

# Supply chain management - opis przedmiotu

| Informacje ogólne   |                                                                   |
|---------------------|-------------------------------------------------------------------|
| Nazwa przedmiotu    | Supply chain management                                           |
| Kod przedmiotu      | 04.2-WM-BizEIP-ZarzŁaćDostaw-Er                                   |
| Wydział             | <a href="#">Wydział Informatyki, Elektrotechniki i Automatyki</a> |
| Kierunek            | Biznes elektroniczny                                              |
| Profil              | praktyczny                                                        |
| Rodzaj studiów      | Program Erasmus pierwszego stopnia                                |
| Semestr rozpoczęcia | semestr zimowy 2022/2023                                          |

| Informacje o przedmiocie        |                                                                                      |
|---------------------------------|--------------------------------------------------------------------------------------|
| Semestr                         | 6                                                                                    |
| Liczba punktów ECTS do zdobycia | 4                                                                                    |
| Typ przedmiotu                  | obowiązkowy                                                                          |
| Język nauczania                 | angielski                                                                            |
| Sylabus opracował               | <ul style="list-style-type: none"><li>dr hab. inż. Sławomir Kłos, prof. UZ</li></ul> |

| 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 objective of student education is to learn about IT technologies supporting supply chain management. During the classes, students will learn methods of synchronizing the flow of materials and components between companies, oriented towards serving a specific market demand. During the course, students will have the opportunity to use computer simulation tools to model the flow of materials and analyze the impact of selected parameters on the efficiency of designed supply chains.

## Wymagania wstępne

The student has to know basic logistic processes carried out in enterprises.

## Zakres tematyczny

Basic concepts related to logistics management and supply chain management. IT technologies in supply chain management. Methods and tools supporting supply chain management. Effective consumer service ECR. SCOR model. Designing technical infrastructure related to computerization of the area of supply, production and distribution logistics. Automation of logistic processes based on Internet solutions. Systems for identification of production flow in manufacturing enterprises. IT technologies supporting warehouse and material management. Maintenance area management based on IT technologies - MES systems. IT systems for simulation of logistic and production processes. Inventory management by a VMI supplier.

Within the project, students will design simulation models of logistics systems using the Tecnomatix or Enterprise Dynamics package.

## Metody kształcenia

Lecture - conventional lecture with the use of a video projector.

Project - practical classes in a computer laboratory.

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

| Opis efektu                                                                                                                                                                                                                 | Symbole efektów | Metody weryfikacji                                                     | Forma zajęć                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------|---------------------------------------------------------|
| The student understands the need to increase the knowledge related to supply chain management.                                                                                                                              |                 | <ul style="list-style-type: none"><li>przygotowanie projektu</li></ul> | <ul style="list-style-type: none"><li>Projekt</li></ul> |
| The student can use the functionality of a selected IT system to model logistics processes.                                                                                                                                 |                 | <ul style="list-style-type: none"><li>przygotowanie projektu</li></ul> | <ul style="list-style-type: none"><li>Projekt</li></ul> |
| The student is aware of the social role of a graduate of a technical university and especially understands the need to formulate and communicate to the public information on aspects of engineering and business activity. |                 | <ul style="list-style-type: none"><li>przygotowanie projektu</li></ul> | <ul style="list-style-type: none"><li>Projekt</li></ul> |
| The student knows to prepare a simulation model of a logistics system.                                                                                                                                                      |                 | <ul style="list-style-type: none"><li>przygotowanie projektu</li></ul> | <ul style="list-style-type: none"><li>Projekt</li></ul> |

| Opis efektu                                                                                      | Symbole efektów | Metody weryfikacji                                                                                       | Forma zajęć                                                 |
|--------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| The student knows methods of effective supply chain management based on information technologies |                 | <ul style="list-style-type: none"> <li>• kolokwium</li> <li>• sprawdzian z progami punktowymi</li> </ul> | <ul style="list-style-type: none"> <li>• Wykład</li> </ul>  |
| The student knows basic concepts related to supply chain management.                             |                 | <ul style="list-style-type: none"> <li>• kolokwium</li> <li>• sprawdzian z progami punktowymi</li> </ul> | <ul style="list-style-type: none"> <li>• Wykład</li> </ul>  |
| The student knows basic concepts related to supply chain management.                             |                 | <ul style="list-style-type: none"> <li>• kolokwium</li> <li>• sprawdzian z progami punktowymi</li> </ul> | <ul style="list-style-type: none"> <li>• Wykład</li> </ul>  |
| The student can design effective logistics processes realized within a common supply chain.      |                 | <ul style="list-style-type: none"> <li>• przygotowanie projektu</li> </ul>                               | <ul style="list-style-type: none"> <li>• Projekt</li> </ul> |

## Warunki zaliczenia

Lecture - a test at the end of the semester.

Project - the final grade is a weighted sum of the grades obtained for the realization of elements of the project. Contribution of particular elements of the assessment: project assessment - 50%, including assessment of the effectiveness of designed processes - 25%, knowledge of a selected software package for modeling and simulation of logistics processes - 25%.

Final grade = 50% of the grade for lecture + 50% of the grade for the project.

## Literatura podstawowa

1. A. Rushton, P. Croucher, P. Baker, The Handbook of Logistics and Distribution Management. Understanding the Supply Chain, Kogan Page Publishers, 2022
2. C. B. Bozarth, R. B. Handfield, Introduction to Operations and Supply Chain Management (What's New in Operations Management) 5th Edition, Pearson, 2019
3. M. Goetschalckx, Supply Chain Engineering, Springer US, 2011
4. N. Chandrasekaran, Supply Chain Management Process, Function & System Supply Chain Management, Oxford University Press, 2010
5. A. Iyer, S. Seshadri, R. Vasher, Toyota Supply Chain Management: A Strategic Approach to Toyota's Renowned System, McGraw-Hill Education, 2009

## Literatura uzupełniająca

## Uwagi

Zmodyfikowane przez dr Katarzyna Skrzypek (ostatnia modyfikacja: 09-04-2022 08:59)

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