



## Subject card

Subject name and code	Production Quality Management, PG_00044443						
Field of study	Engineering Management						
Date of commencement of studies	October 2019	Academic year of realisation of subject			2021/2022		
Education level	first-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	Part-time studies	Mode of delivery			at the university		
Year of study	3	Language of instruction			Polish		
Semester of study	6	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 Anna Zielińska				
	Teachers		dr Anna Zielińska				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	8.0	16.0	0.0	0.0	0.0	24
	E-learning hours included: 0.0						
	Zarządzanie jakością produkcji wykład 2021/2022 niestacjonarne - Moodle ID: 22857 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22857">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22857</a> Zarządzanie jakością produkcji ćwiczenia 2021/2022 niestacjonarne - Moodle ID: 22858 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22858">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22858</a>						
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	24	6.0	70.0	100		
Subject objectives	Understanding of quality management basis, quality measurement and improvement tools, as well as basis of normalization.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_K01] can define priorities related to the implementation of team tasks as well as individual tasks	The student prioritizes tasks and evaluation criteria used in quality management			[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_U08] analyses engineering and managerial solutions in decision-making processes, taking into account pro-quality and pro-environmental aspects, as well as safety of work processes	The student analyzes engineering solutions in the field of quality management			[SU4] Assessment of ability to use methods and tools		
	[K6_W07] knows the basic conditions concerning norms and standards covering particular areas of the organization's functioning, including in particular those concerning technical resources and processes	The student knows the determinants of norms and standards in the functioning of enterprises			[SW2] Assessment of knowledge contained in presentation		
	[K6_U11] can plan and control production and production quality, including the identification and formulation of specifications for simple engineering tasks	The student is able to undertake planning and quality improvement activities in the enterprise			[SU4] Assessment of ability to use methods and tools		

Subject contents	LECTURES Quality definitions; Quality management development; Products and services quality; Quality determinants and its importance level; CSI and ESI index; ; Classical seven tools of quality; New seven tools of quality; ISO 9000 as the normalization example; Environment management system ISO 14000; ISO 18000; HACCP and ISO 22000; Quality management conceptions of E. Deming, J. Juran and Ph. Crosby; Excellence Models; Costs of Quality. TUTORIALS Products and services characteristics identification; Determinants examples of the products and services; Counting of the customer and employee satisfaction level with CSI and ESI index useing; Using of the cause and effects tools; Using of the seven classic quality tools; Using of the seven new quality tools; Group methods of the problems solving; Creating of the quality politics; Quality documents in normalization; Environment politics; Statistical methods of quality; Control charts; Counting of the Cp and Cpk indexes; Deming, Crosby and Juran quality thesis; Excellence Models Criteria; Counting of the quality costs.		
Prerequisites and co-requisites	No requirements		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	60.0%	25.0%
	Midterm colloquium	60.0%	25.0%
	Written exam	60.0%	50.0%
Recommended reading	Basic literature	Dahlgaard J., Kristensen K., Kanji G., Podstawy zarządzania jakością, Wyd. PWN, Warszawa 2002.  Hamrol A., Zarządzanie i inżynieria jakości, Warszawa, I, 2020  Szczepańska K., Zasady zarządzania jakością, Oficyna Wydawnicza Politechniki Warszawskiej, 2018	
	Supplementary literature	Hamrol A., Zarządzanie jakością z przykładami, Wyd PWN, Warszawa 2005  Urban W., Zarządzanie jakością usług, PWN, 2018	
	eResources addresses		
Example issues/ example questions/ tasks being completed	1 - Describe the structure of the tree diagram  2 - Describe control card - type X  3 - Describe control card - type R  4 - Calculate Cp and Cpk index  5 - Describe Kaizen conception		
Work placement	Not applicable		