



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Business process modeling [S2ZilP2>MPB]

### Course

Field of study

Management and Production Engineering

Year/Semester

2/3

Area of study (specialization)

Production control

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

15

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

### Number of credit points

2,00

### Coordinators

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### Lecturers

### Prerequisites

The student should have knowledge of the basics of organization and process management.

### Course objective

The aim of the course is to familiarize students with the basics of business process modeling using the standards and notation forms most frequently used in practice.

### Course-related learning outcomes

Knowledge:

1. The student has knowledge of basic concepts related to business processes and their modeling.
2. The student knows the most important standards of business process models.
3. The student is able to indicate the role of business process modeling in an organization.

Skills:

1. The student can build a business process model in the BPMN standard.
2. The student can build a business process model using appropriate UML standard diagrams.
3. The student can build a business process model using an EPC diagram (part of the ARIS methodology).

4. The student can simulate the process based on the model in the BPMN standard and interpret its results.

Social competences:

1. The student is able to work in a team involved in the implementation of business processes.
2. The student is able to communicate with process owners while building a process model.
3. The student is able to identify and obtain data necessary to build a business process model.
4. The student is able to present and discuss the process model to the company's management staff.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The knowledge acquired during the lecture will be verified on the basis of a final test. Passing the lecture if obtaining at least 50.1% correct answers. 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.

The knowledge and skills acquired during laboratory classes will be verified on the basis of independent tests after completing the discussion of a given modeling standard.

### Programme content

The program includes the issues connected with business process modeling.

### Course topics

Lecture:

1. Business process model and its properties.
2. BPMN standard (3 lectures).
3. UML standard and usage of selected UML diagrams for business process modeling.
4. EPC standard and ARIS methodology.
5. Other business process modeling standards.

Project:

1. BPMN standard (4 classes).
2. Business process modeling using selected UML diagrams.
3. EPC standard.
4. Simulation of processes modelled in BPMN standard.

### Teaching methods

1. Lecture in the form of a presentation presenting a specific modeling standard and case studies. Lecture conducted remotely using the synchronous access method.
2. Project: tasks performed using software dedicated to modeling in a given modeling standard, discussion on the results obtained.

### Bibliography

Basic:

1. PIOTROWSKI M., Procesy biznesowe w praktyce. Projektowanie, testowanie i optymalizacja, wyd. 2
2. SILVER B., BPMN. Method and Style
3. ŚMIAŁEK, Zrozumieć UML 2.0
4. GABRYELCZYK, ARIS w modelowaniu procesów biznesu

Additional:

1. DĄBROWSKI, STASIAK, WOLSKI, Modelowanie systemów informatycznych w języku UML 2.1
2. DREJEWICZ, Zrozumieć BPMN, wyd. 2

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00