

SDAŃSK UNIVERSITY 的 OF TECHNOLOGY

Subject card

Subject name and code	Production Planning and Control, PG_00055506								
Field of study	Mechanical Engineering								
Date of commencement of studies	October 2021		Academic year of realisation of subject			2023/	2023/2024		
Education level	first-cycle studies		Subject gro	oup		Optional subject group Subject group related to scientific research in the field of study			
Mode of study	Full-time studies		Mode of de	livery		at the university			
Year of study	3		Language of instruction			Polish	Polish		
Semester of study	6		ECTS credits			4.0	4.0		
Learning profile	general academic pro	ofile	Assessmer	nt form		assessment			
Conducting unit	Institute of Manufactu Technology	uring and Mater	ials Technolog	y -> Faculty of	Mecha	nical Er	ngineering ar	nd Ship	
Name and surname	Subject supervisor	dr hab. inż. St	efan Dzionk						
of lecturer (lecturers)	Teachers		dr inż. Mieczy	/sław Siemiątk	owski				
			dr inż. Dominika Zakrzewska						
		dr inż. Sławomir Szymański							
			dr inż. Bogdan Ścibiorski						
			dr inż. Tomasz Seramak						
			dr inz. Tomas	z Seramak					
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Projec	:t	Seminar	SUM	
of instruction	Number of study hours	15.0	0.0	15.0	15.0		0.0	45	
	E-learning hours incl								
	Address on the e-lea			1					
Learning activity and number of study hours	Learning activity Participation ir classes includ plan				Self-study		SUM		
	Number of study hours	45		6.0		49.0 10		100	
Subject objectives	The aim of the course Possibilities of seque							itrol.	
Learning outcomes	Course outcome		Subject outcome			Method of verification			
	[K6_U09] is able to plan the manufacturing, assembly and quality control processes of typical constructions and mechanical devices, estimating their costs		The student is able to prepare a set of data indispensable in the production planning and control process. The student uses computer systems to obtain relevant data on the production planning and control process.			[SU3] Assessment of ability to use knowledge gained from the subject			
	[K6_U04] is able to perform a critical analysis of the existing technical solutions, present the specification of the technology of manufacturing basic construction elements of machines and engineering assemblies		The student prepares a paper on production planning and control issues for a simple enterprise model.			[SU5] Assessment of ability to present the results of task			
	[K6_W11] possesses knowledge on design, technology and manufacturing of machine parts, metrology, and quality control; knows and understands methods of measuring and calculating basic values describing the operation of mechanical systems, knows basic calculating methods applied to analyse the results of experiments		The student knows basic issues concerning production planning and control. The student uses the terminology used in production planning and control.			[SW1] Assessment of factual knowledge			

Prerequisites and cortequisites Subject passing criteria Passing threshold Percentage of the final grade practical excersise Assessment methods and criteria Subject passing criteria Passing threshold Percentage of the final grade practical excersise Recommended reading Basic literature 60.0% 25.0% Recommended reading Basic literature 1. Anli Mital, Anoop Desai, Anand Subarmanian, Aashi Mital: Product development, Butterworth-Heinemann is an inpirit Elsevier, 30 Corporate Drive, Suite 400, Buttington MA 01803 USA, 2008. Supplementary literature 1. Meryer Kutz, Mechanical Engineers' Handbook-Manufacturing and Management, John Wiley & Sons, INC, Hoboken New Jersey, 2006. eResources addresses Adresy ng platformie eNauczanie: Planowanie i sterowanie produkcja (PG_0005506), MIBM, sem. 6, stacjonarne i st., Ietni 2023/2024 - Moodie ID: 38310 Example issues/ example questions/ tasks being completed 1. Control theory - basic terminology. 7. The company as a cybernetic system. 5. The company as a cybernetic system. 5. The complexity of the production flow control. 6. The efficiency of the production flow control. 7. Control trues (AI-AIII, BHBII) 6. Control trues (AI-AIII, BHBII) 6. Control trues (AI-AIII, BHBII) 7. Explain whiching and production flow control. 7. Characterize the assess of production. 7. Explain which the PCC systems. 7. Explain which the PCC systems. 7. Characterize the assess of production. 7. Characterize the assess of production flow control. 7. Characterize the assess of production planning. 7.	LABORATORY Products: product attributes, routing options, resources, set-up and operation times, operation attributes. Resources data: resources, secondary constraints, resources groups. PROJECT: Entering the orders. batching methods. calendar states and shift patterns. Sequencing the orders. Standard dispatching rules. Standard algorithmic rules. Schedule analysis. Reports. Gantt Cha Order Trace Chart. Constraints plots.	operation attributes. Resources data: resources, secondary constraints, resources groups. PROJECT: Entering the orders. batching methods. calendar states and shift patterns. Sequencing the orders. Standard dispatching rules. Standard algorithmic rules. Schedule analysis. Reports. Gantt Chart.							
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