

Course Descriptions NonDegree 2021-2022

Course Title Business Process Management
Course Code EBC4059
ECTS Credits 6,5
Assessment Whole/Half Grades

| Period | Start | End | Mon | Tue | Wed | Thu | Fri |
|--------|-----------|-----------|-----|-----|-----|-----|-----|
| 4 | 31-1-2022 | 25-3-2022 | X | | | X | |

Level Advanced

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Language of instruction English

Goals The goal of the course is to equip the students with the basic tools and techniques to define, analyze, and improve business processes. In your professional career, it is inevitable that you will get involved in process-related activities. You may find yourself in the role of a professional working in a process that is being analyzed, redesigned, or supported by an information system. Alternatively, you may be managing such a process. Even more likely, you may play the role of intermediary, standing between the operational professionals executing a process and higher management that wishes organizational improvement. The knowledge and especially the skills taught in this course provide you with the basic instruments to carry out and understand BPM projects. Course objectives are as follows:

- Identify the different phases in the management of business processes;
- Model complex business processes with BPMN;
- Learn to communicate with domain experts and IT specialists on business processes;
- Qualitatively and quantitatively analyze business processes and identify process improvement actions;
- Describe and understand the main features of process-aware information systems.

Description

In order to sustain a competitive advantage and face the rapidly increasing global competition, companies must continuously adapt their business processes based on changing market conditions and business requirements. Organizations can gain competitive advantage by improving and innovating their processes through a holistic process-oriented view. Business Process Management (BPM) is the discipline that combines knowledge from information technology and management sciences and applies this to holistically manage business processes. BPM provides the necessary tools and techniques to identify, document, analyze, automate, and continuously improve business processes. A substantial amount of activities in the BPM life-cycle are related to the creation and usage of process models. Such models represent not only the business activities, events, and control flow relations between them but also incorporate data that is being processed, organizational resources involved, and IT systems that support the performance of business processes. This course examines the different phases of the BPM life-cycle by combining process, human, and technology perspectives. Namely, the course will go through the following BPM phases with a focus on business process modeling with BPMN notation:

- Identification: distinguish which require priority to be actively managed
- Discovery: the elicitation and specification of the way that processes are carried out
- Analysis: evaluating a process' ability to fulfill its requirements
- Redesign: update of process definitions to increase the performance and/or conformance of business processes by changing its elements
- Implementation: the execution of business processes using process-aware information systems, such as workflow management systems
- Monitoring and control: the day-to-day monitoring of a business process to detect operational problems and violations of regulations that constitute a business process. Process models may also incorporate aspects such as the data that is being processed, the organizational resources that are involved in their execution, and the IT systems that are supporting the processes under consideration [25]. Due to the rich nature of process models, they are employed to fulfill a variety of purposes in a wide range of domains. Managers, for example, may analyze process models to identify potential bottlenecks, while new employees refer to these to learn how to perform their tasks. IT developers, in turn, may use process models to understand how new IT systems should support various steps.

Many organizations realize the importance of business processes in delivering high-quality products and services.

Business Process Management (BPM) is the discipline that combines knowledge from information technology and knowledge from management sciences and applies this to operational business processes [1, 2]. It has received considerable attention in recent years due to its potential for significantly increasing productivity and saving costs. Moreover, today there is an abundance of BPM systems. These systems are generic software systems that are driven by explicit process designs to enact and manage operational business processes [3].

Many organizations realize the importance of business processes in delivering high-quality products and services [1,2]

Improving organizational business processes has been high on companies' and researchers' agendas for years

The business process orientation (BPO) is usually regarded as a best practice management principle correlated to organizational performance results

BPM can be seen as a highly analytical, cross-functional, and continuous improvement of processes

Business Process Management (BPM) argues organisations can gain competitive advantage by improving and innovating their processes through a holistic process-oriented view. Processes are at the centre of today's and tomorrow's competition. Organisations have come to the conclusion that efficiency as well as quality and service are to be available in processes. Due to the primary focus of an organisation being on processes instead of functions – i.e. the primary focus of an organisation being on processes instead of functions – is appealing for organisations as it promises higher profitability in the long term

With the increasing competition among companies and increase in process awareness, many organizations started to use BPM approaches where they define their processes, develop software to automate those processes, monitor the execution of the processes and improve them.

Business process management (BPM) focuses on analyzing, improving, and redesigning existing processes to improve the overall efficiency of an organization. A substantial amount of activities in the BPM life-cycle are related to the creation and usage of process models. Such models represent business activities, events, and control flow relations that constitute a business process. Process models may also incorporate aspects such as the data that is being processed, the organizational resources that are involved in their execution, and the IT systems that are supporting the processes under consideration [25]. Due to the rich nature of process models, they are employed to fulfill a variety of purposes in a wide range of domains. Managers, for example, may analyze process models to identify potential bottlenecks, while new employees refer to these to learn how to perform their tasks. IT developers, in turn, may use process models to understand how new IT systems should support various steps.

As a response to increasing competition and more demanding customers, various researchers, practitioners, and management gurus have suggested companies to put less emphasis on hierarchical and functional structures, but instead focus on and improve entire chains of business operations, ranging often from client to client. The orientation on such business processes to manage and improve organizational effectiveness is at the core of this course.

Within this course, there is an emphasis on the role of models and information technology to manage business processes. This means that there will be a focus on the creation and analysis of design artifacts, in particular process models. Also, the role of IT as an enabling and support technology for process improvement will receive a wide share of attention.

The course on Business Process Management builds on the idea that business processes go through a life-cycle, with different phases:

- Identification: the problem to distinguish which processes in organizations require priority to be actively managed;
- Discovery: the elicitation and specification of the way that operational processes are carried out;
- Analysis: the understanding of a process' structural ability to fulfill the requirements it must meet;
- Redesign: the planned actions to increase the performance and/or conformance of business processes by changing its elements;
- Implementation: the execution of business processes using advanced IT, such as workflow management systems;
- Monitoring/control: the day-to-day monitoring of a business process to detect operational problems and violations of regulations.

The various lectures and instructions will be devoted to these phases.

Business processes are everywhere. Tasks such as booking an airline ticket online, developing a new product, or treating a patient can be viewed as processes crossing organizational and technological

boundaries. According to the analysts of the Gartner Group, the improvement of end-to-end business processes is the number one business priority of today's CIOs. Consequently, Business Process Management (BPM) has become a widely appreciated approach for the analysis and design of organizations and information systems.

Literature

Fundamentals of Business Process Management
 Authors: Dumas, M., La Rosa, M., Mendling, J., Reijers, H.
 Edition: 2nd (2018)
 ISBN 978-3-662-56508-7

Prerequisites

There are no specific prerequisites for this course. However, it does build upon the basic understanding of the role of information systems in Organisations that is provided in an introductory MIS course such as the Management Information Systems course offered to International Business students (EBC2003). For further details on the topics covered in EBC2003 and the literature that is used please refer to Canvas . Courses and workload are very demanding for all IB Master courses. Exchange students need to have obtained a Bachelor degree in business or a related field.
 An advanced level of English.

Teaching methods

PBL / Presentation / Lecture / Assignment / Groupwork

Assessment methods

Participation / Written Exam

Evaluation in previous academic year

For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation

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| Master Business Research - No specialisation | Year 1 Disc - IB Inf Mgmt Bus Int |
| Master Business Research - Operations Research | Year 1 Elective Course(s) |
| Master Business Research - Operations Research | Year 2 Elective Course(s) |
| Master Digital Business and Economics | Elective Course(s) |
| Master Human Decision Science | Elective Course(s) |
| Master International Business - Information Management and Business Intelligence | Compulsory Course(s) |
| SBE Exchange Master | Master Exchange Courses |
| SBE Non Degree Courses | Master Courses |