


**KAPITAŁ LUDZKI**  
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez  
 Unię Europejską w ramach  
 Europejskiego Funduszu  
 Społecznego

**UNIA EUROPEJSKA**  
 EUROPEJSKI  
 FUNDUSZ SPOŁECZNY


<b>Course title</b>		<b>ECTS code</b>	
Chemical business design		13.3.0740	
<b>Name of unit administrating study</b>			
null			
<b>Studies</b>			
<b>faculty</b>	<b>field of study</b>	<b>type</b>	wszystkie
Wydział Chemii	Biznes chemiczny	<b>form</b>	wszystkie
		<b>specjalty</b>	wszystkie
		<b>specialization</b>	wszystkie
<b>Teaching staff</b>			
prof. dr hab. inż. Adriana Zaleska-Medynska; dr inż. Beata Zadykowicz; dr inż. Joanna Nadolna; dr Andrzej Poszewiecki; dr inż. Anna Gołąbiewska; prof. UG, dr hab. Przemysław Kulawczuk; dr inż. Beata Bajorowicz			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b>	
<b>Forms of classes</b>		3	
Auditorium classes, Lecture		classes - 45 h	
<b>The realization of activities</b>		tutorial classes – 5 h	
classroom instruction		student's own work – 25 h	
<b>Number of hours</b>		Total: 75 h - 3 ECTS	
Auditorium classes: 30 hours, Lecture: 15 hours			
<b>The academic cycle</b>			
2025/2026 winter semester			
<b>Type of course</b>		<b>Language of instruction</b>	
obligatory		Polish	
<b>Teaching methods</b>		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
<ul style="list-style-type: none"> <li>- Auditorium seminar: case studies analysis, business project method, discussion</li> <li>- seminar lecture</li> </ul>		<b>Final evaluation</b>	
		<ul style="list-style-type: none"> <li>- Graded credit</li> <li>- Examination</li> </ul>	
		<b>Assessment methods</b>	
		<ul style="list-style-type: none"> <li>- assignment work – project or presentation</li> <li>- oral exam</li> </ul>	
		<b>The basic criteria for evaluation</b>	
		Final grade will be issued based on the students' activity during classes and based on the group projects prepared by students. The grades from the activity in the classroom and project presentation will be in accordance with the guidelines defined by the "UG Study Regulations".	
<b>Method of verifying required learning outcomes</b>			
<b>Required courses and introductory requirements</b>			
<b>A. Formal requirements</b>			
Principles of general chemistry, start-up design.			
<b>B. Prerequisites</b>			
Basic knowledge of English language.			
<b>Aims of education</b>			
Aims of education			
<ul style="list-style-type: none"> <li>- Acquainting with the principles of designing of small production installations;</li> </ul>			

- Acquainting with the principles of economical analysis / determining the profitability of a new production installation	
<b>Course contents</b>	
<p>Course contents</p> <p>Lecture program:</p> <p>Business planning process (economical and technological aspects)</p> <p>The structure of the technological process</p> <p>Business plan structure</p> <p>The essence of the strategic and marketing analysis</p> <p>Financial analysis of the planned project</p> <p>Seminar program:</p> <p>1. Development of a preliminary process design for a selected company operating in the field of cosmetics, medicines, plant protection products, paints, varnishes, biotechnology, waste processing, etc.,:</p> <p>Development of chemical concept for selected technological process</p> <p>Development of technological concept of the process (process diagram flow, mass and energy balance, technological diagram)</p> <p>2. Development of preliminary business plan for selected small company</p> <p>Choice and justification of business concept model for a start up</p> <p>Development of market and financial for a start up</p>	
<b>Bibliography of literature</b>	
<p>Bibliography of literature</p> <p>Literature required to pass the course</p> <p>E.Pawłowski, K. Pawłowski, J. Trzcielińska, S. Trzcieliński, Projektowanie biznesu i ocena przedsięwzięć inwestycyjnych, Wydawnictwo Politechniki Poznańskiej, Poznań 2010, publikacja elektroniczna <a href="https://www.researchgate.net/publication/269332977_projektowanie_biznesu">https://www.researchgate.net/publication/269332977_projektowanie_biznesu</a></p> <p>Extracurricular readings</p>	
<b>The learning outcomes (for the field of study and specialization)</b>	<b>Knowledge</b>
	<p>Knowledge</p> <p>Distinguishes the patentability of products/ technologies</p> <p>Prepares the business plan for the small company</p> <p>Identifies and recognizes market needs</p> <p>Designs small production installations and determines their profitability</p>
	<b>Skills</b>
	<p>Skills</p> <p>Group co-working</p> <p>Prepares business plan</p> <p>The ability to briefly and simply presents idea</p> <p>Evaluates the technology readiness level</p> <p>The ability to choose a chemical and technological concept</p>
	<b>Social competence</b>
	<p>Social competence</p> <p>Understands the benefits of teamworking</p> <p>Understands the needs of systematic literature study</p> <p>Shows responsibility for time oriented tasks realization</p> <p>Is aware of the needs of critical own work analysis</p> <p>Is aware of the needs for honest and reliable work.</p>
<b>Contact</b>	
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