GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Labour Process Organization, PG_00040527		
Field of study	Engineering Management		
Date of commencement of studies	October 2020	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	2	Language of instruction	Polish
Semester of study	4	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics		
Name and surname of lecturer (lecturers)	Subject supervisor	mgr inż. Jerzy Grabosz	
	Teachers	mgr inż. Jerzy Grabosz	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	8.0	0.0	16.0	0.0	0.0	24

E-learning hours included: 0.0

Organizacja procesów pracy (SN) - lato 2021/2022 - Moodle ID: 24207
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=24207

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

Mastering the skills of analyzing, modeling and simulating work processes using IT software

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W02] has a basic knowledge of the different types of departments in the organisation, with particular emphasis on structures of an engineering nature	It has a basic knowledge of engineering analyzing, organizing, and improving the structure of work processes.	[SW3] Assessment of knowledge contained in written work and projects
[K6_W13] has a basic knowledge of the design, modelling and optimisation of technical processes and systems	It has a basic knowledge of mathematics, physics and chemistry, which is essential for proper solving technical problems.	[SW1] Assessment of factual knowledge
[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	Uses assessment methods, modeling and simulation work using computer software company BOC Adonis and Profit.	[SU4] Assessment of ability to use methods and tools
[K6_U07] can work independently and in a team	Uses assessment methods, modeling and work using computer software	[SU4] Assessment of ability to use methods and tools
[K6_W12] has a basic knowledge of production management and occupational safety and ergonomics management, as well as information technologies necessary for engineering management	It has a basic knowledge of management, evaluation and categorization of work processes.	[SW3] Assessment of knowledge contained in written work and projects

Subject contents	Lecture Assessment and analysis of the organization of work processes.; Standardization of time work processes.; Assessment and analysis of the human work load.; Suitability of operators to perform the work.; Concepts of extended work.; Evaluation and qualification of work processes.; Selection and optimization of resources in the systems of work.; Standardization of work processes. Laboratory Identification, notations and mapping of processes in Visio.; Modeling the allocation of activities and roles in the processes in ADONIS.; Techniques ETA and FTA of study of work processes in Visio.; Standardization of MTM technique norms in the program STATISTICA.; Analysis and simulation of the load process, in the program ADONIS.; Technology of shift work organization.; Methods of assessing and reducing of monotonous work.; Optimization of work processes and resources in the program SOLVER.
Prerequisites and co-requisites	Management Foundations of Computer Science Fundamentals of statistics

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Midterm colloquium	60.0%	30.0%
Written exam	60.0%	30.0%
Laboratory Rapports	100.0%	20.0%
Oral exam	60.0%	20.0%

Recommended reading

Basic literature

1. Gałaj-Emiliańczyk K, 2020 Implementation of an information security management system in accordance with ISO/IEC 27001. ODDK Publishing House
2. Gawin B., Marcinkowski B. 2013 Simulation of business processes. BPMS and BPMN standards in practice. Helion Publishing House.
3. Grabosz J. 2014 Audit of internal communication in the enterprise: a proposal for a diagnostic tool Publishing House WZiE Gdańsk University of Technology.
4. Horst W. (ed.) 2006: Ergonomics with occupational safety elements. PP Poznań Publishing House.
5. Piotrowski M. 2016 Business processes in practice design, testing and optimization, Helion Publishing House
6. Rostek K, (eds) M. Wiśniewski M. (eds), 2020 Modeling and analysis of processes in the organization OWPW Publishing House
7. Stadnicki J. 2006 Theory and practice of solving optimization tasks Publishing House W-NT, Warsaw 2006.

Szatkowski K. 2022 Modern production management - process approach. PWN Scientific Publishing House

Supplementary literature

1. Auksztol j. Chomuszko M.: 2021 Modeling of process organization. Publishing House PWN
2. Buslawski A. Kulińska E.: 2021 Management of the production process. Publishing House Difin
3. Grabosz J.: 2000 Identification of processes in the enterprise, Publishing House PZ Zielona Góra
4. Karczewski J, Szuman P.: 2019 Scilab. Modeling and simulation of system operation. Publishing House NAKOM
5. Kusztelak P.:2020 Analysis and modeling of financial data, PWE Publishing House
6. Krupa K. : 2017 Modeling, simulation and programming. Publishing House PWN
7. Lewis H., Rachel Zas R.: 2021 Discrete Mathematics. A must-have for IT professionals. Publishing House PWN
8. ISO 45 001:2018 Occupational health and safety management systems Requirements with guidance for use.

eResources addresses

Example issues/ example questions/ tasks being completed	Process mapping work
Work placement	Not applicable