



## Subject card

Subject name and code	Production Management, PG_00040525						
Field of study	Engineering Management						
Date of commencement of studies	October 2019	Academic year of realisation of subject			2020/2021		
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			blended-learning		
Year of study	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			4.0		
Learning profile	general academic profile	Assessment form			exam		
Conducting unit	Department of Quality Management and Commodity Science -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Marek Wirkus				
	Teachers		dr hab. inż. Marek Wirkus				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	16.0	0.0	0.0	8.0	0.0	24
	E-learning hours included: 16.0						
Zarządzanie produkcją - Moodle ID: 9175 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=9175">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=9175</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		7.0		69.0	100
Subject objectives	The goal of the course is obtain by the students knowledge about contemporary operation systems of production and services. It gives the students skills in creation operation strategy and design operation systems.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	[K6_U11] can plan and control production and production quality, including the identification and formulation of specifications for simple engineering tasks					[SU1] Assessment of task fulfilment	
	[K6_K02] identifies problems related to undertaking various tasks, including engineering in the changing conditions of the organisation's functioning; takes into account the ethical aspect related to the implementation of the organisation's tasks					[SK1] Assessment of group work skills	
	[K6_W08] has a basic knowledge of the changes taking place in the organisation and its environment, taking into account environmental problems					[SW1] Assessment of factual knowledge	
	[K6_W12] has a basic knowledge of production management and occupational safety and ergonomics management, as well as information technologies necessary for engineering management		Knows the Goals and Measures of Operations. Productivity. Operation Processes. Process Layout Planning. Process Reengineering and Improvement. Process Management.			[SW1] Assessment of factual knowledge	
	[K6_W02] has a basic knowledge of the different types of departments in the organisation, with particular emphasis on structures of an engineering nature		Student defines and explains contemporary operation systems of production and services. Creates operation strategy. Applies fundamental methods and tools of design operation systems..			[SW1] Assessment of factual knowledge	

Subject contents	LECTURES: <ol style="list-style-type: none"> <li>1. Introduction. Historical view.</li> <li>2. Ability and production program.</li> <li>3. Forms of production organization.</li> <li>4. BOM and MRP.</li> <li>5. System and production process. ABC analysis.</li> <li>6. Supplies management. Production control and planning.</li> <li>7. Industry 4.0.</li> <li>8. Ecological aspects and industry 4.0</li> <li>9. MRPII and ERP systems</li> </ol>			
Prerequisites and co-requisites				
Assessment methods and criteria	Subject passing criteria		Passing threshold	Percentage of the final grade
	Project and colloquium		60.0%	50.0%
	Written exam		60.0%	50.0%
Recommended reading	Basic literature		<ol style="list-style-type: none"> <li>1. Durlik I., Inżynieria zarządzania : strategia i projektowanie systemów produkcyjnych, Cz.1 i 2, Agencja Wyd."Placet", W-wa 2011.</li> <li>2. Liwowski B., Kozłowski R., Podstawowe zagadnienia zarządzania produkcją, Oficyna Ekonomiczna. Kraków 2007.</li> <li>3. Pająk E., Zarządzanie produkcją. Produkt, technologia, organizacja, Warszawa, PWN, 2014.</li> <li>4. Sarjusz - Wolski Z., Sterowanie zapasami w przedsiębiorstwie, PWE, W-wa 2000.</li> <li>5. Olszak C., Sroka H. (red.): Zintegrowane systemy informatyczne w zarządzaniu. Katowice: Wydawnictwo Akademii Ekonomicznej, 2001.</li> <li>6. Syme D., Granicz A., Cystemino A., F# 4.0 dla zaawansowanych, Wyd. 4, Helion Apress, W-wa 2017.</li> </ol>	
	Supplementary literature		<ol style="list-style-type: none"> <li>1. Jasiński Z.: Podstawy zarządzania operacyjnego, Oficyna Ekonomiczna, Kraków, 2005</li> <li>2. Muhlemann A.P., Oakland J.S., Lockyer K.G.: Zarządzanie. Produkcja i usługi. PWN Warszawa 1995</li> <li>3. Krajewski L.J., Ritzman L.P.: Operations Management: Strategy and Analysis. 4th Edition, Addison-Wesley Publishing Company, 1996</li> </ol>	
	eResources addresses			
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> <li>1. Sketch and briefly characterize the types of machines and production facilities known to you. Which of them and why did you use in your project?</li> </ol>			
Work placement	Not applicable			