Design of distribution logistics systems - opis przedmiotu

Informacje ogólne

Nazwa przedmiotu	Design of distribution logistics systems
Kod przedmiotu	06.9-WM-ZiIP-ZL-ANG-D-21_20
Wydział	Wydział Mechaniczny
Kierunek	Management and Production Engineering
Profil	ogólnoakademicki
Rodzaj studiów	drugiego stopnia z tyt. magistra inżyniera
Semestr rozpoczęcia	semestr zimowy 2021/2022

Informacje o przedmiocie

Semestr	3
Liczba punktów ECTS do zdobycia	3
Typ przedmiotu	obowiązkowy
Język nauczania	angielski
Sylabus 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	-	-	Zaliczenie na ocenę
Wykład	15	1	-	-	Zaliczenie na ocenę

Cel przedmiotu

The main objective of the training will be to acquire skills in order to design distribution logistics systems in production companies.

Wymagania wstępne

Production and Service Management, Operations Research.

Zakres tematyczny

Lecture

Design of finished product warehouses, logistics centres and customer service centres. Design of processes, related to the handling of shipments of finished products, in various production companies. Design of ICT infrastructure for distribution logistics. Breakdown of warehouses by sector and analysis of the rotation of finished products in the warehouse. Selection of means of external transport. Planning of the distribution of finished products *vis-à-vis* the efficient management of the distribution of such finished products.

Laboratory

As part of the laboratory, students will design a distribution logistics system for selected production companies. The project will cover a finished products warehouse with a selection of equipment and the means of internal transport and a system for the planning of dispatches, that is, with regard to the dispatch boxes and the completion of orders; planning how the means of transport are to be loaded and then linked, forward, to the planning of shipping routes.

Metody kształcenia

Conventional lecture.

Computer laboratory. Work in a selected simulator.

Efekty uczenia się i metody weryfikacji osiągania efektów uczenia się

Opis efektu	Symbole efektów	Metody weryfikacji	Forma zajęć
The student has orderly and specific theoretical knowledge of branches, within a chosen speciality Logistics management.	• K_W15	• kolokwium	• Wykład
The student is able to formulate the requirements for a supply chain and is also able to design complex logistics system.	• K_U25	• przygotowanie projektu	• Laboratorium
The student has knowledge of development trends and new developments in management, manufacturing engineering.	• K_W16	• kolokwium	• Wykład

Opis efektu	Symbole efektów	Metody weryfikacji	Forma zajęć
The student is able to design a complex manufacturing system and to choose methods for managing work flow by using innovative methods; he/she is also able to design workplaces and critically analyse how the proposed solutions will work.	• K_U24	• przygotowanie projektu	• Laboratorium
The student is able to prioritise and carry out his/her own tasks as well as the tasks of others.	• K_K04	• przygotowanie projektu	• Laboratorium
The student understands the importance of the non-technical aspects and effects of engineering, including their impact on the environment; the student is aware of the responsibilities resulting from decisions taken in this regard.	• K_K02	• przygotowanie projektu	• Laboratorium
The student is able to integrate technical knowledge with appropriate science disciplines, relevant to Management and Production Engineering viz., production engineering, management.	• K_U18	• kolokwium	• Wykład

Warunki zaliczenia

Lecture: graded credit. To gain credits for the lecture, the student is required to pass a written colloquium.

Laboratory: graded credit. A form of laboratory assessment is based on tasks performed while working with the simulator.

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

Literatura podstawowa

1. Gianpaolo Ghiani, Gilbert Laporte: Introduction to Logistics Systems Management, ISBN-13: 978-1119943389, Wiley 2013.

2. Martin Straka: Distribution and Supply Logistics, ISBN-13: 978-1-5275-3607-4, Cambridge Scholars Publishing 2019.

3. Voratas Kachitvichyanukul, Kanchana Sethanan, Paulina Golinska- Dawson: Toward Sustainable Operations of Supply Chain and Logistics Systems, ISBN: 9783319190051, Springer 2013

Literatura uzupełniająca

Uwagi

Zmodyfikowane przez dr inż. Tomasz Belica (ostatnia modyfikacja: 28-04-2021 22:42)