# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Business process modeling [N2ZiIP2>MPB]

Course			
Field of study Management and Production Engineering		Year/Semester	
		2/4	
Area of study (specialization) Production control		Profile of study general academi	C
Level of study second-cycle		Course offered in Polish	1
Form of study part-time		Requirements elective	
Number of hours			
Lecture 8	Laboratory classe 0	es	Other 0
Tutorials 0	Projects/seminar 8	S	
Number of credit points 2,00			
Coordinators dr inż. Jacek Diakun jacek.diakun@put.poznan.pl		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.

Project:

- 1. BPMN standard (3 classes).
- 2. Business process modeling using selected UML diagrams.
- 3. EPC standard.

## **Teaching methods**

1. Lecture in the form of a presentation presenting a specific modeling standard and case studies.

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	16	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	34	1,50