

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Quality Management in Civil Engineering		Code 1010102121010110112
Field of study Civil Engineering second-cycle studies	Profile of study (general academic, practical) (brak)	Year /Semester 1 / 2
Elective path/specialty Costruction Engineering and Management	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: Second-cycle studies	Form of study (full-time,part-time) full-time	
No. of hours Lecture: 1 Classes: 1 Laboratory: - Project/seminars: 1		No. of credits 2
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 2 100% 2 100%
Responsible for subject / lecturer: dr hab. inż. Jerzy Paślawski email: jerzy.paslowski@put.poznan.pl tel. +48616652113 Wydział Budownictwa i Inżynierii Środowiska ul. Piotrowo 5 60-965 Poznań		Responsible for subject / lecturer: mgr inż. Piotr Nowotarski email: piotr.nowotarski@put.poznan.pl tel. 616652113 Wydział Budownictwa i Inżynierii Środowiska ul. Piotrowo 5 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic information about the role of quality management in managing
2	Skills	Can analyze the typical manufacturing process
3	Social competencies	He is aware of the social consequences of unconformity
Assumptions and objectives of the course: Understanding the concept of quality management (lectures) and methods for its implementation and practical skills to create quality system documentation, knowledge of the basic principles of the market (classes)		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. He knows the theoretical basis for quality management - [K2_W10]		
2. He knows the tools, techniques, and principles of quality management - [K2_W10]		
3. He knows the rules of the system of quality management in the construction industry - [K2_W10]		
Skills:		
1. Able to analyze the process of anticipating and preventing the construction quality problem - [K2_U12]		
2. Able to develop and run a system of continuous quality improvement mechanism - [K2_U12]		
3. Can use common tools of quality management - [K2_U12]		
Social competencies:		
1. Isolated complements and extends knowledge in quality management - [K2_K03]		
2. Able to work independently, to work in a team and manage it - [K2_K01]		
3. Follows the rules of ethics - [K2_K11]		
Assessment methods of study outcomes		

<p>Student Work includes:</p> <ul style="list-style-type: none"> * The development and presentation of a selected topic in the subject * Project to improve the system of quality management * Written test <p>Rating scale (test):</p> <p>more than 100 targeted</p> <p>91-100 very good (A)</p> <p>81 - 90 good plus (B)</p> <p>71 - 80 Good (C)</p> <p>61 - 70 is sufficient plus (D)</p> <p>51 - 60 satisfactory (E)</p> <p>insufficient under 50 (F)</p>		
Course description		
<p>Introduction, rationale implementation of quality management systems. Development of quality engineering genesis of quality management systems, current status and prospects for development. Authorities in the field of quality management (Deming's ideas, Juran, Crosby on white and others) - the concept of quality engineering based on their assumptions. The essence of Total Quality Management (assumptions, the basic elements). System measures, methods and tools of quality management and teamwork. Mutual communication, motivation and organizational culture. Understanding the principles of creating quality books in the enterprise. Introduction to the fundamental principles of the free market - simulation</p>		
Basic bibliography:		
<ol style="list-style-type: none"> 1. Zarządzanie jakością z przykładami, Wydawnictwo Naukowe PWN, Warszawa 2005, 2008 2. i Eckers Georges, Rewolucja Six Sigma ? jak General Electric i inne przedsiębiorstwa zmieniały proces w zyski, Akademia Białego Kruka, MT Biznes, Warszawa 2010 		
Additional bibliography:		
<ol style="list-style-type: none"> 1. PO PROSTU JAKOŚĆ. PODRĘCZNIK DO ZARZĄDZANIA JAKOŚCIĄ Jan M. Myszewski, 2009 		
Result of average student's workload		
Activity	Time (working hours)	
1. Participation in lectures / seminars	30	
2. Participation in project in quality system	15	
3. Preparation to test	15	
4. Elaboration of project	20	
Student's workload		
Source of workload	hours	ECTS
Total workload	75	2
Contact hours	15	0
Practical activities	10	0