

Logistic of manufacturing enterprises - opis przedmiotu

Informacje ogólne

| | |
|---------------------|--|
| Nazwa przedmiotu | Logistic of manufacturing enterprises |
| Kod przedmiotu | 06.9-WM-ZiIP-ANG-D-09_17 |
| Wydział | <u>Wydział Mechaniczny</u> |
| Kierunek | Management and Production Engineering |
| Profil | ogółnoakademicki |
| Rodzaj studiów | drugiego stopnia z tyt. magistra inżyniera |
| Semestr rozpoczęcia | semestr zimowy 2018/2019 |

Informacje o przedmiocie

| | |
|---------------------------------|--|
| Semestr | 1 |
| Liczba punktów ECTS do zdobycia | 3 |
| Typ przedmiotu | obieralny |
| Język nauczania | angielski |
| Syllabus opracował | • dr hab. inż. Sławomir Kłos, 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 |
|-------------|--|---|---|--|---------------------|
| Wykład | 15 | 1 | - | - | Zaliczenie na ocenę |
| Projekt | 30 | 2 | - | - | Zaliczenie na ocenę |

Cel przedmiotu

The main effect of instruction is the knowledge of the essence of logistics management in an enterprise in the area of production as well as of methods and production models.

Wymagania wstępne

Production and Services Management.

Zakres tematyczny

Definitions of logistics, process of logistics management in an enterprise, identification of processes in an enterprise, a logistics network - limiting conditions, the objective function. Logistic system, logistic system of an enterprise, logistic system vs. logistic process, logistic chain. Warehouse logistics - the minimum level of ordering, controlling of a warehouse (indicators), methods: FIFO and LIFO, the average cost method. IT systems: MRP, MRP II, ERP, ERP II. Development trends of integrated management systems, application examples. Logistics of production: the production function, production flexibility. Cobb-Douglas production function. The CES function. The Zellner and Revankar function. Optimization of production. The Gozinto's graph. New trends in logistics, e-business, B2B, B2C, virtual enterprise.

The curriculum includes performing of the following exercises:

- Designing of a logistics network - specifying the restrictive conditions, the objective function
- Determining the optimal level of orders
- Controlling in a warehouse - calculation of indicators
- Inventory valuation method in stock - methods : FIFO, LIFO, the average cost method
- MRP - Calculations
- The linear correlation of one variable as a method of prognosis
- Production function
- The Cobb-Douglas function
- Other forms of the production function
- The Gozinto's graph
- Optimization of production
- New trends in logistics, e-business, B2B, B2C, virtual enterprise.

Metody kształcenia

Conventional lecture. Project.

Efekty uczenia się i metody weryfikacji osiągania efektów uczenia się

| Opis efektu | Symbol efektów | Metody weryfikacji | Forma zajęć |
|--|--|--------------------------|-------------|
| The student has an orderly theoretical knowledge of forecasting and simulation in an enterprise. | • K_W10 | • przygotowanie projektu | • Projekt |
| The student has orderly, theoretical knowledge for organising production systems. | • K_W12 | • kolokwium | • Wykład |
| The student has knowledge of the development trends and new advancements in IT applications, as well as of development trends in ERP-class systems: B2B and B2C systems. | • K_W16 | • kolokwium | • Wykład |
| The student is able to formulate the requirements for supply chain and to design a logistics system. | • K_U11 • K_U16 | • przygotowanie projektu | • Projekt |
| The student is able to prioritise and carry out his/her own tasks as well as the tasks of others. | • K_K04 | • przygotowanie projektu | • Projekt |

Warunki zaliczenia

Lecture: graded credit. The assessment is issued based on the results of the written exam verifying the knowledge of the subject.

Project: graded credit. The assessment is determined based on the results of the two tests.

Assessment: 50%L, 50%Class.

Literatura podstawowa

1. M. Christopher, Logistics & Supply Chain Management, FT Press, 2016
2. G. G. Fenich, Production and Logistics in Meeting, Expositions, Events and Conventions, Pearson, 2014
3. S. C. Ailawadi, P. R. Singh, Logistics Management, PHI; Second Edition, 2013

Literatura uzupełniająca

1. F. R. Jacobs, W. Berry, Manufacturing Planning and Control for Supply Chain Management, McGraw-Hill Education, 2011

Uwagi

Zmodyfikowane przez dr inż. Tomasz Belica (ostatnia modyfikacja: 13-09-2018 19:13)

Wygenerowano automatycznie z systemu SylabUZ