UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN

Faculty of Technical Sciences

Course title: Quality Management (for mechanical engineering)

ECTS credit allocation (and other scores): 2.5

Semester: autumn

Level of study: ISCED-6 - first-cycle programmes (EQF-6)

Branch of science: Engineering and technology

Language: English

Number of hours per semester: 30

Course coordinator/ Department and e-mail: Przemysław Drożyner/Chair of Vehicles and Machinery Exploitation. przemyslaw.drozyner@uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: (Project of Integrated Management System for a selected company. Process approach in management. Development of practical solutions for selected requirements of ISO 9001 - the context of the organization, analysis of risks and opportunities, identification of stakeholders, identification of responsibilities, rights and competences of employees, supervision over infrastructure, resources for monitoring and measurement, etc. Integration with the requirements of other management systems - environment, health and safety and business responsibility.

LECTURES: The concept of quality. Outline of quality management theory. Quality control v. Quality management. Quality Management Systems (QMS). Interpretation of the ISO9001 standard. Improving the QMS. Tools and methods for management systems improvement. QMS Certification. Basics of other management systems - environment, health and safety and ethics in business. Integrated Management Systems. Audits of management systems.
Learning purpose: preparing students to carry out tasks related to the implementation, maintenance and improvement of management systems.

On completion of the study programme the graduate will gain:

Knowledge: Knowledge about ISO 9001 requirements as well as other generic management systems.

Skills: Ability to design, maintain, improve quality management systems.

Social Competencies: Ability to work in a team, aw awareness of the responsibility of all employees for the implementation and maintenance of management systems.

Basic literature: Natarajan, Dhanasekharan , ISO 9001 Quality management systems , Springer-Verlag GmbH, 2017; David Hewitt, Quality Management Systems - A guide to ISO 9001, Purple Parrot Publishing, 2019

Supplementary literature: William Edwards Deming, The Essential Deming: Leadership Principles from the Father of Total Quality Management, Mc Grow Hill, 2013

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 30

Student's independent work: 15