



Subject card

Subject name and code	Lean Management, PG_00049444						
Field of study	Engineering Management						
Date of commencement of studies	October 2021	Academic year of realisation of subject				2022/2023	
Education level	first-cycle studies	Subject group				Optional subject group Subject group related to scientific research in the field of study	
Mode of study	Full-time studies	Mode of delivery				at the university	
Year of study	2	Language of instruction				Polish	
Semester of study	4	ECTS credits				4.0	
Learning profile	general academic profile	Assessment form				assessment	
Conducting unit	Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Joanna Czerska				
	Teachers		dr inż. Joanna Czerska mgr Anna Wendt				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	30.0	0.0	0.0	0.0	45
	E-learning hours included: 0.0						
Lean Management 2023 - Moodle ID: 24554 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=24554							
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	Number of study hours	45	7.0	48.0	100		
Subject objectives	<p>The aim of the Lean Management course is to introduce students to the world of the management concept based on the Toyota Production System (TPS). The aim of the theoretical material (lectures) is to familiarize students with the so-called WHY ?, i.e. the reasons why the knowledge of Lean Management and the skills that students will develop during the exercises are of value for companies and their employees. The aim of the exercises is to support students in the development of skills that will allow them to become members of the labor market desired by Best in Class enterprises.</p>						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W13] has a basic knowledge of the design, modelling and optimisation of technical processes and systems	The student has basic knowledge in the field of Lean Management and is able to apply it in practice, solving problems arising in production, service and logistics processes.			[SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge		
	[K6_U10] uses tools to measure and improve technical solutions concerning: devices, objects, systems, processes, products and services	The student is able to evaluate the process and indicate its ineffectiveness. The student has developed the ability to work in a team based on values			[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject		

Subject contents	<p>LECTURE</p> <ol style="list-style-type: none"> 1. Introduction to Lean Management and Toyota Production System 2. Key Lean Management tools in the improvement process (Management System Development Tools, Flow Improvement Tools, Efficiency Improvement Tools, Speed and Quality Improvement Tools, Management System Development Tools) 3. Lean Leadership. What a manager managing a continuous improvement organization must be able to do 4. Managing continuous team development. <p>EXERCISES</p> <ol style="list-style-type: none"> 1. Improvement Kata simulation game (Team identity and values, Continuous improvement management) 2. Competence development management. 3. Lean management tools. 4. Learning to see. Value stream mapping using the Makigami method: <ul style="list-style-type: none"> • Analysis and improvement of process flow on selected case studies • Problem diagnosis. Diagnosis of the state of the existing process • Setting a goal for change. Building a process vision • Identification of root causes and designing improvement actions • Planning changes using a road map • Concept design • Communication of changes 																				
Prerequisites and co-requisites																					
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="451 707 794 741">Subject passing criteria</th> <th data-bbox="794 707 1142 741">Passing threshold</th> <th data-bbox="1142 707 1487 741">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="451 741 794 775">quizes</td> <td data-bbox="794 741 1142 775">75.0%</td> <td data-bbox="1142 741 1487 775">20.0%</td> </tr> <tr> <td data-bbox="451 775 794 808">skils matrix</td> <td data-bbox="794 775 1142 808">80.0%</td> <td data-bbox="1142 775 1487 808">6.0%</td> </tr> <tr> <td data-bbox="451 808 794 842">one point lesson</td> <td data-bbox="794 808 1142 842">60.0%</td> <td data-bbox="1142 808 1487 842">15.0%</td> </tr> <tr> <td data-bbox="451 842 794 875">project</td> <td data-bbox="794 842 1142 875">60.0%</td> <td data-bbox="1142 842 1487 875">39.0%</td> </tr> <tr> <td data-bbox="451 875 794 943">Implementation of the development plan</td> <td data-bbox="794 875 1142 943">80.0%</td> <td data-bbox="1142 875 1487 943">20.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	quizes	75.0%	20.0%	skils matrix	80.0%	6.0%	one point lesson	60.0%	15.0%	project	60.0%	39.0%	Implementation of the development plan	80.0%	20.0%
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Recommended reading	Basic literature	<p>Cel I. [T.] 1, Doskonałość w produkcji. Eliyahu M. Goldratt i Jeff Cox</p> <p>Pięć dysfunkcji pracy zespołowej. Opowieść o przywództwie. Patric Lencioni</p> <p>Zaczynaj od dlaczego. Jak wielcy liderzy inspirują innych do działania. Simon Sinek</p> <p>Poradnik Młodego Lean Lidera. red. Joanna Czerska</p> <p>Naucz się widzieć. Metoda mapowania strumienia wartości. John Shook, ,Mike Rother</p>																			
	Supplementary literature	<p>1.Narzędzia Lean Management. Joanna Czerska</p> <p>2.Doskonalenie strumienia wartości. Joanna Czerska</p>																			
	eResources addresses																				
Example issues/ example questions/ tasks being completed	https://enauczanie.pg.edu.pl/moodle/course/view.php?id=9489																				
Work placement	Not applicable																				