Business information management (non-IE)

Offered by: Department of Industrial Engineering & Innovation Sciences
Language: English
Primarily interesting for: All students except for Major Industrial Engineering
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Content and composition
As information volumes increase, businesses and organizations are challenged with managing this information in an effective, efficient and systematic way. In this elective package, you learn the principles of information management through the use of information systems in modern businesses.
In Business Modelling, you learn to formalize business process descriptions and how to generate formal models of your processes. Design of complex information systems in organizations based on your process and data models is discussed in Design of Business Information Systems. Finally, you learn the impact of information technology on the performance and the competitiveness of an organization in the course Business Information Systems Management.

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Level classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1BV00</td>
<td>Business modeling</td>
<td>1. Basic</td>
</tr>
<tr>
<td>1BV10</td>
<td>Design of business information systems</td>
<td>2. Intermediate</td>
</tr>
<tr>
<td>1BV20</td>
<td>Business information systems management</td>
<td>3. Advanced</td>
</tr>
</tbody>
</table>

There are no obligatory precedence relations.

Course description

Business Modeling
Business models are needed to understand and analyze modern organizations. Moreover, business models specify the functionality of business information systems that organizations use to produce and deliver their goods and services. Particularly relevant are models that capture the process behavior of organizations and their information needs. This course teaches how to model business processes and business data, and introduces the basic principles of business information systems in practice.

Design of Business Information Systems
Information systems are integral elements of modern organizations. At the process level, information systems can be used for support and management of business activities, as well as for storage and transport of information (e.g. documents) regarding products and services. In this course, students learn how process and data modelling knowledge can be applied to create specifications of information systems that support business activities and how such specifications can be used to build a prototype of the system.
Business Information Systems Management
The course focuses on the one hand on the strategic impact of the usage of IT on the performance and the competitiveness of an organization, and on the other hand on the management of the IT function within organizations. It also focuses on enterprise models that are meant to generate a detailed understanding of the organization's operations, to understand how a change affects the organization, and to communicate about it with others. Techniques are taught to separate an enterprise model into smaller, more usable, components, to approach the activity of enterprise modeling in a structured manner and to evaluate the quality of a generated enterprise model.