POZNAN UNIVERSITY OF TECHNOLOGY

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Quality management [N2IBez1>ZJ2]

Course

Field of study	Year/Semester
Safety Engineering	1/2
Area of study (specialization)	Profile of study
Ergonomics and Work Safety	general academic
Level of study	Course offered in
second-cycle	polish
Form of study	Requirements
part-time	compulsory

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
0	0	0
Tutorials	Projects/seminars	
0	10	

Number of credit points

2,00

Coordinators

dr hab. inż. Agnieszka Misztal prof. PP
agnieszka.misztal@put.poznan.pl

Lecturers

dr hab. inż. Małgorzata Jasiulewicz-Kaczmarek
prof. PP
malgorzata.jasiulewicz-kaczmarek@put.poznan.pl

Prerequisites

Student should have a basic knowledge of quality engineering, is able to interpret concept of quality, knows how to apply basic quality methods and technigues, has ability to work in a group.

Course objective

Providing students with knowledge about precursors of quality management, system and process approach, modern principles of quality management and conditions related to them; teaching how to solve quality management problems and creating pro-quality attitudes.

Course-related learning outcomes

Knowledge:
1. knows issues in field of designing quality management system processes [p7s_wg_07]
2. knows issues of management functions in area of quality [p7s_wg_08]
3. knows basic pro-quality principles used in solving simple engineering tasks in area of ergonomics and work safety using information technologies, information protection and computer support [p7s_wk_03]

Skills:
1. is able to properly select sources and information derived from them in relation to quality-oriented principles, and on the basis of this makes an assessment, critical analysis and synthesis, as well as is able to formulate conclusions and comprehensively justify the opinion [ps7_ow_01]
2. is able to apply various pro-quality techniques to communicate in a professional environment and in other environments [ps7_ow_02]
3. can see the analogy of pro-quality systems and formulate engineering and non-technical as well as socio-technical, organizational and economic aspects in engineering tasks [ps7_ow_03]
4. is able to use research, analytical, simulation and experimental methods to formulate and solve engineering tasks using pro-quality methods and tools [ps7_ow_04]
5. is able to plan and carry out measurements and computer simulations of the quality system, interpret the results obtained and draw conclusions [ps7_ou_01]

Social competences:
1. is aware of perception cause-and-effect relationships in achieving set pro-quality goals and ranking the significance of alternative or competitive tasks [ps7_kk_01]
2. is aware of recognition of importance of pro-quality knowledge in solving problems in the field of security engineering and continuous improvement [ps7_kk_02]
3. is aware of the responsibility for own work and readiness to comply with the rules of teamwork and taking responsibility for jointly implemented tasks [ps7_kr_02]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
Formative assessment: current assessment of project progress, partial points,
Summative rating: grade for project and its presentation.

Programme content

Managing process environment in implementation. Machine safety map.

Teaching methods

Didactics method: project based on a case study.

Bibliography

Basic
1. Jasiulewicz-Kaczmarek M., Misztal A. (2014), Projektowanie i integracja systemów zarządzania jakością, Wydawnictwo Politechniki Poznańskiej, Poznań.
2. Hamrol A. (2008), Zarządzanie jakością z przykładami, PWN, Warszawa.
3. Gołaś H., Mazur A. (2012), Zarządzanie jakością, Wydawnictwo Politechniki Poznańskiej, Poznań.
4. Szczepańska K. (2018), Zasady zarządzania jakością, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa.
5. Dobrowolska A. (2017), Podejście procesowe w organizacjach zarządzanych przez jakość, Wydawnictwo Poltext, Warszawa.
Additional
1. Gruszka J., Misztal A. (2017), Zarządzanie jakością w motoryzacji wg standardu IATF 16949:2016 w ujęciu procesowym, Problemy Jakości 11, 4-10.
2. Gołaś H., Mazur A., Misztal A. (2016), Model doskonalenia przedsiębiorstwa przez zarządzanie ryzykiem zgodnie z ISO 9001:2015, Problemy Jakości, 10, 9-14.
3. Jasiulewicz-Kaczmarek M., Drożyner P. (2010), Excellence models in maintenance , [w:] Fertsch M. (red.), Innovative and intelligent manufacturing systems, (s. 335-352), Wydawnictwo Politechniki Poznańskiej, Poznań.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	10	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	40	1,50