



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Product lifecycle management

		Course
Field of study		Year/Semester
Mechanical and Automotive Engineering		2/3
Area of study (specialization)		Profile of study
Refrigerated vehicles		general academic
Level of study		Course offered in
Second-cycle studies		polish
Form of study		Requirements
full-time		elective

		Number of hours
Lecture	Laboratory classes	Other (e.g. online)
15	0	0
Tutorials	Projects/seminars	
0	15	
<b>Number of credit points</b>		
2		

		Lecturers
Responsible for the course/lecturer:		Responsible for the course/lecturer:
dr inż. Karolina Perz		
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**Prerequisites**

Knowledge: Has an elementary knowledge of the life cycle of machines, recycling of machine elements and construction and operating materials

Skills: He can design a technology of making a simple machine element as well as the technology of assembling and disassembling a machine.

Social Competence: Is ready to think and act in an entrepreneurial manner

### Course objective

The aim of the course is to familiarize students with the product management process. Students learn



product management strategies depending on the product life cycle, learn about product promotion methods depending on the goal of the campaign.

### Course-related learning outcomes

#### Knowledge

1. Has general knowledge of standardization, EU recommendations and directives, national industry and international standards systems and industrial standards.
2. Has extended knowledge of modern construction materials such as carbon plastics, composites, ceramics, in terms of their construction, processing technology and applications.
3. Has extended knowledge of the life cycle of machines, principles of operation of working machines and destructive processes occurring during operation, such as tribological wear, corrosion, surface fatigue and material aging.

#### Skills

1. Can estimate the potential threats to the environment and people from the designed work machine and vehicle from a selected group.
2. Can advise on the selection of machines for the technological line within the specialization.
3. Can independently plan and implement his own learning throughout life and direct others in this regard.

#### Social competences

1. Is ready to critically evaluate the knowledge and content received.
2. Is ready to fulfill social obligations, inspire and organize activities for the benefit of the social environment.
3. Is willing to think and act in an entrepreneurial manner.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

For discussion, ongoing preparation and activity in class. Final credit for a self-made project.

### Programme content

Introduction to the issue of product life cycle management, analysis of individual stages of the product life cycle, development of new products, development of the product concept, shaping the product and assortment in accordance with the requirements of the European Union, product and service promotion, implementation of product quality assurance systems in the enterprise, price and promotion management product, strategies to ensure product competitiveness.

### Teaching methods

1. Lecture with multimedia presentation



## 2. Implementation of the project

### Bibliography

#### Basic

1. Sojkin B. pod red., 2003r., "Zarządzanie produktem", wyd. Polskie Wydawnictwo Ekonomiczne,
2. Gorchels L. , 2007r., "Zarządzanie produktem. Od badań i rozwoju do budżetowania reklamy", wyd. Wydawnictwo Helion. Gliwice,
3. Gutkowska K., Ozimek I., 2002r., "Badania marketingowe na rynku żywności", wyd. Wydawnictwo SGGW

#### Additional

1. John Stark, Product Lifecycle Management (Volume 3): The Executive Summary, Springer International Publishing., 2018
2. Tyrańska, Małgorzata, Formułowanie strategii produktu w firmie : pomocnicze materiały dydaktyczne , Wydawnictwo / Akademia Ekonomiczna w Krakowie., 2002

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for tutorials, preparation for tests) <sup>1</sup>	20	1,0

<sup>1</sup> delete or add other activities as appropriate