

Business Process Management (F000778)

Course size (nominal values; actual values may depend on programme)

Credits 4.0 Study time 120 h Contact hrs 45.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 2)	English	demonstration	3.75 h
		seminar	2.5 h
		group work	15.0 h
		lecture	18.75 h
		lecture: plenary	5.0 h
		exercises	

Lecturers in academic year 2018-2019

Gailly, Frederik	EB24	lecturer-in-charge
Verdonck, Michaël	EB24	co-lecturer

Offered in the following programmes in 2018-2019

	crdts	offering
Master of Science in Business Engineering (main subject Data Analytics)	4	A
Master of Science in Business Engineering (main subject Finance)	4	A
Master of Science in Business Engineering (main subject Operations Management)	4	A
Master of Science in Economics	4	A
Exchange programme in Economics and Business Administration	4	A

Teaching languages

English

Keywords

Business Process Modelling; Business Process Management; Business Process Analytics; Business Process Intelligence

Position of the course

To introduce Business Process Management concepts and methods that are needed for realizing a process-oriented organization. Following the BPM lifecycle the students will (1) learn to create business process models using the Business Process Model and Notation (BPMN); (2) learn how business process models can be implemented and used in practice using different approaches and finally (3) learn how to evaluate and monitor the business processes and their corresponding implementation.

Contents

1. Introduction BPM
2. Process identification
3. Business Process Modelling
4. Process Discovery
5. Process Analysis
6. Process Redesign
7. Process Implementation
8. Process Monitoring
9. Information Systems Research

Initial competences

Knowledge of the fundamental concepts of IT and information systems
 Knowledge of conceptual data modelling (using UML) and relational database design
 Be able to program using an object-oriented programming language

Final competences

- 1 Have knowledge of the different subdomains of business process management
- 2 Be able to identify and position relevant business processes
- 3 Develop detailed business process models using BPMN
- 4 Be able to analyze business processes using both qualitative and quantitative business process analysis techniques
- 5 Be able to use the process models in the context of strategy implementation, business design, business performance analysis and software development
- 6 Be able to discover process models using process logs
- 7 Be able to critically evaluate a BPM project report

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Demonstration, group work, lecture, seminar, lecture: plenary exercises

Extra information on the teaching methods

Demonstration:

- Guest lecture BPM in practice
- Guest Lecture Process Mining
- Business Process Configuration using Bizagi

Groupwork:

In groups, the students need to develop a business process model in BPMN that represents the business process of an existing business. This business process model needs to be analyzed and improved. The groups also have to evaluate the report/project of another group using a provided rubric.

seminar:

- Business Process Identification
- Business Process Modelling using Signavio BPM platform
- Business Process Analysis using R
- Business Process Mining using Disco

seminar:

The students will be asked to participate in one or two experiments which are set-up by one of the researchers of the Information Systems Research Group.

Learning materials and price

Slides and notes + reader with articles, manuals, professional standards, reports, etc.

References

- Fundamentals of Business Process Management Marlon Dumas, Marcello La Rosa, Jan Mendling, Hajo A. Reijers, Springer - Second Edition
- BPMN Method and Style Bruce Silver

Course content-related study coaching

Evaluation methods

end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Oral examination

Examination methods in case of periodic evaluation during the second examination period

Oral examination

Examination methods in case of permanent evaluation

Participation, peer assessment, report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible in modified form

Calculation of the examination mark

In case an experiment is organised:

- 45% project + peer evaluation

- 45% Exam
 - 10% participation experiments
- In case no experiment is organised:
- 50% project + peer evaluation
 - 50% Exam