GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Lean Management, PG_00064719						
Field of study	Management and Production Engineering						
Date of commencement of studies	February 2025		Academic year of realisation of subject	2024/2025			
Education level	second-cycle studies		Subject group	Obligatory subject group in the field of study 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	1		Language of instruction	Polish			
Semester of study	1		ECTS credits	4.0			
Learning profile	general academic profile		Assessment form	exam			
Conducting unit	Katedra Inżynierii Zarządzania i Jakości -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Joanna Czerska				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	30.0	0.0	0.0	0.0	60
	E-learning hours included: 0.0						
	Additional information: Non-computer simulation game, team and individual work, interactive lectures.						
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	60		9.0	31.0	100	
Subject objectives	The concept of Lean Management is taking the world by storm and is currently a reference point for an increasing number of companies.Therefore, the aim of the Lean Management course is to introduce students to the world of management concept based on the Toyota Production System (TPS Toyota Production System) and to support students in developing skills that will allow them to become process leaders desired by the so-called Best in Class companies.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_U01] uses known analytical, simulation and experimental methods as well as mathematical models to analyze and evaluate stationary and non-stationary technological and production systems/processes with continuous and discrete operation	The student is able to perform value stream mapping using the Makigami method, identify losses in the process, prioritize and plan improvement actions.	[SU1] Assessment of task fulfilment
[K7_U12] dvelops her/his own potential and independently plans own, lifelong learning, while also being able to guide others in this regard	The student creates their development plan in relation to the subject and keeps a journal of reflections on the progress of this development. The development plan includes soft, managerial and hard skills. Knows the principles of Lean Thinking and uses them.	[SU1] Assessment of task fulfilment
[K7_W03] demonstrates structured and theoretically based knowledge covering key issues in the field of Management and Production Engineering enabling the design and synthesis of stationary and non-stationary systems, devices and technological processes with continuous and discrete operation	The student has knowledge of leadership in accordance with the principles of lean management and end-to-end process analysis in order to improve processes and jobs in these processes.	[SW1] Assessment of factual knowledge
[K7_K01] is aware of the importance and understanding of non-technical aspects and effects of engineering/production activities, including its impact on the environment and the related responsibility for decisions made, demonstrating knowledge of actions aimed at reducing risk and anticipating the social and environmental effects of engineering/production activities	The student is able to indicate the role of team values, teamwork and communication in the implementation of changes in the processes in which people work. The student is able to define the values that guide them, develop team values and define attitudes that reflect these values.	[SK2] Assessment of progress of work

Subject contents

- History of Toyota Production System
- Fundamental principles of Lean Management
- Lean Leadership and its key elements (work based on values, hoshin kanri, kaizen of employees and processes)
- My development plan. My reflections.
- Process improvement based on daily management (simulation game)
- Value stream mapping using the Makigami method
- Methods of engaging employees in changes
- Lean Taboo. Lean competency management.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Mini team projects	60.0%	40.0%
Exam	60.0%	20.0%
Theoretical quizzes	60.0%	20.0%
My development plan	60.0%	20.0%

Recommended reading

Basic literature

Womack J.P.; Jones D.T. "Lean Thinking", Simon & Schuster, 2002Liker J.K., "The Toyota way. 14 management principles from the world's greatest manufacturer", McGraw-Hill Education, 2004

	Supplementary literature	Bicheno J.R, Holweg M., "A Handbook for Lean Transformation", PICSIE Books, 2016
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	1. Develop your development plan and track its progress during the course. 2. Make a Makigami process mapping 3. Create a competency matrix for the team 4. Design one-point lessons for selected lean tools	
Work placement	Not applicable	

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