



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Quality management systems [S2ZiIP2-liZJ>SZJ]

### Course

Field of study

Management and Production Engineering

Year/Semester

2/3

Area of study (specialization)

Quality Engineering and Management

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

15

Laboratory classes

0

Other (e.g. online)

0

Tutorials

15

Projects/seminars

30

### Number of credit points

5,00

### Coordinators

dr inż. Łukasz Grudzień

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### Lecturers

### Prerequisites

The student has knowledge of the attitudes of business management, understands the need to learn and acquire new knowledge; recognizing the possibility of continuous improvement in various areas of life, including the activities of organizations, with particular emphasis on manufacturing enterprises. Knowledge of the requirements of ISO 9001. The ability to translate the requirements of standards into ways to meet them. Ability to interpret the requirements of the standards. Ability to work in a team. Awareness of responsibility for the solutions adopted and the consequences of the decisions made.

### Course objective

To familiarize students with theoretical and practical issues related to documentation design in management systems and system maintenance. To develop pro-quality awareness. Ability to develop MS documentation.

### Course-related learning outcomes

Knowledge:

1. knows the principles of management systems documentation design
2. has knowledge of documentation oversight requirements

3. has basic knowledge of systemic elements of management systems maintenance (internal audits, management reviews)
4. knows the principles of audit preparation including plan, pre-audit and post-audit activities

**Skills:**

1. can explain the requirements of ISO 9001 from the point of view of documenting solutions
2. can independently develop the initial version of the documentation in the organization
3. be able to develop individual procedures
4. is able to program internal audits and document the audit evidence observed.
5. the student is able to recognize threats (traditional approach) and take advantage of opportunities in the functioning of the organization.

**Social competences:**

1. is able to independently develop knowledge in the area of the subject.
- 2 the student is open to new ideas and concepts, making changes and striving for improvement.

**Methods for verifying learning outcomes and assessment criteria**

Learning outcomes presented above are verified as follows:

Credit on the basis of a colloquium consisting of 15+20 test questions conducted at the end of the semester. Credit from half of good answers+1.

**Programme content**

Terminology of the subject: management systems requirements, documentation, process, procedyra Introduction to SZ design. Analysis of ISO 9001 requirements in terms of documentation. Contents of the quality book, procedures, instructions. Discussion of basic system tools supporting SZ maintenance - management reviews, internal audits, corrective and preventive actions. Internal audit guidelines (ISO 19011) - planning, conducting, documenting, auditor qualifications.

**Course topics**

Terminology of the subject: management systems requirements, documentation, process, procedyra Introduction to SZ design. Analysis of ISO 9001 requirements in terms of documentation. Contents of the quality book, procedures, instructions. Discussion of basic system tools supporting SZ maintenance - management reviews, internal audits, corrective and preventive actions. Internal audit guidelines (ISO 19011) - planning, conducting, documenting, auditor qualifications.

**Teaching methods**

Lecture: multimedia presentation illustrated with examples given on the blackboard

**Bibliography**

**Basic:**

1. Hamrol A., Quality management with examples, PWN Warsaw, 2012
2. PN-EN ISO 9001:2015 Quality Management Systems. Requirements
3. PN-EN ISO 9004:2015 Quality Management Systems. Guidelines for operation
4. PN-EN ISO 9000:2015 Quality Management Systems. Attitudes and terminology

**Additional:**

Schlickman, ISO 9001:200 Quality Management System Design, Artech House, Boston-London 2003

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	125	5,00
Classes requiring direct contact with the teacher	62	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	63	2,50