



Subject card

Subject name and code	Quality Management and Building Chemistry Products, PG_00018825						
Field of study	Chemistry in Construction Engineering						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2024/2025		
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	Full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Process Engineering and Chemical Technology -> Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Anna Zielińska-Jurek					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	30.0	30
	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	30		4.0		16.0	50
Subject objectives	Gaining knowledge regarding management systems, the quality management (TQM), methods, tools, and instruments of quality management. Basic knowledge of ISO 9001, 14001, 18001. Quality audits, environmental audits, quality costs						

Learning outcomes	Course outcome	Subject outcome	Method of verification
		Student is able to: 1. point and discuss basic ideas of quality management 2. define, evaluate and solve simple problems 3. apply rules of production management and total quality management 4. apply ground rules of quality control for building materials and products 5. find and comply with regulations of chemical substances management related to building materials and products.	[SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task
			[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
			[SU3] Assessment of ability to use knowledge gained from the subject
			[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
	K6_W11	student is able to: 1. prepare an audit 2. be fluent in ISO 9001 3. discuss the REACH system principles 4. discuss the principles, methods and tools of quality management	
K6_U04	student is able to describe the existing technical solutions, apparatus, processes in the field of construction chemistry. Can prepare an environmental impact assessment of the existing technology.		
Subject contents	Basics of total quality management. Business excellence. Normalization, certification and integration of quality, environment, industrial safety and information safety management systems. Methods and tools of quality improvement. Quality costs. Selected systems and standards of quality management. Quality in production management. Regulations on chemical substances management. Normalization and conformity estimation for building materials.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Homework in the field of ISO standards	60.0%	50.0%
	Activity during classes	60.0%	20.0%
	Multimedial presentation	60.0%	30.0%
Recommended reading	Basic literature	1. J. Łunarski, Zarządzanie jakością, WNT 2008 2. Ustawa z dn. 16 kwietnia 2004 r. o wyrobach budowlanych (Dz.U. nr 92, poz. 881) z późn. zmianami 3. Ustawa z dn. 30 sierpnia 2002 r. o systemie oceny zgodności (Dz.U. nr 166, poz. 1360) z późn. zmianami 4. Rozporządzenie (WE) nr 1907/2006 Parlamentu Europejskiego i Rady w sprawie rejestracji, oceny, udzielania zezwoleń i stosowanych ograniczeń w zakresie chemikaliów (REACH)	
	Supplementary literature	1. P. F. Drucker – Praktyka zarządzania 2. L. Iacocca – Autobiografia 3. J. Stoner, R. Freeman, D. Gilbert – Kierowanie 4. H. Drummond – W pogoni za jakością 5. A. Chauvet – Metody zarządzania – przewodnik 6. J. Brilaman – Nowoczesne koncepcje i metody zarządzania 7. A. Koźmiński, W. Piotrowski Zarządzanie – teoria i praktyka	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	1. Discuss the modern methods of management, Quality Management (ZPJ), the philosophy of quality - concepts of Deming, Juran, Crosby 2. Discuss the quality management system based on ISO 9000 3. What management system should be implemented at the time of development of the organization		
Work placement	Not applicable		