COURSE DESCRIPTION CARD - SYLLABUS

Course name
Enterprise management information systems [N1ZiIP2>ISZP]

Course

Field of study
Management and Production Engineering

Year/Semester
3/5

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
part-time

Requirements
compulsory

Number of hours

Lecture
8

Laboratory classes
16

Other
0

Tutorials
0

Projects/seminars
0

Number of credit points

3,00

Coordinators

Lecturers

Prerequisites

The student has knowledge of production management and the use of information technology in the enterprise. Is able to operate a computer, is able to plan the production process, is able to conduct a production flow analysis and prepare a production schedule (e.g. in MS Excel), is able to distinguish between strategic, tactical and operational decisions. Is aware of the responsibility for their own work, understands and is prepared to bear social responsibility for decisions in the functional areas of the enterprise.

Course objective

Acknowledge of theoretical and practical subjects related to the construction and use of integrated management systems in the enterprise.

Course-related learning outcomes

Knowledge:
The student knows the evolution of management information systems.
Has knowledge of the structure and functionality of management information systems.
Has knowledge of the application of information systems at various levels of production planning in an enterprise.
Has knowledge of the implementation of modern management standards in information systems.

Skills:
The student is able to obtain information from management information systems.
Is able to model and define the production process in the management information system.
Is able to manage the production process using computer tools and configure the product and prepare the necessary data for the information system.

Social competences:
The student is able to independently develop knowledge in the subject and think and act in an entrepreneurial manner.
Is aware of the role of computerization in engineering activities in the area of production management.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Intermediate rating:
Laboratory: on the basis of an assessment of the progress of laboratory tasks
Lecture : based on answers to questions about the material discussed in previous lectures.
Summary rating:
Laboratory: credit based on tasks performer during laboratory (credit on computer workstation) and the implementation of the report of the exercises. The student must obtain a positive assessment of the executed report.
Lecture: credit based on test consisting of open questions in a scale 0-1. Test is passed after obtaining at least 50% of all points. Discussion of the test results. Test is carried out at the end of the semester.
Assignment of grades to percentage ranges of results: <90-100> very good; <80-90) good plus; <70-80) good; <60-70) satisfactory plus; <50-60) satisfactory; <0-50) unsatisfactory

Programme content

IT tools supporting technical and organizational preparation of production.
Specification of IT systems.
Functionalities of the IT management system in the field of production planning and scheduling.

Course topics

Lecture:
Functions and tasks of integrated management systems (IMS).Theory basics of management and organization of work.
Elements of production organization.
The production cycle and principles of work organization.
Organization cycles.
International standards of management in enterprises, MRP /ERP approach, MRP/ERP software and systems, IT architectures and technologies. The modular construction of IMS. Economical and legal aspects of management in enterprises.
Laboratory:
Examine the integrated management systems (IMS). Feeding computer system with basic data (manufactured products, company structure, production factors, human resources, processes, suppliers, customers, etc.). Providing client orders to the system. Running the MRP procedure and calculation of material requirements and production order. Conduct of materials ordering. Implementation of the production flow in a computer system with emphasis on quality. Summary execution and development of conclusions.

Teaching methods

Lecture: multimedia presentation illustrated with examples given on a board, problem solving.
Laboratory: solving tasks at the computer. Practical exercises and discussion.

Bibliography

Basic:
1. Adamczewski P., Informatyczne wspomaganie łańcucha logistycznego, Wydawnictwo Akademii

Ekonomicznej w Poznaniu, Poznań 2000
2. Banaszak Z., Kłos S., Mleczko J., Zintegrowane systemy zarządzania, PWE warszawa, 2011
3. Chlebus E., Techniki komputerowe CAx w inżynierii produkcji, WNT, Warszawa 2000
4. Durlik I., Inżynieria zarządzania, Tom 1 i 2, Wydawnictwo Placet, 1996
5. Pająk E., Zarządzanie produkcją. Produkt, technologia, organizacja, PWN, Warszawa, 2006

Additional:
1. Rojek I., Zintegrowany system informatyczny IFS Applications, Wydawnictwo Uniwersytetu Kazimierza Wielkiego, Bydgoszcz 2007

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	24	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	51	2,00