



Subject card

Subject name and code	PRODUCTION AND QUALITY MANAGEMENT, PG_00061101						
Field of study	Management						
Date of commencement of studies	October 2024	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			English		
Semester of study	1	ECTS credits			5.0		
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. Ewa Marjańska					
	Teachers	dr inż. Ewa Marjańska					
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						
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	10.0		55.0		125
Subject objectives	Explains the rules for the implementation of production processes in the context of ensuring their efficiency and quality						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_W01] identifies in-depth the phenomena related to the field of study and the theories describing them and possible analytical methods	correctly identifies production management processes, taking into account the context of quality assurance, selecting the appropriate management concept			[SW1] Assessment of factual knowledge		
	[K7_U02] presents logical and solid arguments about the obtained results, by analyzing and synthesizing information in various business contexts, approaching their interpretation critically	critically evaluates the results of process analysis by synthesizing information from various contexts of their functioning			[SU2] Assessment of ability to analyse information		

Subject contents	<p>Production management Introduction to production management Historical view. Trends Operational strategy as a competitive tool Objectives and measures of operational activities. Productivity The structure of the production system. Structure, types and forms of organization of production Methodology of designing production systems Organization of the production process Continuous improvement and reengineering of processes Production planning and control Demand forecasting Coordination of demand and production Supplies management Material Requirements Planning (MRP) method Changing the principles of production management in the conditions of using information technology: MRP II, CIM and BPR The concept of JIT and Lean Manufacturing Kanban flow control system Human resource management in production systems</p> <p>Quality management LECTURE Quality definitions Development of quality management Quality of products and services Quality determinants and their level of importance CSI and ESI index; QFD method and quality house Tools of the classic seven of quality New quality seven tools Normalization on the example of ISO 9000 ISO 14000 Environmental Management System; ISO 18000; HACCP and ISO 22000 Quality management concepts by E. Deming, J. Juran, Ph. Crosby Models of Excellence Quality costs TUTORIAL Identification of features of products and services Examples of quality determinants in products and services Calculation of the level of customer and employee satisfaction using the CSI and ESI indexes Quality cottage construction Use of cause and effect tools The use of the tools of the classic seven of quality The use of tools of the new quality seven Group problem solving methods Creating a quality policy Quality documents in standardization Environmental policy Statistical methods in quality Control cards Calculation of the Cp and Cpk indices Deming's quality theses; Juran and Crosby Excellence Model Criteria Calculation of quality costs</p>											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="453 1366 794 1393">Subject passing criteria</th> <th data-bbox="799 1366 1141 1393">Passing threshold</th> <th data-bbox="1145 1366 1485 1393">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="453 1400 794 1426">Written exam</td> <td data-bbox="799 1400 1141 1426">60.0%</td> <td data-bbox="1145 1400 1485 1426">50.0%</td> </tr> <tr> <td data-bbox="453 1433 794 1460">Project</td> <td data-bbox="799 1433 1141 1460">80.0%</td> <td data-bbox="1145 1433 1485 1460">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Written exam	60.0%	50.0%	Project	80.0%	50.0%
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Example issues/ example questions/ tasks being completed	Operational strategy as a competitive tool Prioritize competing in quality, productivity and time The main objectives and criteria for evaluating enterprises Structure, types and forms of organization of production Organization of the production process Continuous improvement and reengineering of processes Coordination of demand and production											

Work placement	Not applicable
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