# STUDY MODULE DESCRIPTION FORM

| Name of the module/subject | Code |
|---|---|
| **Integrated Information Systems for Management** | **1011102321011110218** |

| Field of study | Profile of study (general academic, practical) | Year /Semester |
|---|---|---|
| **Engineering Management - Full-time studies -** | **general academic** | **1 / 2** |
| Elective path/specialty | Subject offered in: | Course (compulsory, elective) |
| **Enterprise Management** | **Polish** | **elective** |

| Cycle of study: | Form of study (full-time,part-time) |
|---|---|
| **Second-cycle studies** | **full-time** |

| No. of hours | No. of credits |
|---|---|
| Lecture: **15** Classes: **-** Laboratory: **15** Project/seminars: **-** | **2** |

| Status of the course in the study program (Basic, major, other) | (university-wide, from another field) |
|---|---|
| **other** | **university-wide** |

| Education areas and fields of science and art | ECTS distribution (number and %) |
|---|---|
| **social sciences** | **2 100%** |
| **Economics** | **2 100%** |

## Responsible for subject / lecturer:

dr hab. inż. Marek Fertsch, prof. nadzw.
email: marek.fertsch@put.poznan.pl
tel. 61 665 3416
Faculty of Engineering Management
ul. Strzelecka 11 60-965 Poznań

## Prerequisites in terms of knowledge, skills and social competencies:

| | | |
|---|---|---|
| 1 | **Knowledge** | Basic knowledge of the organization of production and logistics bases. |
| 2 | **Skills** | Efficient use of IT tools. |
| 3 | **Social competencies** | Ability to work in a project team. |

## Assumptions and objectives of the course:

Familiarize students with the spirit and principles of operation of integrated ERP information systems. Familiarize students with the basic procedures performed in these systems.

## Study outcomes and reference to the educational results for a field of study

### Knowledge:

1. Student has knowledge of the subject teaching context in relation to the management sciences and sciences ergologicznych and used in their research methods as well as the common and specific conceptual apparatus in relation to management science - [K2A_W01]

2. Has in-depth knowledge of the determinants of organizational structures and the mechanisms of changes in the organizational structure of enterprises - [K2A_W03]

3. Knows in depth the methods and tools of information modeling - [K2A_W08]

4. Has in-depth knowledge of the processes of change organizational structures and management of these changes - [K2A_W15]

### Skills:

1. Student can properly analyze the causes and course of the processes and phenomena of social (cultural, political, legal, economic), to formulate their own opinions on the subject and put a simple hypothesis testing and verifying them - [K2A_U03]

2. Has the ability to use their knowledge in various areas and forms, enhanced by a critical analysis of the effectiveness and suitability of applied knowledge - [K2A_U06]

3. Has the ability to use their knowledge in various areas and forms, enhanced by a critical analysis of the effectiveness and suitability of applied knowledge - [K2A_U06]

### Social competencies:

| |
|---|
| 1. Student understands the need and knows the possibility of lifelong learning (third level courses, postgraduate courses) - raising professional competence, personal and social, is able to argue the need for learning throughout life - [K2A_K01] |
| 2. Can see depending on cause and effect in achieving the set goals and achieve graduation importance of alternative or competing tasks - [K2A_K04] |
| 3. Is aware of interdisciplinary knowledge and skills needed to solve complex problems of organization and the need to create interdisciplinary teams - [K2A_K06] |

## Assessment methods of study outcomes

Forming Rating:

a) in respect of the laboratory: on the basis of the current progress of the task,

b) in respect of lectures: on the basis of written or oral answers to questions about the material covered in the current and previous lectures,

Summary rating :

a) in respect of the laboratory: the average score for completed tasks

b) in respect of lectures: final test.

## Course description

The lecture begins with a discussion of standard ERP and its main components. Then discuss the basic procedures are subsequently implemented by ERP systems: production planning and sales, master planning, development of the master schedule, material requirements planning (distribution), demand planning capabilities.

In the laboratory students become familiar with the functioning of the ERP system as an example Axapta.

Teaching methods: conventional specialist lecture, laboratory exercises using the AXAPTA system, work with literature

## Basic bibliography:

1. Gray C.D., Landvater D.V., MRP II Standarts System, Oliver Wight Limited Publications, 1989.

2. Orlicky J., Material Requirements Planning. The New Way of Life in Production and Inventory Management, McGraw- Hill Book Company, New York, 1975.

3. Fertsch M. Metoda planowania zapotrzebowania materiałowego w planowaniu produkcji i sterowania jej przebiegiem, Wydawnictwo Politechniki Poznańskiej, Poznań

4. Fertsch M., Fertsch M., Moduły systemów informatycznych zarządzania, Wydawnictwo Politechniki Poznańskiej, Poznań 2011

## Additional bibliography:

1. Brzeziński M., Organizacja i sterowanie produkcją. Projektowanie systemów produkcyjnych i procesów sterowania produkcją, Agencja Wydawnicza Placet, Warszawa 2002

2. Hadaś Ł., Fertsch M., Cyplik P., Planowanie i sterowanie produkcją, Wydawnictwo Politechniki Poznańskiej, Poznań, 2012

## Result of average student's workload

| Activity | Time (working hours) |
|---|---|
| 1. Lecture | 15 |
| 2. Laboratory | 15 |
| 3. Consultation | 10 |
| 4. Preparing for classes | 9 |
| 5. Independent student work | 9 |
| 6. Final Test | 2 |

## Student's workload

| Source of workload | hours | ECTS |
|---|---|---|
| Total workload | 60 | 2 |
| Contact hours | 30 | 1 |
| Practical activities | 34 | 1 |