			Reference to the learning outcomes designed for the fields of study	Reference to the learning outcomes defined for the particular areas of education	Reference to learning outcomes leading to the degree of "inżynier"	Course objectives	Course content	Teaching methods	Evaluation methods
Knowledge									
ChEn_1A_C26b_W01 Student has theory-based knowledge within the scope of startups.			ChEn_1A_W16 ChEn_1A_W17	P6S_WG_TA11 P6S_WK_TA11	P6S_WG_IA11	C-1	T-W-1	M-1	S-1
Skills									
ChEn_1A_C26b_U01 Student can use the acquired knowledge to recognize the basic concepts of startups.			ChEn_1A_U05 ChEn_1A_U11 ChEn_1A_U13	P6S_UU P6S_UW_TA12	P6S_UW_IA12	C-2	T-W-1	M-1	S-1
Other social / personal competences									
ChEn_1A_C26b_K01 Student is aware of the need for continuous education and professional development in the field of startups.			ChEn_1A_K02 ChEn_1A_K06	P6S_KO		C-3	T-W-1	M-1	S-1

<i>Required reading</i>
1. Uchino Kenji, Entrepreneurship for engineers., CRC Press, 2009
2. Steve Blank, The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company, 2011
3. Eric Ries, The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, 2011
4. Ash Maurya, Running Lean: Iterate from Plan A to a Plan That Works, 2011