



## Subject card

Subject name and code	Lean Management, PG_00059486						
Field of study	Management and Production Engineering						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2022/2023		
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			blended-learning		
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 hab. inż. Piotr Grudowski					
	Teachers	dr inż. Ewa Marjańska mgr Anna Wendt					
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: 30.0 Additional information:  The lecture takes place remotely. The link to the lecture can be found on the e-learning course page. Stationary exercises.						
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		8.0		32.0	100
Subject objectives	The aim of the Lean Management course is to introduce students to the world of management concepts based on the Toyota Production System (TPS - Toyota Production System) and to support students in the development of skills that will allow them to become leaders of the processes desired by the companies of the so-called. Best in Class.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U81] is able to communicate with ease in foreign language at B2+ level of the Common European Framework of Reference for Languages (CEFR) in everyday life, in academic and professional environments	Knows the English terminology of Lean tools and concepts.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
	[K7_K03] can think and act in a creative and entrepreneurial manner	According to the Lean principle, thinks creatively and outside the box. He looks for the simplest solutions.	[SK5] Assessment of ability to solve problems that arise in practice [SK1] Assessment of group work skills
	[K7_W04] has an organized knowledge of the life cycle of devices, facilities and technical systems, has an extensive knowledge of management.	Has knowledge of the organization and functioning of the Lean production system according to the TPS (Toyota Production System) concept.	[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge
	[K7_W01] knows and understands to a greater extent selected issues in the field of management and quality sciences and mechanical engineering, their location in the field of social sciences and engineering and technical sciences, as well as relationships with related disciplines, and sees the possibility of applying the knowledge in practice	Knows and applies the basic concepts and tools of Lean.	[SW3] Assessment of knowledge contained in written work and projects
[K7_U04] is able to plan and carry out experiments, including measurements and computer simulations, interpret the obtained results and extract conclusions; can use analytical, simulation and experimental methods to formulate and solve engineering tasks	Can perform value stream mapping, identify value adding activities in processes.	[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment	
Subject contents	<ul style="list-style-type: none"> <li>• TPS history</li> <li>• Introduction to Lean</li> <li>• Lean tools</li> <li>• Lean Leadership</li> <li>• Employee engagement</li> <li>• Simulation game</li> <li>• Daily management</li> <li>• Problem solving</li> <li>• Lean Taboo</li> </ul>		
Prerequisites and co-requisites	None. An introductory subject to LEAN.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Exercises credit	60.0%	50.0%
	Lecture credit	60.0%	50.0%
Recommended reading	Basic literature	TPS handbook	
		Toyota Way	
	Supplementary literature	"Lean Thinking", Womack J.P.; Jones D.T.	
	"Machine that changed the world" Womack J.P.; Jones D.T.; Roos D.		
	eResources addresses	Adresy na platformie eNauczenie: Lean Management WIMiO - Moodle ID: 28814 <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=28814">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=28814</a>	

Example issues/ example questions/ tasks being completed	Zaprojektować produkt i proces  Projekt 5S zaangażuj do dostrzegania 3M  Projekt - program pomysłów pracowniczych korzystaj z wiedzy na gemba
Work placement	Not applicable