GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Norms and standards in an enterprise, PG_00056143		
Field of study	Management and Production Engineering		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2026/2027
Education level	first-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	4	ECTS credits	7.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Institute of Manufacturing and Materials Technology -> Faculty of Mechanical Engineering and Ship Technology -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. inż. Jerzy Łabanowski	
	Teachers		

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	15.0	30.0	15.0	0.0	90
	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	90	0.0	0.0	90

Subject objectives	To acquaint students with standardization and normalization systems functioning in an enterprise. The task of these systems is to determine the application of optimal criteria and guidelines for the use of resources of their condition and the way of process implementation.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W10] has basic knowledge necessary to understand the economic determinants of engineering activities and economic law, to improve the work environment affecting productivity, costs and quality of work	The student understands the technical and economic benefits of standardization and normalization. The student knows legal references to standardization and normalization.	[SW3] Assessment of knowledge contained in written work and projects
[K6_K01] feels the need for self-realization by learning throughout life, is looking for modern and innovative solutions in their actions, is able to think creatively and act in an entrepreneurial way	The student seeks new and innovative solutions in setting standards and norms in implemented technical solutions.	[SK5] Assessment of ability to solve problems that arise in practice
[K6_W08] has basic management knowledge, including process and product quality management, and detailed knowledge of integrated and standardized quality, environmental, health and safety management systems	The student knows basic rules of normalization and standardization. The student understands benefits and threats resulting from applying norms and standards in various aspects of the business activity.	[SW1] Assessment of factual knowledge
[K6_U06] when formulating and solving engineering tasks a student can see aspects of system management and organization of individual and as a team, taking into account the human factor, has necessary peparation for work in an industrial environment, and knows the rules and standards related to occupational health and safety	The student is able to formulate basic requirements necessary to create documentation within the scope of local normative and standardization acts. The student is able to interpret basic normative acts in relation to the properties of manufactured elements, work environment and environmental protection.	[SU1] Assessment of task fulfilment
[K6_U01] can find the necessary information in professional literature, databases and other sources, knows basic scientific and technical journals in the field of production management, quality and operation management, can integrate the obtained information, formulate conclusions and justify opinions	The student will look for necessary information in the literature on aspects of standardization and normalization. The student is able to verify various technical standards for their usefulness in product development.	[SU2] Assessment of ability to analyse information

Subject contents

Course content – lecture
History and development of standardisation, Modern standardisation - legal regulations, Organisation of standardisation activity, Principles of standardisation activity, General guidelines for planning standardisation activities, Processes of preparing projects and approving standardisation activities, Types and structure of standards, Methods of proceeding in standardisation, Standardisation supporting management processes, Certification basis, Company standardisation and standardisation, Basis and principles of standardisation, Areas of standardisation, Benefits from standardisation and standardisation.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project	60.0%	25.0%
Colloquium lecture	60.0%	25.0%
Colloquium exercises	60.0%	25.0%
Reports of laboratory	60.0%	25.0%

Recommended reading

Basic literature

1. Jerzy Łunarski: Normalizacja i Standaryzacja, Wydawnictwo Politechnik Rzeszowskiej 2014r.
2. Jerzy Łunarski: Zarządzanie jakością - standardy i zasady, WNT, Warszawa 2008r
3. Marek Bugdol: System zarządzania jakością wg normy ISO 9001:2015, Wydawnictwo Onepress Helicon, 2018.

Supplementary literature

1. Polskie Normy
2. Europejskie Normy Zharmonizowane
3. Normy ISO

eResources addresses

Example issues/ example questions/ tasks being completed	1. A broad view of the concept of "norm" 2. Unconscious "normalization activity" of nature 3. Standardized systems in the development of civilization 4. Early prenormalization activities 5. Laws as obligatory norms 6. Customary and ethical standards 7. Origins of organized standardization activity 8. Sources and foundations of standardization 9. General Guidelines for Standard-setting 10. Planning for standardization activities 11. Standardization in quality management 12. Standardization in safety management 13. Standardization in personnel management 14. Standardization in other areas of organizational management 15. Processes for drafting standards 16. Approval and use processes for standards 17. Classification and labelling 18. Standardization in personnel management 19. Standardization in design processes 20. Standardization of production work processes
Practical activites within the subject	Not applicable

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