

# Procurement logistics engineering - opis przedmiotu

## Informacje ogólne

Nazwa przedmiotu	Procurement logistics engineering
Kod przedmiotu	06.9-WM-ZiIP-ZL-ANG-D-23_20
Wydział	<u>Wydział Mechaniczny</u>
Kierunek	Management and Production Engineering
Profil	ogółnoakademicki
Rodzaj studiów	drugiego stopnia z tyt. magistra inżyniera
Semestr rozpoczęcia	semestr zimowy 2020/2021

## Informacje o przedmiocie

Semestr	3
Liczba punktów ECTS do zdobycia	2
Typ przedmiotu	obowiązkowy
Język nauczania	angielski
Syllabus opracował	• dr hab. inż. Waldemar Woźniak, prof. UZ

## Formy zajęć

Forma zajęć	Liczba godzin w semestrze (stacjonarne)	Liczba godzin w tygodniu (stacjonarne)	Liczba godzin w semestrze (niestacjonarne)	Liczba godzin w tygodniu (niestacjonarne)	Forma zaliczenia
Laboratorium	30	2	18	1,2	Zaliczenie na ocenę
Wykład	15	1	9	0,6	Zaliczenie na ocenę

## Cel przedmiotu

The main effect of the training is to learn how to implement the sourcing of raw materials, parts and the intermediates used in manufacturing enterprises.

## Wymagania wstępne

Production and Service Management, Operations Research.

## Zakres tematyczny

### Lecture

The essence and meaning of supply shopping. The basic functions of purchasing processes, that is, identification of the function and of the informative conditions of the processes of supply. Major phases of the flow of material. The design and construction of organisational infrastructure. Types of organisational structures. Centralised supply purchases, *vis-à-vis* the advantages and disadvantages of the centralisation of the purchase of supplies. Relations between the Supply Purchasing Department and other departments within the company. Internal organisation of the Supply Purchasing Department. Sourcing, in multi-factory enterprises. Economic and organisational conditions of supply chain management. Fundamentals of planning the supply of materials. System for planning the requirements of the quantities of materials – MRP. Tasks and structure of the MRP system. Operational objectives in the management of the purchase of supplies. Selection of sources of purchase. Styles and phases of negotiation in procurement processes. Traditional purchase procedures. Simplified purchase procedures. Special cases during the purchasing phase, namely, the group ordering of materials, price reductions, the inflation factor in purchasing policy, spare part purchases, discontinuity purchases and '*just-in-time*' supply purchases. Research into the sourcing of supply of purchases.

### Laboratory

Process engineering, based on the sourcing process. Computer simulation carried out using selected IT tools and balancing the requirements of the quantities of materials with planned or active production orders.

## Metody kształcenia

Conventional lecture.

Laboratory, according to the assumptions of the subject of the course.

## Efekty uczenia się i metody weryfikacji osiągania efektów uczenia się

Opis efektu	Symbol efektów	Metody weryfikacji	Forma zajęć
The student is able to choose the relevant modules and use integrated management information systems.	• K_U12	• bieżąca kontrola na zajęciach	• Wykład • Laboratorium
The student is able to identify and determine occupational problems.	• K_K05	• bieżąca kontrola na zajęciach	• Laboratorium

Opis efektu	Symbol efektów	Metody weryfikacji	Forma zajęć
The student is able to choose the method for support in decision-making in management and to introduce modifications of the methods applied.	• <a href="#">K_U26</a>	• bieżąca kontrola na zajęciach	• Wykład • Laboratorium
The student has a thoroughly extensive knowledge of the application of computer aided, numerical methods as applied to source and data analysis.	• <a href="#">K_W03</a>	• bieżąca kontrola na zajęciach	• Wykład • Laboratorium
The student is able to assess costs, both initial and estimated, of the engineering projects implemented, in order to provide a preliminary economic analysis of the engineering activities undertaken.	• <a href="#">K_U23</a>	• bieżąca kontrola na zajęciach	• Wykład • Laboratorium
The student has an orderly theoretical knowledge of forecasting and simulation in an enterprise.	• <a href="#">K_W10</a>	• bieżąca kontrola na zajęciach	• Wykład • Laboratorium
The student is able to obtain information from literature, databases and other sources and is able to integrate, interpret and critically evaluate it, as well as draw conclusions, therefrom, both formulating it and sufficiently justify opinions on it.	• <a href="#">K_U01</a>	• bieżąca kontrola na zajęciach	• Wykład • Laboratorium
The student is able to design and manage mechanical engineering databases.	• <a href="#">K_U28</a>	• bieżąca kontrola na zajęciach	• Wykład • Laboratorium

## Warunki zaliczenia

**Lecture:** graded credit. Assessment on the basis of a written test which includes verification of a knowledge of basic issues.

**Laboratory:** graded credit. Assessment on the basis of the performance of tasks in the simulator, during the course of the class.

**Final score:** the arithmetical average of the scores from each type of class.

## Literatura podstawowa

1. Sachin Kumar Mangla, Sunil Luthra: Sustainability, Innovation and Procurement, ISBN 9781138365483, CRC Press 2019.
2. G. Don Taylor: Logistics Engineering Handbook, ISBN 9780367387976, CRC Press 2019.
3. Sachin K. Mangla, Sunil Luthra, Suresh Kumar Jakhar, Anil Kumar, Nripendra P. Rana: Sustainable Procurement in Supply Chain Operations, ISBN 9781138608153, CRC Press 2019.

## Literatura uzupełniająca

1. G. Don Taylor: Introduction to Logistics Engineering, ISBN 9780367386269, CRC Press 2019

## Uwagi

Zmodyfikowane przez dr hab. inż. Waldemar Woźniak, prof. UZ (ostatnia modyfikacja: 05-05-2020 22:40)

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