# Basismodule

## inf030 - Programming, Algorithms and Data Structures

<table>
<thead>
<tr>
<th><strong>Module label</strong></th>
<th>Programming, Algorithms and Data Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module code</strong></td>
<td>inf030</td>
</tr>
<tr>
<td><strong>Credit points</strong></td>
<td>9.0 KP</td>
</tr>
<tr>
<td><strong>Workload</strong></td>
<td>270 h</td>
</tr>
</tbody>
</table>

**Used in course of study**
- Fach-Bachelor Informatik > Basismodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Wirtschaftsinformatik > Basismodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Wirtschaftsinformatik
- Zwei-Fächer-Bachelor Informatik > Basismodule

**Contact person**
- Module responsibility
  - Sebastian Lehnhoff
  - Dietrich Boles
- Authorized examiners
  - Sebastian Lehnhoff
  - Dietrich Boles
  - Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**

**Module contents**

**Reader's advisory**

**Links**

**Language of instruction**
- German

**Duration (semesters)**
- 1 Semester

**Module frequency**

**Module capacity**
- unlimited

**Modulart**
- je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**

<table>
<thead>
<tr>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>KL</td>
<td></td>
</tr>
</tbody>
</table>

**Final exam of module**

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>4.00</td>
<td>WiSe</td>
<td>56 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>WiSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**
- 84 h
inf031 - Object-oriented Modelling and Programming

Module label: Object-oriented Modelling and Programming
Module code: inf031
Credit points: 9.0 KP
Workload: 270 h

Used in course of study:
- Fach-Bachelor Informatik > Basismodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Wirtschaftsinformatik > Basismodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Wirtschaftsinformatik
- Zwei-Fächer-Bachelor Informatik > Basismodule

Contact person:
Module responsibility:
- Andreas Winter
- Dietrich Boles
Authorized examiners:
- Andreas Winter
- Dietrich Boles
- Die im Modul Lehrenden

Entry requirements

Skills to be acquired in this module

Module contents

Reader's advisory

Links

Language of instruction: German
Duration (semesters): 1 Semester

Module frequency

Module capacity: unlimited
Module level:
- ---
Moduleart:
- je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program

Vorkenntnisse / Previous knowledge

Examination

Time of examination

Type of examination

Final exam of module

Comment

SWS

Frequency

Workload attendance

Course type

Lecture

4.00

SuSe

56 h

Exercises

2.00

SuSe

28 h

Total time of attendance for the module

84 h
inf600 - Business Informatics I

**Module label**: Business Informatics I

**Module code**: inf600

**Credit points**: 6.0 KP

**Workload**: 180 h

**Used in course of study**
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Nachhaltigkeitsökonomik > Basismodule
- Fach-Bachelor Wirtschaftsinformatik > Basismodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Wirtschaftsinformatik
- Master of Education (Gymnasium) Informatik > Mastermodule
- Master of Education (Wirtschaftspädagogik) Informatik > Mastermodule

**Contact person**

- Module responsibility
  - Axel Hahn
- Authorized examiners
  - Axel Hahn
  - Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**

Business informatics regards itself as an interdisciplinary subject. It connects business administration with computer science. Business informatics also includes information technologies as well as technical subjects and research topics. It is more than just an intersection of research fields and offers e.g. special methods to coordinate corporate strategies and information processing. The module introduces the entire scope of the field of business informatics.

**Professional competence**
The students:

- Describe the key aspects of business informatics
- Differentiate business informatics as an interdisciplinary subject from other subjects
- Characterise the functionality of essential application systems and management structures, from the strategical to the tactical and operative level.
- Consider and evaluate case studies and layout options for the conception, development, implementation, usage and maintenance of operational sociotechnical applications systems

**Methodological competence**
The students:

- Model technical and sociotechnical processes using suitable tools
- Analyse business processes and the demands on their modification and their technical assistance
- Abstract from complex systems in a suitable way to improve the manageability of models

**Social competence**
The students:

- Present their solutions in front of other groups
- Discuss their outcomes

**Self-competence**
The students:

- Develop solutions for case studies in groups
- Construct an argument based on acquired knowledge

**Module contents**
The main topics of business informatics are the presentation and evaluation of configuration options to conceptualise, develop, implement, use and maintain operational sociotechnical application systems. The lecture focuses on information systems of the networked company. Technical, economic, organisational, and psychosocial aspects are considered. The understanding of these relations will be trained by means of case studies taken from Laudon et al. (cf. suggested reading). The lecture gives an overview of the following business informatics fields.

- Information systems, (object of BI)
- Application systems
- E-Commerce and E-Business
- Ethical, social and political aspects
- Business process integration
- Knowledge management
- Support of decision making
- Reorganisation of companies
- Economic evaluation

For a better understanding of each subject, it is recommended to take specific modules later in the course of studies.

**Reader's advisory**

- Frank, Gronau (2002), Systemanalyse im Unternehmen Oldenbourg (Gebundene Ausgabe – Juni 2002)

**Links**

**Language of instruction**
German

**Duration (semesters)**
1 Semester

**Module frequency**
jährlich

**Module capacity**
unlimited

**Modullevel**
---

**Modulart**
je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**
V & Ü

**Vorkenntnisse / Previous knowledge**

**Examination**
Time of examination: At the end of the lecture period
Type of examination: Tasks and active partaking during the exercises / written exam or oral exam

**Final exam of module**
At the end of the lecture period
Tasks and active partaking during the exercises / written exam or oral exam

**Course type**

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>2.00</td>
<td>WiSe</td>
<td>28 h</td>
<td></td>
</tr>
<tr>
<td>Exercises</td>
<td>2.00</td>
<td>WiSe</td>
<td>28 h</td>
<td></td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**
56 h
### inf601 - Business Informatics II

<table>
<thead>
<tr>
<th>Module label</th>
<th>Business Informatics II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf601</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>

**Used in course of study**
- Fach-Bachelor Informatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Basismodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Wirtschaftsinformatik
- Master of Education (Gymnasium) Informatik > Mastermodule

**Contact person**

<table>
<thead>
<tr>
<th>Module responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jorge Marx Gomez</td>
</tr>
</tbody>
</table>

**Authorized examiners**
- Jorge Marx Gomez
- Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**

**Professional competence**

The students:

- name the strategic aspects of information management and identify their impact on technical and operational information management
- examine the essential questions of enterprise reorganization in connection with an information system and recognize the influence of the Internet and its services on commercial processes and information systems by an exemplary system, e.g. SAP R/3
- identify different approaches to information management (Information Ressource Management, Management approach, management approach, personal information management) and understand why determining the value of information management is necessary and how it is done
- specify the objectives of information management, differentiate and classify its tasks appropriately
- recognize the methodological characteristics of information management
- transfer the concept of architecture to the information infrastructure
- assess the importance to plan features for strategic IT-design oriented on IT-architecture
- schedule the procedures concerning the strategical situation analysis of the competition analysis, the information infrastructure and the environmental analysis with the objective to transfer them to simple problems
- name the key contents of strategical IT objectives and are aware of difficulties in determining the measurement category
- identify and learn the scope and central tasks of business process and environmental management (as excursion) and the significance for information management

**Methodological competence**

The students:

- perform information management tasks using methods of Information Engineering and thereby learn how to transfer and employ the methods to other fields, e.g. economy
- learn by practice advantages and disadvantages of different methods and can use them as part of the optimized IT strategy based on the acquired knowledge.

**Social competence**

The students:

- construct solutions to case studies given in the group, i.e. the development of an IT strategy
- discuss the solutions on a technical level
- present the solutions to case studies as part of the exercises

**Self-competences**

The Students:

accept criticism and understand it as a precondition for the further development of one's own actions

**Module contents**

The proportion of information technology in the investment budget of companies is rising continuously. For instance, banks spend 25% of all investments for their information systems. Information is not just a production factor, it is also an element of competition. Information is increasingly important for business. The business informatics deals with these economic tasks of information technology.
Information systems in businesses and organisations are of central concern. The interdisciplinary nature of business informatics raises questions about proceedings, problems of models (modelling in a narrow sense) and the application in specific problem domains.

Contents of this module are:

- Information management principles and tasks
- IT architectures
- Infrastructure of information and communication technology
- Strategic, administrative and operative information engineering

Reader's advisory

- Heinrich, Stelzer (2011): Informationsmanagement - Grundlagen, Aufgaben, Methoden. Oldenbourg Verlag
- Krcmar (2015): Informationsmanagement. Springer Verlag

Links

http://www.wi-ol.de

Language of instruction

German

Duration (semesters)

1 Semester

Module frequency

jährlich

Module capacity

unlimited

Modullevel

AS (Akzentsetzung / Accentuation)

Modulart

Pflicht o. Wahlpflicht / compulsory or optional

Lern-/Lehrform / Type of program

V+Ü

Vorkenntnisse / Previous knowledge

Examination

Final exam of module

Usually two weeks after lecture time

Written exam max. 120 minutes

Time of examination

SWS

Frequency

Workload attendance

2.00

SuSe

28 h

2.00

SuSe

28 h

Total time of attendance for the module

56 h
**Module label**
Introduction to Business Administration

**Module code**
wir011

**Credit points**
6.0 KP

**Workload**
180 h

**Used in course of study**
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Basismodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Nachhaltigkeitsökonomik > Basismodule
- Fach-Bachelor Wirtschaftsinformatik > Basismodule
- Fach-Bachelor Wirtschaftswissenschaften > Basismodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Basismodule

**Contact person**
Module responsibility
- Jörn Hoppmann

**Authorized examiners**
- Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**
The goal of the course is that students are able to...
- know and understand basic concepts and processes in the context of business administration
- name important research streams and theoretical frameworks in the field
- apply models and instruments of business administration to develop solutions for practical challenges in companies
- critically question the application of common instruments and models and evaluate their advantages and disadvantages in specific decision making situation
- put the newly acquired knowledge into a broader context, so it can be deepened in the further course of study and when working in a company

**Module contents**
The course offers an introduction to the most important concepts, instruments, and frameworks of business administration. Toward this end, the course first introduces the core concepts and provides an overview of the history, goals, structure, and research traditions of business administration. Subsequently, students will gain insights into 11 important areas of business administration: (1) Entrepreneurship, (2) Strategic Management, (3) Logistics and Supply Chain Management, (4) Production Management, (5) Marketing and Sales, (6) Accounting and Controlling, (7) Finance and Investment, (8) Technology and Innovation Management, (9) Human Resource Management, (10) Information Management, and (10) Sustainability Management. Students deepen and apply the knowledge acquired in the lecture in tutorials. In addition, the course includes guest lectures by practitioners to clarify the practical relevance of the content.

**Reader's advisory**

**Links**

**Language of instruction**
German

**Duration (semesters)**
1 Semester

**Module frequency**
---

**Module capacity**
unlimited

**Modulart**
je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**

**Time of examination**
Final exam of module
- At the end of the semester

**Type of examination**
1 Prüfungsleistung: 1 Klausur/antwort-Wahlverfahren (Multiple Choice) (i. d. R. 60 – 90 Min.) oder 1 mündl. Prüfung (i. d. R. 20 Min.) oder 1 Hausarbeit (max. 15 Seiten) oder 1 Referat (max. 30 Min.) oder 1 Portfolio (max. 5 Leistungen)

**Course type**

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Tutorial</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**
56 h
Aufbaumodule

**inf005 - Software Engineering I**

<table>
<thead>
<tr>
<th>Module label</th>
<th>Software Engineering I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf005</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>

**Used in course of study**
- Fach-Bachelor Informatik > Aufbaumodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Master of Education (Wirtschaftspädagogik) Informatik > Mastermodule
- Zwei-Fächer-Bachelor Informatik > Aufbaumodule

**Contact person**
- Module responsibility
  - Andreas Winter
- Authorized examiners
  - Andreas Winter
  - Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**

**Professional competence**
The students:
- comprehend the different developmental phases of software (especially requirements engineering, software design, software implementation and quality control)
- name the tasks of each phase
- select appropriate methodical utilities
- select suitable methods and utilities for each project phase
- understand the advantages of the modelling process with UML
- model moderate tasks in UML
- understand and develop solutions for given problems by means of development environments

**Methodological competence**
The students:
- structure, document and evaluate problems and solutions with the tools of object oriented modelling
- apply methods and techniques of object oriented modelling purposefully

**Social competence**
The students:
- create, present and discuss solutions with modelling techniques
- present and solve modelling problems in teams

**Self-competence**
The students:
- reflect their problem-solving behaviour with regard to the capabilities of software technology

**Module contents**
The module introduces fundamental terms and concepts in software engineering. This includes:
- need for software engineering
- activities and process-models in software development
- object-oriented modelling, meta modelling
- interdependencies between code and models
- requirements elicitation
- definition of software architectures
- application of software patterns
- software quality management
- software maintenance, evolution and operation

Software engineering tools are presented and applied in practical exercises.

**Reader's advisory**

Helmut Balzert: Lehrbuch der Software-Technik, Spektrum Akademischer Verlag, 3. Auflage 2009

**Links**

**Language of instruction**

German

**Duration (semesters)**

1 Semester

**Module frequency**

jährlich

**Module capacity**

unlimited

**Modullevel**

---

**Modalität**

je nach Studiengang Pflicht oder Wahlpflicht

**Lern- / Lehrform / Type of program**

V + Ü

**Vorkenntnisse / Previous knowledge**

**Examination**

<table>
<thead>
<tr>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the end of the lecture period or during the lecture period (portfolio)</td>
<td>Written exam or oral exam or portfolio (? 3 services)</td>
</tr>
</tbody>
</table>

**Course type**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>3.00</th>
<th>WiSe</th>
<th>42 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial</td>
<td>1.00</td>
<td>WiSe</td>
<td>14 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**

56 h
inf007 - Information Systems I

Module label | Information Systems I
---|---
Module code | inf007
Credit points | 6.0 KP
Workload | 180 h

Used in course of study
- Fach-Bachelor Informatik > Aufbaumodule
- Fach-Bachelor Wirtschaftswissenschaften > Aufbaumodule
- Master of Education (Gymnasium) Informatik > Mastermodule
- Master of Education (Wirtschaftspädagogik) Informatik > Mastermodule

Contact person
- Module responsibility
  - Marco Grawunder
- Authorized examiners
  - Marco Grawunder
  - Die im Modul Lehrenden

Entry requirements

Skills to be acquired in this module
This module introduces the core concepts, languages and architectures of databases. In software systems these concepts are important.

Professional competence
The students:
- name the core concepts of the languages and architectures of databases (especially)
- select data models
- integrate structuring concepts of information systems in their designs

Methodological competence
The students:
- design database systems appropriately
- analyse problems from the field of database-supported information systems and solve them appropriately

Social competence
The students:
- enhance their ability to work in a team

Self-competence
The students:
- reflect their problem-solving behaviour with regard to the information processing concepts

Module contents
- Relational data models
- Relational algebra and its implementation in SQL (the standard of databases)
- Database design on different abstractions (conceptual and logical design)
- Normalisation
- Data base architectures
- Distributed and active databases
- Object-oriented, object-related and XML-based database systems

Reader's advisory

Links
Language of instruction | German
Duration (semesters) | 1 Semester
Module frequency | jährlich
<table>
<thead>
<tr>
<th>Modul</th>
<th>Modullevel</th>
<th>Modulart</th>
<th>Lern-/Lehrform / Type of program</th>
<th>Vorkenntnisse / Previous knowledge</th>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>---</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
<td>V + Ü</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Final exam of module
- At the end of the lecture period
- Hands-on exercises and written or oral exam

### Course type
- **Lecture**
  - Comment: 3.00
  - Frequency: WiSe
  - Workload attendance: 42 h
- **Exercises**
  - Comment: 1.00
  - Frequency: WiSe
  - Workload attendance: 14 h

### Total time of attendance for the module
56 h
inf008 - Information Systems II

<table>
<thead>
<tr>
<th>Module label</th>
<th>Information Systems II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf008</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>

**Used in course of study**
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Wirtschaftsinformatik
- Master Wirtschaftsinformatik > Bereichswahlmodule

**Contact person**

- Module responsibility
  - Marco Grawunder

- Authorized examiners
  - Marco Grawunder
  - Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**

The Module "Information Systems II" enhances the knowledge and the concepts of "Information Systems I".

**Professional competence**

- The students:
  - Know further concepts, languages and architectures of databases
  - Analyse advanced information processing tasks
  - Analyse complex requirements of information systems appropriately
  - Realize information requirements and gather relevant information

**Methodological competence**

- The students:
  - Propose concrete processing principles for special application classes
  - Reflect specific technologies' consequences and proceedings

**Social competence**

- The students:

**Self-competence**

- The students:
  - Reflect their problem-solving behaviour with regard to extended information processing concepts

**Module contents**

- Implementation of databases (architecture, index structures, query processing and optimization)
- Data integration and data analysis (data integration, data warehouses, data mining)
- Information retrieval
- Parallel databases

**Reader's advisory**

**Suggested reading:**

- Härder, T., Rahm, E.: Datenbanksysteme - Konzepte und Techniken der Implementierung, Morgan Kaufmann
- U. Leser, F. Naumann. Informationsintegration: Architekturen und Methoden zur Integration verteilter und heterogener Datenquellen. dpunkt
- Bauer/Günzel. Data-Warehouse-Systeme, dpunkt
- Han/Kamber/Pei. Data Mining: Concepts and Techniques, Morgan Kaufmann

**Links**

**Language of instruction**

German
<table>
<thead>
<tr>
<th>Duration (semesters)</th>
<th>1 Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modulelevel</td>
<td>AS (Akzentsetzung)</td>
</tr>
<tr>
<td>Modulart</td>
<td>Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>VL + Ü</td>
</tr>
<tr>
<td>Vorkenntnisse / Previous knowledge</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
<td>written or oral Exam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>3.00</td>
<td>SuSe</td>
<td>42 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>1.00</td>
<td>SuSe</td>
<td>14 h</td>
</tr>
</tbody>
</table>

| Total time of attendance for the module | 56 h |
inf010 - Computer Networks

<table>
<thead>
<tr>
<th>Module label</th>
<th>Computer Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf010</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td></td>
</tr>
<tr>
<td>Fach-Bachelor Informatik &gt; Aufbaumodule</td>
<td></td>
</tr>
<tr>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Aufbaumodule</td>
<td></td>
</tr>
<tr>
<td>Master of Education (Gymnasium) Informatik &gt; Mastermodule</td>
<td></td>
</tr>
<tr>
<td>Master of Education (Wirtschaftspädagogik) Informatik &gt; Mastermodule</td>
<td></td>
</tr>
<tr>
<td>Zwei-Fächer-Bachelor Informatik &gt; Aufbaumodule</td>
<td></td>
</tr>
</tbody>
</table>

Contact person

- Module responsibility
  - Oliver Kramer
- Authorized examiners
  - Oliver Kramer
  - Die im Modul Lehrenden

Entry requirements

Skills to be acquired in this module

### Professional competence:

The students:

- Identify the layers of the ISO/OSI model
  - Recognise the main concepts and algorithms of each IOS/OSI layer
  - Assign technical processes to the layers
  - Classify new technologies to the main concepts of the ISO/OSI model
  - Compare different methods and approaches of a layer (i.e. TCP and UDP)
  - Characterise safety-critical aspects of each layer

### Methodological competence:

The students

- Administer small networks
- Characterise safety-critical aspects of networks

### Social competence:

The students work on exercises in small teams

### Self-competence:

The students recognise their administrative abilities

Module contents

Contents of this lecture (cf. suggested reading Tanenbaum and Wetherall)

- Introduction to networks and the internet
- Physical Layer
- Data Link Layer
- MAC Sub-Layer
- Network Layer
- Transport Layer
- Session Layer
- Presentation Layer
- Application Layer
- Technologies (Cable and Co)
- Nyquist Shannon and Transmissions
- CDMA
- Hamming & CRC
- Stop & wait, go back n, selective repeat
- Aloha & CSMA
- Ethernet technologies
- Wifi
- Paket switchen & Dijsktra
- IP Adressing & Header
- TCP
- UDP
- Buckets & TCP-Reno
- DNS
- Flask
- RSA & PGP
- Firewalls
Reader's advisory

- lecture notes

Links

<table>
<thead>
<tr>
<th>Language of instruction</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>V + Ü</td>
</tr>
</tbody>
</table>

Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
<td>Written or oral exam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>3.00</td>
<td>SuSe</td>
<td>42 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>1.00</td>
<td>SuSe</td>
<td>14 h</td>
</tr>
</tbody>
</table>

Total time of attendance for the module 56 h
### inf012 - Operating Systems I

<table>
<thead>
<tr>
<th>Module label</th>
<th>Operating Systems I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf012</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>
| Used in course of study | Fach-Bachelor Informatik > Aufbaumodule  
                       | Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule  
                       | Master of Education (Gymnasium) Informatik > Mastermodule |
| Contact person | Module responsibility  
                       | Oliver Theel  
                       | Authorized examiners  
                       | Oliver Theel  
                       | Die im Modul Lehrenden |
| Entry requirements | Skills to be acquired in this module  
                       | To gain knowledge of and capabilities in the design, the implementation, and the evaluation of operating systems.  
                       | Professional competence  
                       | The students:  
                       | ▪ Develop an understanding of operating systems regarding terminology, structure, functionality, conception, central challenges and solutions  
                       | ▪ Evaluate the performance of operating systems  
                       | ▪ Are aware of the implementation problems of operating systems  
                       | ▪ Realise and evaluate solutions of subproblems  
                       | ▪ Comprehend and evaluate the functional connections between application systems and hardware  
                       | ▪ Understand operating systems as a link between technical and applied computer science  
                       | Methodological competence  
                       | The students:  
                       | ▪ Transfer concepts of implementations to other contexts  
                       | ▪ Question different solutions wrt. properties  
                       | Social competence  
                       | The students:  
                       | ▪ Solve problems in small teams  
                       | ▪ Present their solutions to the members of the tutorial  
                       | ▪ Discuss their different solutions with members of the tutorial  
                       | Self-competence  
                       | The students:  
                       | ▪ Accept criticism  
                       | ▪ Question their initial solutions in the light of newly learned methods |
| Module contents | The contents of this module are:  
                       | 1. “Operating systems” definition and structure  
                       | 2. Requirements of operation systems  
                       | 3. Technical characteristics of related hardware  
                       | 4. The need and implementation options of parallel processes  
                       | 5. Cooperation of processes: communication and synchronisation (semaphores)  
                       | 6. Memory management: virtual und non-virtual memory management  
<pre><code>                   | 7. File management |
</code></pre>
<p>| Links | Language of instruction | German |
| Duration (semesters) | 1 Semester |</p>
<table>
<thead>
<tr>
<th>Module frequency</th>
<th>jährlich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>V + Ü</td>
</tr>
</tbody>
</table>

### Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>End of the lecture period</td>
<td>Written or oral exam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Exercise or tutorial</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**: 56 h
inf016 - Internet Technologies

Module label: Internet Technologies
Module code: inf016
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Master of Education (Gymnasium) Informatik > Mastermodule
- Master of Education (Wirtschaftspädagogik) Informatik > Mastermodule

Contact person:
Module responsibility:
- Susanne Boll-Westermann

Authorized examiners:
- Susanne Boll-Westermann
- Die im Modul Lehrenden

Entry requirements:
Skills to be acquired in this module:
The graduates of the module know different Internet concepts and technologies. They are able to evaluate the capability of the concepts and techniques to design internet-based applications. The students will apply these concepts and techniques in a project.

Professional competence:
The students:
- Know basic concepts and technologies of the Internet and the web

Methodological competence:
The students:
- Are able to use techniques in projects

Social competence:
The students:
- Implement web-based projects in a team

Self-competence:
The students:
- Reflect their own capability to develop web-based applications

Module contents:
This module deals with the basic development concepts of Internet-based applications. It covers the web languages: HTML, CSS, XML, XML-Schema, XPath, XSTL. It includes the relevant client technologies of web applications (Applets, AJAX, COMET) and server technologies (Forms, Servlets, Java Server Pages, STRUTS, Ruby on Rails). Additional topics are multimedia on the internet (SMIL, SVG, Flash), usability and accessibility.

The practical project of this module consists of the design, implementation and presentation of a comprehensive web application. The topics of the lecture will be applied and deepened in practice. The project is based on the web framework Ruby on Rails.

Reader's advisory:
Reserve shelf in the library; extensive list of links in e-learning platform StudIP covering course topics.

Links:
https://www.uni-oldenburg.de/informatik/medieninformatik/lehre/

Language of instruction:
German

Duration (semesters):
1 Semester

Module frequency:
jährlich

Module capacity:
unlimited

Reference text:
Associated with the modules:
- Complements with Software-Systementwurf
- Informationssysteme I
- Informationssysteme II
- Technologien des Wissensmanagement im Internet

<table>
<thead>
<tr>
<th>Modullevel</th>
<th>AS (Akzentsetzung / Accentuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>V+P</td>
</tr>
</tbody>
</table>
| Vorkenntnisse / Previous knowledge | - HTML
- Objectoriented programming |

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>The practical projects will all be presented on a single project day, which will take place at the end of the lecture period. The oral exam takes place during the last two weeks of the lecture period. If necessary, re-examinations will take place at the end of the term. Find out more about the schedule on the websites of the department and in StudIP.</td>
<td>Project and oral exam or project and written exam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

| Total time of attendance for the module | 56 h |
The module provides an introduction to the "Electronic Business" (e-business). The graduates know the fundamental and current technologies, advanced concepts, applications and competitive strategies of the "Electronic-Commerce" (e-commerce). The knowledge and abilities acquired in this module are directly applicable in study and business. They are deepening the basics from the module „Wirtschaftsinformatik II“. They provide a professional e-business consulting background and the skills to design software products for this area of business in practice.

**Professional competence**

The students:

- Name and discuss the eBusiness key challenges
- Discuss the chances of the added value and the changes of commercial models by the internet
- Define the concepts of e-business and e-commerce.
- Discuss the change of retail trade and the transactions between companies in e-business
- Name current payment systems and communication technologies
- Discuss the possibilities of the internet in order to simplify the administration and the coordination of internal and external business processes
- Characterise the challenges for the management caused by e-business and e-commerce
- Assess applications with regard to economic points of view
- Practically learn how to handle core technologies of e-business

**Methodological competence**

The students:

- Assess the core technologies of e-business and e-commerce
- Apply methods in case studies

**Social competence**

The students:

- Develop case studies on basis of given problems in groups
- Present their solutions

**Self-competence**

The students:

- Learn about their own limitations while planning and developing e-commerce applications

**Module contents**

The module provides the following contents:

- The definition of the core e-business concepts and the technical conditions for the implementation
- Introduction of the variations of e-commerce, especially the Business-to-Consumer (B2C) and Business-to-Business (B2B) concepts and the current research in this field
- Discussion on the economic aspects of e-business based on the theory of informational added value
- Technological basics of the web and current development technologies for e-commerce web
applications and security mechanisms with focus on online-shops and applications (hands-on exercise topics: HTTP, JSP and SQL Injection, PHP, XML, XML-Security, data modelling, Online-Shop development and Online-Shop administration)

Reader's advisory


Links
http://www.wi-ol.de/

Language of instruction
German

Duration (semesters)
1 Semester

Module frequency
jährlich

Module capacity
unlimited

Modullevel
---

Modulart
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
V & Ü

Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
<td>Written or oral exam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

Total time of attendance for the module
56 h
### Module Information

**Module label:** Business Process Management

**Module code:** inf609

**Credit points:** 6.0 KP

**Workload:** 180 h

**Used in course of study:**
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule

**Contact person**

- Module responsibility: Axel Hahn
- Authorized examiners: Axel Hahn, Die im Modul Lehrenden

**Entry requirements**

- Teaching of the basics of process management. They understand the importance of models for the analysis and design of business processes.

**Professional competence**
After attending the module, students will be able to model and classify business processes and to optimize them for given goals.

**Methodological competence**
The students can map and evaluate processes in structure models, process chains, and costing models.

**Social competence**
The students recognize the importance of employee empowerment for simple, flexible management of processes and design processes on case studies interactively with the intended process participants.

**Self competence**
The students are able to independently acquire knowledge and skills within the framework of an eLearning module.

### Module Contents

- The basics of process management
- Strategic Process Management / Strategic Process Planning
- Process design (procedure, actual and target modeling)
- Process implementation (process types, process integration using the example SAP ERP)
- Quality and Change Management (ISO 9000, Total Quality Management)
- Process Controlling
- Process management in service companies

### Reader's Advisory


### Links

**Language of instruction:** German

**Duration (semesters):** 1 Semester

**Module frequency:** Wintertherm and Sommertherm

**Module capacity:** unlimited

**Modulelevel:** AS (Akzentsetzung / Accentuation)

**Modularit:** je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program:** E-Learning

### Previous knowledge

**Examination:**
- Time of examination: At the end of the lecture period
- Type of examination: Written exam
<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe or WiSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>SuSe or WiSe</td>
<td>28 h</td>
</tr>
<tr>
<td><strong>Total time of attendance for the module</strong></td>
<td></td>
<td></td>
<td></td>
<td>56 h</td>
</tr>
</tbody>
</table>
### mat950 - Discrete Mathematics

**Module label**: Discrete Mathematics  
**Module code**: mat950  
**Credit points**: 6.0 KP  
**Workload**: 180 h

**Used in course of study**  
- Fach-Bachelor Informatik > Aufbaumodule  
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule  
- Zwei-Fächer-Bachelor Informatik > Basismodule

**Contact person**  
Module responsibility:  
- Florian Heß  
- Andreas Stein  
- Sandra Stein

**Entry requirements**

**Skills to be acquired in this module**  
- Getting to know and to understand the axiomatic structure of mathematics and the importance of mathematical reasoning  
- Mastering basic mathematical proof techniques and their logical structure  
- Recognizing the relevance of premises in mathematical theorems: Localization of premises within proofs and possible consequences if premises are not met  
- Exemplary acquaintance with further mathematical areas and thus expansion of the student's mathematical knowledge  
- Getting to know applications  
- Integration and crosslinking of the student’s mathematical knowledge by establishing relationships between different mathematical areas  
- Learning the essential ideas and methods for discrete structures in mathematics  
- Knowledge of the fundamental concepts and methods of graph theory  
- Knowledge of the fundamental concepts and methods of algebra and number theory, such as groups, rings, fields, residue class rings, Euclidean algorithm, Chinese remainder theorem, polynomials.  
- Knowledge of further concepts and methods for discrete structures, e.g. primality tests, RSA, graph-theoretical algorithms

**Module contents**  
Elements of propositional logic, proof techniques, sets, relations and maps, combinatorics, graphs and applications, the ring of integers and residue class rings, groups and semi groups

**Reader's advisory**  
Graham, Knuth, Patashnik: Concrete Mathematics, Addison-Wesley 1994.  
Hartmann: Mathematik für Informatiker, Vieweg 2014.  
Teschl, Teschl: Mathematik für Informatiker, Band 1, Springer 2013.  
Further reading will be announced in the lecture.

**Links**

**Language of instruction**: German  
**Duration (semesters)**: 1 Semester  
**Module frequency**: annual  
**Module capacity**: unlimited  
**Modullevel**: AC (Aufbaucurriculum / Composition)  
**Modulart**: Pflicht / Mandatory

### Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>after the end of the lecture period</td>
<td>Written exam or oral exam.</td>
</tr>
</tbody>
</table>

**Course type** | **Comment** | **SWS** | **Frequency** | **Workload attendance** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>3.00</td>
<td>WiSe</td>
<td>42 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>1.00</td>
<td>WiSe</td>
<td>14 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**: 56 h
### mat955 - Mathematics of Computer Science (Linear Algebra)

<table>
<thead>
<tr>
<th>Module label</th>
<th>Mathematics of Computer Science (Linear Algebra)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>mat955</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td>• Fach-Bachelor Informatik &gt; Aufbaumodule</td>
</tr>
<tr>
<td></td>
<td>• Fach-Bachelor Wirtschaftsinformatik &gt; Aufbaumodule</td>
</tr>
<tr>
<td>Contact person</td>
<td>Module responsibility</td>
</tr>
<tr>
<td></td>
<td>• Florian Heß</td>
</tr>
<tr>
<td></td>
<td>• Andreas Stein</td>
</tr>
<tr>
<td></td>
<td>• Sandra Stein</td>
</tr>
</tbody>
</table>

#### Entry requirements
- Getting to know and to understand the axiomatic structure of mathematics and the importance of mathematical reasoning
- Mastering basic mathematical proof techniques and their logical structure
- Recognizing the relevance of premises in mathematical theorems: Localization of premises within proofs and possible consequences if premises are not met
- Learning the significant ideas and methods of linear algebra
- Mastering the fundamental concepts of algebra, such as groups, rings, fields
- Mastering the fundamental concepts and significant methods of linear algebra, such as systems of linear equations, Gaussian algorithm, vector spaces, dimension, linear maps, matrices, determinants
- Mastering of further notions and methods of linear algebra, e.g. eigenvectors, eigenvalues, diagonalization

#### Module contents
- Significant techniques and structures, systems of linear equations, vector spaces, dimension, linear maps, determinants, eigenvalues, diagonalization

#### Reader’s advisory
- S. Bosch: Lineare Algebra, Springer 2014
- B. Huppert, W. Willems: Lineare Algebra, Springer 2010
- F. Lorenz: Lineare Algebra, Spektrum 2008

#### Language of instruction
- German

#### Duration (semesters)
- 1 Semester

#### Module frequency
- annual

#### Module capacity
- unlimited

#### Module level
- AC (Aufbaucurriculum / Composition)

#### Modulart
- Pflicht o. Wahlpflicht / compulsory or optional

#### Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam</td>
<td></td>
<td>written exam or oral exam.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bonus points can be earned.</td>
</tr>
</tbody>
</table>

#### Course type

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

#### Total time of attendance for the module
- 56 h
mat960 - Mathematics of Computer Science (Analysis)

Module label: Mathematics of Computer Science (Analysis)
Module code: mat960
Credit points: 6.0 KP
Workload: 180 h
Used in course of study:
- Fach-Bachelor Informatik > Aufbaumodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule

Contact person: Module responsibility
- Frank Schöpfer

Entry requirements

Skills to be acquired in this module:
The students learn and apply basic notions and techniques of mathematical analysis.

Professional competence
The students:
- use rigorous mathematical proofs
- compute limit values and analyse the convergence behaviour of iterative methods
- apply differential and integral calculus to compute extreme values, to analyse the behaviour of functions and to develop numerical solution methods

Methodological competence
The students:
- analyse formal relations
- structure and justify solution methods

Social competence
The students:
- develop solutions to given problems in groups
- accept constructive criticism

Personal competence
The students:
- reflect their solution strategies
- deepen their understanding of the presented mathematical concepts with exercises and adopt the solution methods

Module contents:
- Convergence of sequences, series and iterative methods
- Continuity, differential and integral calculus of functions of one variable
- Characterization and computation of extreme values
- Separable and linear ordinary differential equations

Reader's advisory:
- Peter Hartmann: Mathematik für Informatiker - ein praxisbezogenes Lehrbuch
- Dirk Hachenberger: Mathematik für Informatiker
- Otto Forster: Analysis I
- Harro Heuser: Lehrbuch der Analysis, Teil 1
- Konrad Königsberger: Analysis

Links
- Language of instruction: German
- Duration (semesters): 1 Semester
- Module frequency: every year
- Module capacity: unlimited
- Modulelevel: BC (Basiscurriculum / Base curriculum)
- Modulart: Pflicht / Mandatory

Vorkenntnisse / Previous knowledge

Examination
- Time of examination: At the end of the lecture period written exam
- Type of examination: Final exam of module

Course type
- Comment: SWS Frequency Workload attendance
- Lecture: 3.00 SuSe 42 h
- Exercises: 1.00 SuSe 14 h

Total time of attendance for the module: 56 h
mat990 - Mathematics for Economists

Module label: Mathematics for Economists
Module code: mat990
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodelle
- Fach-Bachelor Nachhaltigkeitsökonomik > Basismodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Fach-Bachelor Wirtschaftswissenschaften > Basismodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Basismodule

Contact person:
Module responsibility:
- Angelika May

 Authorized examiners:
- Die im Modul Lehrenden
- Die Modulverantwortlichen

Module counseling:
- Peter Krug

Entry requirements:

Skills to be acquired in this module:
Students internalize basic mathematical concepts and methods from analysis and matrix calculation and their applications in economics.

Professional competence:
The students:
- are proficient in the mathematical fundamentals relevant to economics
- master methods for solving equations and inequalities
- master differential calculus for one and two variables and can integrate
- are able to reliably determine local and global extreme points for functions of one and two variables.

Methodological competence:
The students:
- analyse formal contexts
- understand the formal mathematical language
- structure problems from the economic sciences and justify their solutions.

Social competence:
The students:
- construct solutions to given problems in groups
- accept criticism and see it as an aid.

Self-competence:
The students:
- reflect their actions in establishing solutions
- deepen the presented mathematical concepts in exercises and add them to their actions.

Module contents:
Basics in real Arithmetic, Rules for Matrix Arithmetic
Linear equations, linear inequalities and systems of those, quadratic equations, financial mathematics (interest rates and present values, pension calculation)
Calculus for functions of one variable: derivation rules for power functions, exp and ln, indefinite integral, applications of integral calculus (density function, ordinary differential equations), single-variable optimization (stationary points, extreme-value theorem, local and global extreme points),
Approximation methods (linear approximation, Taylor series with Lagrange remainder)
Functions of two variables (partial derivatives, total differential), Tools for comparative statics : (elasticity of substitution, homogeneous and homothetic functions), multivariable optimization tasks (local and global extremes, extremes under constraints)

Reader's advisory:
Begleitend:

Links
www.uni-oldenburg.de/wire

Language of instruction
German

Duration (semesters)
1 Semester

Module frequency
annual

Module capacity
unlimited

Modulelevel
AC (Aufbaucurriculum / Composition)

Modulart
Pflicht o. Wahlpflicht / compulsory or optional

Lern-/Lehrform / Type of program

Vorkenntnisse / Previous knowledge

Examination
Time of examination
Type of examination

Final exam of module
written exam

Course type
Comment
SWS
Frequency
Workload attendance

Lecture
2.00
WiSe
28 h

Exercises
2.00
WiSe
28 h

Total time of attendance for the module
56 h
mat991 - Mathematics for Economists II

Module label | Mathematics for Economists II
Module code | mat991
Credit points | 6.0 KP
Workload | 180 h

Used in course of study
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodul
- Fach-Bachelor Nachhaltigkeitökonomik > Aufbaumodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Betriebswirtschaftslehre
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Ökologie und Nachhaltigkeit
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Recht
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Volkswirtschaftslehre
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Wirtschaftsinformatik

Contact person
Module responsibility
- Jorge Marx Gomez
- Angelika May

Authorized examiners
- Angelika May

Entry requirements

Skills to be acquired in this module
- The students internalize advanced mathematical methods, know applications in economics and can provide solutions.

Professional competence
- The students:
  - are proficient in the quantitative methods relevant to economics
  - know vector spaces and die rings
  - master the differential calculus for n variables
  - can determine extreme points with general constraints
  - can solve special homogeneous and inhomogeneous differential equations.

Methodological competence
- The students:
  - analyse complex interrelationships
  - understand the formal mathematical language
  - structure problems from the economic sciences and find independent solutions.

Social competence
- The students:
  - construct solutions to given problems in groups
  - accept criticism and see it as an aid.

Self-competence
- The students:
  - reflect their actions in establishing solutions
  - deepen the presented mathematical concepts in exercises and add them to their actions.

Module contents
- n-dimensional vector spaces, linear maps, matrix and vector algebra (determinant, inverse matrix, eigenvalues and eigenvectors), linear systems of equations and their economic application.
- Functions of n variables), tools for comparative static (chain rules, implicit differentiation along a level curve, elasticity of substitution), multivariate optimization with and without constraints (necessary and sufficient conditions), general constraints, Kuhn-Tucker conditions.
- Integration, Differential and ordinary differential equations with solution methods for special types.

Reader's advisory
<table>
<thead>
<tr>
<th>Links</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>annual</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>AC (Aufbaucurriculum / Composition)</td>
</tr>
<tr>
<td>Modular</td>
<td>Pflicht o. Wahlpflicht / compulsory or optional</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lern-Lehrform / Type of program</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination</td>
<td>Time of examination</td>
</tr>
<tr>
<td>Final exam of module</td>
<td>written exam (90-120 minutes)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vorkenntnisse / Previous knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Course type</td>
<td>Comment</td>
</tr>
<tr>
<td>Lecture</td>
<td>2.00</td>
</tr>
<tr>
<td>Exercises</td>
<td>2.00</td>
</tr>
</tbody>
</table>

| Total time of attendance for the module  | 56 h                                        |

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

Bonus points can be earned.
mat996 - Introduction to Numerical Analysis

<table>
<thead>
<tr>
<th>Module label</th>
<th>Introduction to Numerical Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>mat996</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td>• Fach-Bachelor Informatik &gt; Wahlpflichtbereich Mathematik</td>
</tr>
<tr>
<td></td>
<td>• Fach-Bachelor Wirtschaftsinformatik &gt; Aufbaumodule</td>
</tr>
<tr>
<td></td>
<td>• Master Informatik &gt; Nicht Informatik</td>
</tr>
<tr>
<td>Contact person</td>
<td>Module responsibility</td>
</tr>
<tr>
<td></td>
<td>• Alexey Chernov</td>
</tr>
<tr>
<td></td>
<td>• Frank Schöpfer</td>
</tr>
<tr>
<td>Entry requirements</td>
<td>Skills to be acquired in this module</td>
</tr>
<tr>
<td></td>
<td>The students learn and analyze the basic numerical methods. The students learn to implement the basic numerical methods in a computer program.</td>
</tr>
<tr>
<td></td>
<td>Professional competence</td>
</tr>
<tr>
<td></td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>• learn basic numerical methods and algorithms</td>
</tr>
<tr>
<td></td>
<td>• analyze properties of the numerical methods using rigorous mathematical tools</td>
</tr>
<tr>
<td></td>
<td>• implement the basic numerical methods in a computer program</td>
</tr>
<tr>
<td></td>
<td>• interpret results of computer simulations</td>
</tr>
<tr>
<td></td>
<td>Methodological competence</td>
</tr>
<tr>
<td></td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>• analyze algorithms with mathematical tools</td>
</tr>
<tr>
<td></td>
<td>• implement numerical algorithms for concrete problems</td>
</tr>
<tr>
<td></td>
<td>Social competence</td>
</tr>
<tr>
<td></td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>• develop solutions to given problems in groups</td>
</tr>
<tr>
<td></td>
<td>• accept constructive criticism</td>
</tr>
<tr>
<td></td>
<td>Personal competence</td>
</tr>
<tr>
<td></td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>• reflect their solution strategies</td>
</tr>
<tr>
<td></td>
<td>• deepen their understanding of the presented mathematical and algorithmical concepts with exercises and adopt the solution methods</td>
</tr>
<tr>
<td>Module contents</td>
<td>Module contents</td>
</tr>
<tr>
<td></td>
<td>• Numerical methods for linear systems: LU-, Cholesky decompositions, iterative methods</td>
</tr>
<tr>
<td></td>
<td>• Numerical methods for nonlinear equations: fix-point iterations, Newton's Method</td>
</tr>
<tr>
<td></td>
<td>• Polynomials, spline and trigonometric interpolation</td>
</tr>
<tr>
<td></td>
<td>• Numerical integration: Newton-Cotes, Gauss quadrature rules, adaptive quadrature and extrapolation methods</td>
</tr>
<tr>
<td></td>
<td>• Stability and conditioning of algorithms and problems</td>
</tr>
<tr>
<td>Reader's advisory</td>
<td>Reader's advisory</td>
</tr>
<tr>
<td>Links</td>
<td>Links</td>
</tr>
<tr>
<td></td>
<td>Language of instruction</td>
</tr>
<tr>
<td></td>
<td>Duration (semesters)</td>
</tr>
<tr>
<td></td>
<td>Module frequency</td>
</tr>
<tr>
<td></td>
<td>Module capacity</td>
</tr>
<tr>
<td></td>
<td>Modullevel</td>
</tr>
<tr>
<td></td>
<td>Modulart</td>
</tr>
<tr>
<td>Lern- /Lehrform / Type of program</td>
<td>Lern-/Lehrform / Type of program</td>
</tr>
<tr>
<td>Vorkenntnisse / Previous knowledge</td>
<td>Vorkenntnisse / Previous knowledge</td>
</tr>
<tr>
<td>Examination</td>
<td>Examination</td>
</tr>
<tr>
<td>Final exam of module</td>
<td>Final exam of module</td>
</tr>
<tr>
<td>Course type</td>
<td>Course type</td>
</tr>
<tr>
<td>Course type</td>
<td>Comment</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**: 56 h
Module label: Double Entry Bookkeeping & Financial Statements under German Law (HGB)

Module code: wir021

Credit points: 6.0 KP

Workload: 180 h

Used in course of study:
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Basismodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Nachhaltigkeitsökonomik > Basismodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Fach-Bachelor Wirtschaftswissenschaften > Basismodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Basismodule

Contact person:
- Module responsibility: Remmer Sassen
- Authorized examiners: Die im Modul Lehrenden

Entry requirements:
- none

Skills to be acquired in this module:
1. understand financial accounting as the basis of corporate data and bookkeeping
2. gain comprehensive knowledge of main accounting areas such as procurement, sales, HR, inventory, tax, provisions etc.
3. obtain basic knowledge about annual report process of single entities

Module contents:
The main objective of this module is to give the students an overview of the double entry bookkeeping as well as the link between financial accounting, balance sheet and income statement. The acquisition of basis knowledge of the corporate accountancy stands in the foreground, for example, how organizations manage the bookkeeping, legal basis of the annual accounts, creating an inventory, content of accounting and income statement.

Reader's advisory:
An additional script is provided.

Links:
http://www.uni-oldenburg.de/accounting/

Language of instruction:
German

Duration (semesters):
1 Semester

Module frequency:
jährlich

Module capacity:
unlimited

Modullevel:
BC (Basiscurriculum)

Modulart:
Pflicht

Lern-/Lehrform / Type of program

Vorkenntnisse / Previous knowledge

Examination:

Time of examination:
at the end of the semester

Type of examination:
final exam

Course type:

Comment
SWS
Frequency
Workload attendance

Lecture
2.00

28 h

Tutorial
2.00

WiSe

28 h

Total time of attendance for the module:
56 h
## wir150 - Statistics I for Economists

<table>
<thead>
<tr>
<th>Module label</th>
<th>Statistics I for Economists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>wir150</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>

**Used in course of study**

- Fach-Bachelor Betriebswirtschaftslehre für Leistungssportlerinnen und Leistungssportler > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Biologie > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Business Administration in mittelständischen Unternehmen > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Chemie > Fachnahe Angebote Betriebswirtschaftslehre more...
- Fach-Bachelor Comparative and European Law > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Engineering Physics > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Informatik > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Interkulturelle Bildung und Beratung > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Mathematik > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Nachhaltigkeitsökonomik > Aufbaumodule
- Fach-Bachelor Nachhaltigkeitsökonomik > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Pädagogik > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Pädagogisches Handeln in der Migrationsgesellschaft > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Physik > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Physik, Technik und Medizin > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Sozialwissenschaften > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Umweltwissenschaften > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Fach-Bachelor Wirtschaftsinformatik > Fachnahe Angebote Betriebswirtschaftslehre
- Fach-Bachelor Wirtschaftswissenschaften > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftswissenschaften > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Anglistik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Biologie > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Chemie > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Elementarmathematik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Ex. Theologie und Religionspädagogik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Gender Studies > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Germanistik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Geschichtswissenschaften > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Informatik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Interdisziplinäre Sachbildung > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Kunst und Medien > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Materielle Kultur: Textil > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Mathematik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Musik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Niederlandistik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Ökonomische Bildung > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Pädagogik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Philosophie / Werte u. Normen > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Physik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Politik-Wirtschaft > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Slavistik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Sonderpädagogik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Sozialwissenschaften > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Sportwissenschaft > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Technik > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Fachnahe Angebote Betriebswirtschaftslehre
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Schwerpunkt Berufliche Bildung
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Schwerpunkt Management und Ökonomie

**Contact person**

- Module responsibility
  - Ralf Werner Stecking

**Authorized examiners**

- Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**

- Students
• will understand the fundamental terms of descriptive and inductive statistics.
• will be able to choose and calculate appropriate measures and methods in order to describe empirical data properly.
• are familiar with concepts of probability theory and will be able to transfer statistical results from sample to population.

Module contents
Measuring and tabular / graphic representation of the data, summary statistics (arithmetic mean, statistical dispersion), two-dimensional distributions (graphic / tabular depiction, statistical independence, contingency, simple linear regression, and correlation), fundamentals of probability theory and probability distribution, sampling distributions, estimation and test methods.

Reader's advisory

Links
Language of instruction
German
Duration (semesters)
1 Semester
Module frequency
jährlich
Module capacity
unlimited

Modulelevel
---

Modulart
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program

Vorkenntnisse / Previous knowledge

Examination
Time of examination
Type of examination

Final exam of module
end of semester
written exam

Course type
Comment
SWS
Frequency
Workload attendance

Lecture
2.00

Tutorial
2.00

Exercises
0.00

Total time of attendance for the module
56 h

Examination
Time of examination
Type of examination

Final exam of module
end of semester
written exam

Course type
Comment
SWS
Frequency
Workload attendance

Lecture
2.00

Tutorial
2.00

Exercises
0.00

Total time of attendance for the module
56 h
wir083 - Purchasing, Operations, and Logistics Management

Module label: Purchasing, Operations, and Logistics Management
Module code: wir083
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule
- Fach-Bachelor Wirtschaftswissenschaften > Aufbaumodule
- Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften > Mastermodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Aufbaumodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Schwerpunkt Management und Ökonomie

Contact person:
Module responsibility
- Christian Busse
Authorized examiners
- Die im Modul Lehrenden

Entry requirements
Skills to be acquired in this module:
Students obtain an overview of the most important operational functions of an industrial or service company. These are procurement, production and logistics. Students will get to know typical operational challenges and familiarize themselves with established approaches and methods for analyzing and improving procurement, production and logistics operations.

Module contents:
The module comprises a lecture (course number 2.02.231) and an accompanying tutorial (course numbers 2.02.231a to 2.02.231j). The lecture is based on the text book "Grundzüge der Beschaffung, Produktion und Logistik" by Kummer, Grüne und Jammernegg in the third edition of 2013 and the associated workbook, as well as partly on the text book "Operations Management: Konzepte, Methoden und Anwendungen" by Thonemann in the third edition of 2015. The purpose of the lecture is to explain the fundamental problems and their solutions theoretically. The tutorials focus on application and practice and offer time for questions. There are no formal or content-related participation or entrance requirements.

Reader's advisory

Links
Language of instruction: German
Duration (semesters): 1 Semester

Module capacity: unlimited
Reference text: The module takes place in the summer semester. Please refer to the syllabus available via Stud.IP for a more detailed description of content and procedure.

Modulart: je nach Studiengang Pflicht oder Wahlpflicht

Final exam of module
Course type: Lecture
Comment: 2.00
SWS: 28 h
Frequency: SuSe and WiSe

Course type: Tutorial
Comment: 2.00
SWS: 28 h
Frequency: SuSe and WiSe

Total time of attendance for the module: 56 h
**Akzentsetzungsmodul**

inf006 - Software Engineering II

<table>
<thead>
<tr>
<th>Module label</th>
<th>Software Engineering II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf006</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>

**Used in course of study**

- Fach-Bachelor Informatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Master of Education (Gymnasium) Informatik > Mastermodule
- Master Wirtschaftsinformatik > Bereichswahlmodule

**Contact person**

Module responsibility

- Andreas Winter

Authorized examiners

- Andreas Winter
- Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**

The objective of the module inf005 Software Engineering II is to deepen the subjects and skills of the module Software Engineering I. Special software engineering topics will be presented, deepened and discussed. The lecture deals with different software engineering methods and technology which will be discussed in the seminar. The discussions are contextualised by scientific research projects, practical projects and latest research findings.

**Professional competence**

The students:

- Deepen software engineering methods and techniques
- Use specific software engineering methods and techniques
- Differentiate developmental techniques of software systems
- Discuss software engineering topics
- Design software systems by using appropriate methods
- Solve software engineering problems independently
- Reflect self-designed software engineering solutions critically and present them appropriately

**Methodological competence**

The Students:

- Structure problems with modelling techniques
- Develop actual methods of software engineering
- Present software engineering solutions
- Write scientific papers independently

**Social competence**

The Students:

- Explain and discuss software development solutions in their practical use
- Accept criticism and see it as an asset

**Self-competence**

The Students:

- Reflect their problem-solving behaviour with regard to the possibilities of software technology
- Internalize the presented developmental methods and integrate them in their own actions

**Module contents**

The following subjects are provided:

- Concept of systems
- Iterative and agile process models of software development
- System development and cost estimation
- Methods, techniques and tools to collect requirements
- Techniques to develop and describe software architecture
- Measurement and evaluation of software systems
- Extended techniques of modelling, meta-modelling, domain specific languages
- Model based development
- Methods and techniques of software evolution

Reader's advisory

- Helmut Balzert: Lehrbuch der Software-Technik, Spektrum Akademischer Verlag, 3. Auflage 2009

and actual papers from IEEE Software, IEEE Transactions on Software-Engineering, Informatik-Spektrum and conferences (z.B. ICSE, ICSM, WCRE, CSMR, ICPC, SLE, u.a.)

Links

<table>
<thead>
<tr>
<th>Language of instruction</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
</tbody>
</table>

Lern-/Lehrform / Type of program

<table>
<thead>
<tr>
<th>Vorkenntnisse / Previous knowledge</th>
<th>Softwaretechnik I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination</td>
<td>Time of examination</td>
</tr>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
<td></td>
</tr>
<tr>
<td>Seminar</td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
<td></td>
</tr>
</tbody>
</table>

Total time of attendance for the module | 56 h |
**info09 - Database Practical**

<table>
<thead>
<tr>
<th>Module label</th>
<th>Database Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>info09</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Informatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Master of Education (Wirtschaftspädagogik) Informatik &gt; Praktische Vertiefung der Informatik</td>
</tr>
<tr>
<td></td>
<td>Zwei-Fächer-Bachelor Informatik &gt; Praktische Vertiefung</td>
</tr>
<tr>
<td>Contact person</td>
<td></td>
</tr>
<tr>
<td>Module responsibility</td>
<td>Marco Grawunder</td>
</tr>
<tr>
<td>Authorized examiners</td>
<td>Marco Grawunder</td>
</tr>
<tr>
<td></td>
<td>Die im Modul Lehrenden</td>
</tr>
<tr>
<td>Entry requirements</td>
<td></td>
</tr>
<tr>
<td>Skills to be acquired in this module</td>
<td>The objective of this module is to gather practical experience on databases and information systems. The students get an overview of the technical realisation, implementation and optimisation of a professional database management system.</td>
</tr>
<tr>
<td></td>
<td><strong>Professional competence</strong></td>
</tr>
<tr>
<td></td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>• Realise, implement and program data base systems</td>
</tr>
<tr>
<td></td>
<td>• Program and implement database-oriented system routines</td>
</tr>
<tr>
<td></td>
<td>• Implement optimisation goals in the modelling phase</td>
</tr>
<tr>
<td></td>
<td>• Administer professional database systems (installation, maintenance and adjustment)</td>
</tr>
<tr>
<td></td>
<td>• Recognise database systems' performance problems and are able to fix them with according methods</td>
</tr>
<tr>
<td></td>
<td>• Organise and control processes of database systems</td>
</tr>
<tr>
<td></td>
<td><strong>Social competence</strong></td>
</tr>
<tr>
<td></td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>• Solve database system problems in a team</td>
</tr>
<tr>
<td></td>
<td><strong>Self-competence</strong></td>
</tr>
<tr>
<td></td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>• Acknowledge the limits of their ability to cope with pressure during the implementation and are aware of failures</td>
</tr>
<tr>
<td></td>
<td>• Reflect their self-perception</td>
</tr>
<tr>
<td>Module contents</td>
<td>The module &quot;Practical Course Databases&quot; is a related practical course of the module &quot;Information Systems I&quot;. The objectives of this module are special technical concepts of a database system and practical solutions in database programming and optimisation. Contents of this module are:</td>
</tr>
<tr>
<td></td>
<td>• System-oriented database management programming,</td>
</tr>
<tr>
<td></td>
<td>• Implementation of catalogue systems,</td>
</tr>
<tr>
<td></td>
<td>• Optimisation strategies based on parallelisation and partitioning requirements</td>
</tr>
<tr>
<td>Links</td>
<td></td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td><strong>Module frequency</strong></td>
<td>jährlich</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td><strong>Module capacity</strong></td>
<td>unlimited</td>
</tr>
<tr>
<td><strong>Modullevel</strong></td>
<td>---</td>
</tr>
<tr>
<td><strong>Modulart</strong></td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td><strong>Lern-/Lehrform / Type of program</strong></td>
<td>P</td>
</tr>
<tr>
<td><strong>Vorkenntnisse / Previous knowledge</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Examination</strong></td>
<td>Time of examination</td>
</tr>
<tr>
<td><strong>Final exam of module</strong></td>
<td>Type of examination</td>
</tr>
<tr>
<td></td>
<td>At the end of the lecture period</td>
</tr>
<tr>
<td><strong>Course type</strong></td>
<td>Practical</td>
</tr>
<tr>
<td><strong>SWS</strong></td>
<td>4.00</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>WiSe</td>
</tr>
<tr>
<td><strong>Workload attendance</strong></td>
<td>56 h</td>
</tr>
</tbody>
</table>
# inf014 - Operating Systems Practical

## Module label
Operating Systems Practical

## Module code
inf014

## Credit points
6.0 KP

## Workload
180 h

## Used in course of study
- Fach-Bachelor Informatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Master of Education (Wirtschaftspädagogik) Informatik > Praktische Vertiefung der Informatik
- Zwei-Fächer-Bachelor Informatik > Praktische Vertiefung

## Contact person
- **Module responsibility**
  - Oliver Theel
- **Authorized examiners**
  - Oliver Theel
  - Die im Modul Lehrenden

## Entry requirements
- **Skills to be acquired in this module**
The aim of this module is to get practical experience in the field of analysis, design, and implementation methods of components of operating systems and their interactions.

### Professional competence
The students:
- Familiarise with complex software systems
- Implement hardware-related components of operating systems
- Describe parallel system operation executions
- Understand the basic concepts of the programming language C++
- Identify software errors systematically, especially regarding parallel software
- Work in teams
- Use UNIX standard software to solve problems
- Recognise the advantage of working with virtual machines

### Methodological competence
The students:
- Are aware of the challenges in handling operating systems
- Transfer operating system concepts to a practical context
- Analyse different solutions to a problem wrt. their properties
- Select the most suitable solution

### Social competence
The students:
- Solve problems in small teams
- Present their solutions to all teams
- Discuss their different solutions within their own team and among all teams

### Self-competence
The students:
- Accept criticism
- Organise the workflows within their teams
- Question their potential solutions in the light of criticism received
- Identify own shortcomings in their initial ability to successfully transfer theory to praxis

## Module contents
The contents of this module are:
- Analysis of a rudimentary operating system
- Design and implementation of a process management subsystem
- Design and implementation of process synchronisation mechanisms
- Design and implementation of a virtual memory management subsystem
- Design and implementation of a file subsystem or dialog subsystem
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Links</strong></td>
<td></td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Reference text</td>
<td>Associated with the modules:</td>
</tr>
<tr>
<td></td>
<td>• Betriebssysteme I</td>
</tr>
<tr>
<td></td>
<td>• Betriebssysteme II</td>
</tr>
<tr>
<td></td>
<td>• Verteilte Systeme</td>
</tr>
<tr>
<td><strong>Module level</strong></td>
<td>AS (Akzentsetzung / Accentuation)</td>
</tr>
<tr>
<td><strong>Modulart</strong></td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td><strong>Lern-/Lehrform / Type of program</strong></td>
<td>P</td>
</tr>
<tr>
<td><strong>Vorkenntnisse / Previous knowledge</strong></td>
<td>- Betriebssysteme I</td>
</tr>
<tr>
<td></td>
<td>- Betriebssysteme II</td>
</tr>
<tr>
<td></td>
<td>- Computer language: C, Assembler</td>
</tr>
<tr>
<td><strong>Examination</strong></td>
<td></td>
</tr>
<tr>
<td>Time of examination</td>
<td></td>
</tr>
<tr>
<td>Type of examination</td>
<td></td>
</tr>
<tr>
<td><strong>Final exam of module</strong></td>
<td>At the end of the semester</td>
</tr>
<tr>
<td><strong>Course type</strong></td>
<td>Practical</td>
</tr>
<tr>
<td><strong>SWS</strong></td>
<td>4.00</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>WiSe</td>
</tr>
<tr>
<td><strong>Workload attendance</strong></td>
<td>56 h</td>
</tr>
</tbody>
</table>
inf017 - Interactive Systems

Module label: Interactive Systems
Module code: inf017
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Betriebswirtschaftslehre für Leistungssportlerinnen und Leistungssportler > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Biologie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Business Administration in mittelständischen Unternehmen > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Chemie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
  more...
- Fach-Bachelor Comparative and European Law > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Engineering Physics > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Informatik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Interkulturelle Bildung und Beratung > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Mathematik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Nachhaltigkeitsökonomik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Pädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Pädagogisches Handeln in der Migrationsgesellschaft > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Physik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Physik, Technik und Medizin > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Sozialwissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Umweltwissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Wirtschaftsmanagement > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsmanagement > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Master of Education (Gymnasium) Informatik > Mastermodule
- Zwei-Fächer-Bachelor Anglistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Biologie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Chemie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Elementarmathematik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Ev. Theologie und Religionspädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Gender Studies > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Germanistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Geschichte > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Informatik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Interdisziplinäre Sachbildung > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Kultur und Medien > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Mathematik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Musik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Niederlandistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Ökonomische Bildung > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Pädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Philosophie / Werte u. Normen > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Physik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Politik-Wirtschaft > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Slavistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Sonderpädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Sozialwissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Sportwissenschaft > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Technik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
Zwei-Fächer-Bachelor Wirtschaftswissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"

Contact person

Module responsibility
- Susanne Boll-Westermann

Authorized examiners
- Susanne Boll-Westermann
- Die im Modul Lehrenden

Entry requirements

Skills to be acquired in this module

Professional competence
The students:
- name the basic concepts and characteristics of usable user interfaces
- characterise the basic elements of the user-centered design of interactive systems

Methodological competence:
The students:
- characterise the basic approaches to analyse context of use and user requirements
- explain methods for the design and prototypical implementation of interactive systems
- characterise established evaluation techniques and are able to use them

Social competence
The students:
- develop and present solutions for Human-Computer-Interaction related problems

Module contents
The field of interactive systems deals with the tasks, concepts and technologies of human-computer interaction and its user-friendly and suitable design. The lecture is based on the so-called Human Centred Design Process and includes models of interaction between humans and their environment, iterative design, prototyping techniques, study and evaluation processes. Basic design principles, methods and tools are presented. Practical tasks complete the lecture.

Reader's advisory

- Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale: Human Computer Interaction.
- Bernhard Preim, Raimund Dachselt: Interaktive Systeme
- Further articles and papers that are presented in the lecture

Links

Language of instruction
German

Duration (semesters)
1 Semester

Module frequency
jährlich

Module capacity
unlimited

Modullevel
AS (Akzentsetzung / Accentuation)

Modulart
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
V+Ü
<table>
<thead>
<tr>
<th>Vorkenntnisse / Previous knowledge</th>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final exam of module</strong></td>
<td></td>
<td>Individually arranged at the end of the lecture period</td>
<td>Practical tasks and oral exam</td>
</tr>
<tr>
<td>Course type</td>
<td>Comment</td>
<td>SWS</td>
<td>Frequency</td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>WSe</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td>2.00</td>
<td>WSe</td>
</tr>
<tr>
<td><strong>Total time of attendance for the module</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
inf018 - Media Processing

<table>
<thead>
<tr>
<th>Module label</th>
<th>Media Processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf018</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>

Used in course of study

- Fach-Bachelor Betriebswirtschaftslehre für Leistungssportlerinnen und Leistungssporter > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Biologie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Biologie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Business Administration in mittelständischen Unternehmen > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Chemie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Comparative and European Law > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Engineering Physics > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Informatik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Interkulturelle Bildung und Beratung > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Mathematik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Nachhaltigkeitsökonomik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Pädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Pädagogisches Handeln in der Migrationsgesellschaft > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Physik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Physik, Technik und Medizin > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Sozialwissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Umweltwissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftswissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Wirtschaftswissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Wirtschaftswissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Fach-Bachelor Wirtschaftswissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Master of Education (Gymnasium) Informatik > Mastermodule
- Master of Education (Wirtschaftspädagogik) Informatik > Mastermodule
- Master of Education (Wirtschaftspädagogik) Informatik > Praktische Vertiefung der Informatik
- Master Wirtschaftsinformatik > Bereichswahlmodule
- Zwei-Fächer-Bachelor Anglistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Biologie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Chemie > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Elementarmathematik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Ev. Theologie und Religionspädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Germanistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Geschicchte > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Informatik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Informatik > Praktische Vertiefung
- Zwei-Fächer-Bachelor Interdisziplinäre Sachbildung > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Kunst und Medien > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Materielle Kultur: Textil > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
- Zwei-Fächer-Bachelor Mathematik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Musik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Niederlandistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Ökonomische Bildung > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Pädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Philosophie / Werte u. Normen > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Physik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Politik-Wirtschaft > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Slavistik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Sonderpädagogik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Sozialwissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Sportwissenschaft > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Technik > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"
• Zwei-Fächer-Bachelor Wirtschaftswissenschaften > PP "Medieninformatik für Studierende musisch-künstlerischer Fächer"

Contact person
Module responsibility
  ▶ Susanne Boll-Westermann
Authorized examiners
  ▶ Susanne Boll-Westermann
  ▶ Die im Modul Lehrenden

Entry requirements
Skills to be acquired in this module
Professional competence:
The students:
  • name the basic concepts and characteristics of digital media
  • name the core concepts of encoding and compressing images, videos and audio files
  • characterise the complexity of the analysis, classification and processing of unstructured media, using the examples of image analysis
  • apply concepts of encoding, compression and image analysis independently

Module contents
Media processing technologies are presented in the lecture. One focus of the lecture is the encoding of digital images and the compression of an image, image enhancement and image processing. The lecture also deals with encoding and analysis of video and audio. This lecture is accompanied by simple practical tasks.

Reader's advisory
  • Reserve shelf in the library; extensive list of links in e-learning platform StudIP covering course topics.

Links
https://www.uni-oldenburg.de/informatik/medieninformatik/lehre/

Language of instruction
German

Duration (semesters)
1 Semester

Module frequency
jährlich

Module capacity
unlimited

Modulelevel
AS (Akzentsetzung / Accentuation)

Modular
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
V+P

Vorkenntnisse / Previous knowledge

Examination
Time of examination
Type of examination
Final exam of module
At the end of the lecture period
Project and oral exam

Course type
Comment
SWS
Frequency
Workload attendance
Lecture
2.00
WiSe
28 h
Project
2.00
WiSe
28 h
<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total time of attendance for the module</td>
<td></td>
<td></td>
<td></td>
<td>56 h</td>
</tr>
</tbody>
</table>
inf021 - Advanced Java Technology Practical

<table>
<thead>
<tr>
<th>Module label</th>
<th>Advanced Java Technology Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf021</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Informatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Master of Education (Wirtschaftspädagogik) Informatik &gt; Praktische Vertiefung der Informatik</td>
</tr>
<tr>
<td></td>
<td>Zwei-Fächer-Bachelor Informatik &gt; Praktische Vertiefung</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact person</th>
<th>Module responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dietrich Boles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Authorized examiners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietrich Boles</td>
</tr>
<tr>
<td>Die im Modul Lehrenden</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact person</th>
<th>Entry requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The objective of this practical course is to introduce advanced concepts and technologies of the Java Standard Edition. The students will be able to use the technologies to implement large-scale applications.</td>
</tr>
</tbody>
</table>

**Skills to be acquired in this module**

**Professional competence:**

The students:

- Name the essential packages of the JDK class library
- Structure large-scale programs properly and implement them extensively
- Set up own Java class libraries
- Look up required classes in the JDK-Library and solve problems with these classes
- Structure their programs properly
- Understand and interpret large-scale programs
- Evaluate the quality of large-scale programs related to their maintainability, reusability and expandability

**Methodological competence:**

The students:

- Search for solutions on the internet

**Social competence:**

The students:

- Discuss own and someone else’s solutions

**Self-competence:**

The students:

- Reflect their problem-solving behaviour and take up new solutions, e.g. from the internet

<table>
<thead>
<tr>
<th>Module contents</th>
<th>A selection of the following subjects is presented during the practical course:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GUI (AWT, Swing, JavaFX)</td>
</tr>
<tr>
<td></td>
<td>Java-Basics and Collection-API</td>
</tr>
<tr>
<td></td>
<td>Graphics and multimedia</td>
</tr>
<tr>
<td></td>
<td>Events</td>
</tr>
<tr>
<td></td>
<td>Model-View-Control (MVC)</td>
</tr>
<tr>
<td></td>
<td>Threads</td>
</tr>
<tr>
<td></td>
<td>Internationalisation, localization</td>
</tr>
<tr>
<td></td>
<td>Reflection</td>
</tr>
<tr>
<td></td>
<td>IO, Files</td>
</tr>
<tr>
<td></td>
<td>Tools (compiler, classloader, printer, ...)</td>
</tr>
<tr>
<td></td>
<td>Storage technologies (XML and serialisation)</td>
</tr>
<tr>
<td></td>
<td>Distributed programming (sockets and RMI)</td>
</tr>
<tr>
<td></td>
<td>Databases (JDBC)</td>
</tr>
<tr>
<td></td>
<td>Compression</td>
</tr>
<tr>
<td></td>
<td>Security concepts</td>
</tr>
</tbody>
</table>

50 / 104
The practical course is based on a large-scale project. This project is developed step-by-step relating to the subjects of the course.

<table>
<thead>
<tr>
<th>Reader’s advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Links</strong></td>
</tr>
<tr>
<td><a href="http://www.boles.de/teaching/javapraktikum/index.html">http://www.boles.de/teaching/javapraktikum/index.html</a></td>
</tr>
<tr>
<td><strong>Language of instruction</strong></td>
</tr>
<tr>
<td>German</td>
</tr>
<tr>
<td><strong>Duration (semesters)</strong></td>
</tr>
<tr>
<td>1 Semester</td>
</tr>
<tr>
<td><strong>Module frequency</strong></td>
</tr>
<tr>
<td>jährlich</td>
</tr>
<tr>
<td><strong>Module capacity</strong></td>
</tr>
<tr>
<td>unlimited</td>
</tr>
<tr>
<td><strong>Module level</strong></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>Moduleart</strong></td>
</tr>
<tr>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td><strong>Lern-/Lehrform / Type of program</strong></td>
</tr>
<tr>
<td>P</td>
</tr>
<tr>
<td><strong>Vorkenntnisse / Previous knowledge</strong></td>
</tr>
<tr>
<td>Programmierkurs</td>
</tr>
<tr>
<td><strong>Examination</strong></td>
</tr>
<tr>
<td>Time of examination</td>
</tr>
<tr>
<td>Type of examination</td>
</tr>
<tr>
<td>Final exam of module</td>
</tr>
<tr>
<td>At the end of the lecture period</td>
</tr>
<tr>
<td>Hands-on training</td>
</tr>
<tr>
<td><strong>Course type</strong></td>
</tr>
<tr>
<td>Practical</td>
</tr>
<tr>
<td><strong>SWS</strong></td>
</tr>
<tr>
<td>4.00</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td>WiSe</td>
</tr>
<tr>
<td><strong>Workload attendance</strong></td>
</tr>
<tr>
<td>56 h</td>
</tr>
</tbody>
</table>
inf521 - Medical Informatics

Module label: Medical Informatics
Module code: inf521
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Informatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Master of Education (Gymnasium) Informatik > Mastermodule

Contact person:
Module responsibility:
  - Rainer Röhrig

Authorized examiners:
  - Rainer Röhrig
  - Die im Modul Lehrenden

Entry requirements:
Skills to be acquired in this module:

Professional competence:
The students:
- know the medical and healthcare computer science applications
- know typical IT solutions and infrastructures
- know the legal framework to process care data
- know medical classifications and nomenclatures and the DRG-System and are able to apply them

Methodological competence:
The students:
- know bio-medical research requirements and patient data privacy methods
- know communication standards and apply them in small-scale scenarios
- know and apply patient safety and risk management methods
- know and apply biosignal and image processing methods

Social competence:
The students:
Realise the importance of communication during the software development process between developer, customer and user of a successful and secure system. Feedback, request, respectful cooperation and the empathy of other disciplines’ working processes are of great importance.

Self-competence:
The students:
Realise their responsibility as a medical informatic and reflect their impact on patients, medical employers and hospitals (corporates)

Module contents:
- Medical informatics introduction / medical documentation
- Medical documentation / progression of disease
- Healthcare information systems
- Terminology and classification / Medical controlling
- Image processing / interoperability and communication standards
- Medical data privacy
- Medical research
- Analyses of information system data
- Decision making support and process management
- MI/MT patient safety (Regulatory Affairs)
- Telemedicine / Customer Health informatics
- Medical technology introduction, biomedical technology
- Biosignal processing, sensor technology
- Robotics, prosthetics

Reader's advisory:
- Jan van Bemmelen, M.A. Musen, Mark A. Musen (Hrsg.): Handbook of Medical Informatics. Springer, Heidelberg 1997
- Christian Johner und Peter Haas (Hrsg.): Praxishandbuch IT im Gesundheitswesen
### Links

- Carl Hanser Verlag München 2009

### Language of instruction
- German

### Duration (semesters)
- 1 Semester

### Module frequency
- jährlich

### Module capacity
- unlimited

### Module level
- ---

### Module type
- je nach Studiengang Pflicht oder Wahlpflicht

### Lern-/Lehrform / Type of program
- V & Ü

### Examination

**Final exam of module**
- At the end of the lecture period
- Written or oral exam

### Course type

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**
- 56 h
inf530 - Artificial Intelligence

Module label: Artificial Intelligence
Module code: inf530
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Master of Education (Gymnasium) Informatik > Mastermodule

Contact person
Module responsibility
- Jürgen Sauer
Authorized examiners
- Jürgen Sauer
- Die im Modul Lehrenden

Entry requirements

Skills to be acquired in this module
The students are familiar with the basic concepts of artificial intelligence (AI). They know the concept of rational agents and their behavior. They know how to implement expert systems. They also know basic search and problem solving techniques as well as techniques of knowledge representation. The students can compare different problem solving techniques and use them within other problem contexts.

Professional competence
The students:
- describe the concept of rational agents and their behavior in an agent environment
- name and describe the basic search and problem solving techniques of Artificial Intelligence
- describe and implement expert systems
- describe basic techniques of knowledge representation

Methodological competence
The students:
- acknowledge the basic methods of AI
- transfer AI methods to other application areas
- evaluate AI methods regarding their appropriateness for distinct problem areas
- modify and adapt AI methods for specific application areas

Social competence
The students:
- work in teams
- present results to groups

Self-competence
The students:
- reflect their results with regard to the methods of AI

Module contents

- Overview of AI
- Rational agents and agent based systems
- Search and other problem solving techniques
- Knowledge representation
- Planning

Reader's advisory


Links
<table>
<thead>
<tr>
<th><strong>Language of instruction</strong></th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration (semesters)</strong></td>
<td>1 Semester</td>
</tr>
<tr>
<td><strong>Module frequency</strong></td>
<td>jährlich</td>
</tr>
<tr>
<td><strong>Module capacity</strong></td>
<td>unlimited</td>
</tr>
<tr>
<td><strong>Modullevel</strong></td>
<td>---</td>
</tr>
<tr>
<td><strong>Modulart</strong></td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td><strong>Lern-/Lehrform / Type of program</strong></td>
<td>V &amp; Ü</td>
</tr>
<tr>
<td><strong>Vorkenntnisse / Previous knowledge</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Examination</strong></td>
<td>Time of examination</td>
</tr>
<tr>
<td><strong>Final exam of module</strong></td>
<td>At the end of the lecture period</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Course type</strong></th>
<th><strong>Comment</strong></th>
<th><strong>SWS</strong></th>
<th><strong>Frequency</strong></th>
<th><strong>Workload attendance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**: 56 h
inf603 - Planning and Simulation in Logistics

<table>
<thead>
<tr>
<th>Module label</th>
<th>Planning and Simulation in Logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf603</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Informatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Master of Education (Gymnasium) Informatik &gt; Mastermodule</td>
</tr>
<tr>
<td>Contact person</td>
<td>Module responsibility</td>
</tr>
<tr>
<td></td>
<td>Jürgen Sauer</td>
</tr>
<tr>
<td></td>
<td>Authorized examiners</td>
</tr>
<tr>
<td></td>
<td>Jürgen Sauer</td>
</tr>
<tr>
<td></td>
<td>Die im Modul Lehrenden</td>
</tr>
<tr>
<td>Entry requirements</td>
<td></td>
</tr>
<tr>
<td>Skills to be acquired in this module</td>
<td>Introduction to the problems/challenges of simulation and planning of applications in production and logistics. The students will learn the simulation with a tool in hands-on exercises.</td>
</tr>
<tr>
<td>Learning objectives:</td>
<td>The Students have knowledge of basic problems/challenges of simulating and planning in the field of production and logistic. They know approaches and algorithms to solve simulation and planning problems/challenges. They are able to model solutions for simple production problems/challenges with a simulation tool and are able to solve given tasks with it.</td>
</tr>
<tr>
<td>They are able:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to identify, classify and associate solutions to problems/challenges</td>
</tr>
<tr>
<td></td>
<td>to model and implement a production plan with the simulation tool</td>
</tr>
<tr>
<td>Professional competence</td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>Characterise basic problems/challenges of the production planning and logistic simulation</td>
</tr>
<tr>
<td></td>
<td>Name approaches/concepts and algorithms to solve simulation and planning problems/challenges</td>
</tr>
<tr>
<td></td>
<td>Identify, classify and assign solutions to planning problems/challenges</td>
</tr>
<tr>
<td></td>
<td>Model and implement a given production process with a simulation tool</td>
</tr>
<tr>
<td>Methodological competence</td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>Model small production problems with a simulation tool and solve given tasks with the tool</td>
</tr>
<tr>
<td>Social competence</td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>Develop solutions to given simulation problems in small groups</td>
</tr>
<tr>
<td></td>
<td>Present the solutions to other groups</td>
</tr>
<tr>
<td>Self-competence</td>
<td>The students:</td>
</tr>
<tr>
<td></td>
<td>Reflect their own solutions in conjunction with other solutions</td>
</tr>
<tr>
<td>Module contents</td>
<td>This module provides the basic production and logistic planning and simulation approaches/concepts. Supply chain planning problems are introduced and simple algorithmic solutions are introduced and implemented. The hands-on simulation with a tool is provided by a case study from the production.</td>
</tr>
<tr>
<td>Reader's advisory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>selected material on the simulation tool</td>
</tr>
<tr>
<td></td>
<td>others will be announced in the lecture</td>
</tr>
<tr>
<td>Links</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>V &amp; Ü</td>
</tr>
<tr>
<td>Vorkenntnisse / Previous knowledge</td>
<td></td>
</tr>
<tr>
<td>Examination</td>
<td>Time of examination</td>
</tr>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
</tr>
<tr>
<td>Course type</td>
<td>Comment</td>
</tr>
<tr>
<td>Lecture</td>
<td>2.00</td>
</tr>
<tr>
<td>Exercises</td>
<td>2.00</td>
</tr>
<tr>
<td>Total time of attendance for the module</td>
<td></td>
</tr>
</tbody>
</table>
inf609 - Business Process Management

Module label: Business Process Management
Module code: inf609
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Aufbaumodule

Contact person:
- Module responsibility: Axel Hahn
- Authorized examiners:
  - Axel Hahn
  - Die im Modul Lehrenden

Entry requirements:
Skills to be acquired in this module:
Teaching of the basics of process management. They understand the importance of models for the analysis and design of business processes.

Professional competence:
After attending the module, students will be able to model and classify business processes and to optimize them for given goals.

Methodological competence:
The students can map and evaluate processes in structure models, process chains, and costing models.

Social competence:
The students recognize the importance of employee empowerment for simple, flexible management of processes and design processes on case studies interactively with the intended process participants.

Self competence:
The students are able to independently acquire knowledge and skills within the framework of an eLearning module.

Module contents:
- The basics of process management
- Strategic Process Management / Strategic Process Planning
- Process design (procedure, actual and target modeling)
- Process implementation (process types, process integration using the example SAP ERP)
- Quality and Change Management (ISO 9000, Total Quality Management)
- Process Controlling
- Process management in service companies

Reader's advisory:

Links:
- Language of instruction: German
- Duration (semesters): 1 Semester
- Module frequency: Winterterm and Summerterm
- Module capacity: unlimited
- Module level: AS (Akzentsetzung / Accentuation)
- Module type: je nach Studiengang Pflicht oder Wahlpflicht
- Lern-/Lehrform / Type of program: E-Learning

Vorkenntnisse / Previous knowledge:
- Examination Time of examination: At the end of the lecture period
- Type of examination: Written exam
<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe or WiSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>SuSe or WiSe</td>
<td>28 h</td>
</tr>
<tr>
<td><strong>Total time of attendance for the module</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>56 h</strong></td>
</tr>
</tbody>
</table>
inf610 - Enterprise Architecture Management

Module label: Enterprise Architecture Management
Module code: inf610
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Informatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul

Contact person:
Module responsibility
- Axel Hahn
Authorized examiners
- Die im Modul Lehrenden

Entry requirements:
This module addresses basic elements of enterprise architectures and their management as well as concepts and methodologies used to describe and develop enterprise architectures.

Professional competences
The students:
- Have knowledge of components of enterprise architectures and used enterprise architecture frameworks
- Choose Enterprise Architecture Frameworks based on requirements and needs

Methodological competences
The students:
- Identify business goals and describe the resulting business processes
- Design fitting IT-architectures
- Analyze and harmonize different architectures into an enterprise architecture

Social competences
The students:
- Extend their ability to work as a team
- Create, present and discuss exercises using EAM methods
- Identify and solve problems and challenges in the harmonization of enterprise architectures using EAM methods

Self-competences
The students:
- Reflect their actions in identifying possible solutions using EAM methods
- Learn methodical and scientific procedures in the processing of accompanying exercises
- Develop the ability to look at different aspects of systems in a superordinate and common (company) context, including the methods of EAM.

Module contents:
Enterprise Architecture Management (EAM) is an interdisciplinary approach for the integration of information systems in enterprises and enterprise-like structures to support their business objectives and business processes. EAM addresses the harmonization of these aspects on the basis of the respective IT-architecture and business architectures to a holistic enterprise architecture. The description and development of such architectures is structured by Enterprise Architecture Frameworks like TOGAF and ZACHMAN. In general, the following architectural perspectives are taken into account: business architecture, information and data architecture, application architecture and technology architecture.

Reader's advisory:
- Strategisches Management der IT-Landschaft Ein praktischer Leitfaden für das Enterprise Architecture Management – Inge Hanschke - 978-3-446-43509-4

Links

Language of instruction: German
<table>
<thead>
<tr>
<th><strong>Duration (semesters)</strong></th>
<th>1 Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module frequency</strong></td>
<td>Jedes Sommersemester</td>
</tr>
<tr>
<td><strong>Module capacity</strong></td>
<td>unlimited</td>
</tr>
<tr>
<td><strong>Modulart</strong></td>
<td>---</td>
</tr>
<tr>
<td><strong>Lern-Lehrform / Type of program</strong></td>
<td>Language: German, the Lecture will be in English</td>
</tr>
<tr>
<td><strong>Vorkenntnisse / Previous knowledge</strong></td>
<td>Business informatics I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Examination</strong></th>
<th><strong>Time of examination</strong></th>
<th><strong>Type of examination</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final exam of module</strong></td>
<td>Oral examination or written examination at the end of the semester</td>
<td>With an appropriate number of participants (&lt;12 students), an oral examination will be held. In case of a high number of participants (&gt;12 students), an exam will be held instead. It counts the number of participants in the Stud.IP at the beginning of the first course. Exercises are issued during the semester, the successful completion of them is credited to the examination with a maximum total of 10% bonus.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Course type</strong></th>
<th><strong>Comment</strong></th>
<th><strong>SWS</strong></th>
<th><strong>Frequency</strong></th>
<th><strong>Workload attendance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td>SuSe or WiSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>SuSe or WiSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**

56 h
inf853 - Application Fields of Computer Science I

<table>
<thead>
<tr>
<th>Module label</th>
<th>Application Fields of Computer Science I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf853</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>
| Used in course of study | • Fach-Bachelor Informatik > Akzentsetzungsmodule  
• Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule |
| Contact person| Module responsibility  
• Die im Modul Lehrenden  
Authorized examiners  
• Die im Modul Lehrenden |

**Entry requirements**

Skills to be acquired in this module
The students are introduced into a different subject area and its methods.

**Professional competence**
The students:

- Know a computer science application area
- Transfer computer science methods and development models to/with IT application area requirements

**Methodological competence**
The students:

- Know and name ways of thinking and methods of other subject areas

**Social competence**
The students:

- Communicate considerately and appropriately with users and experts

**Self-competence**
The students:

- Plan their informatical actions independently
- Reflect their contributions critically and discuss them with users and experts

**Module contents**
According to the assigned task

**Reader's advisory**
According to the assigned task

**Links**

<table>
<thead>
<tr>
<th>Languages of instruction</th>
<th>German, English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>unregelmäßig</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>2 courses out of VL, Ü, S, P, PR</td>
</tr>
</tbody>
</table>

**Vorkenntnisse / Previous knowledge**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>Exercises or presentation or oral exam or written exam</td>
<td></td>
</tr>
</tbody>
</table>

**Course type**
Course selection

<table>
<thead>
<tr>
<th>SWS</th>
<th>4.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>SuSe or WiSe</td>
</tr>
<tr>
<td>Workload attendance</td>
<td>56 h</td>
</tr>
</tbody>
</table>
inf854 - Application Fields of Computer Science II

Module label
Application Fields of Computer Science II

Module code
inf854

Credit points
6.0 KP

Workload
180 h

Used in course of study
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule

Contact person
Module responsibility
- Die im Modul Lehrenden

Authorized examiners
- Die im Modul Lehrenden

Entry requirements

Skills to be acquired in this module
The students are introduced into a different subject area and its methods.

**Professional competence**
The students:

- Know a computer science application area
- Transfer computer science methods and development models to/with IT application area requirements

**Methodological competence**
The students:

- Know and name ways of thinking and methods of other subject areas

**Social competence**
The students:

- Communicate considerately and appropriately with users and experts

**Self-competence**
The students:

- Plan their informatical actions independently
- Reflect their contributions critically and discuss them with users and experts

Module contents
According to the assigned task

Reader's advisory
According to the assigned task

Links

Languages of instruction
German, English

Duration (semesters)
1 Semester

Module frequency
halbjährlich

Module capacity
unlimited

Modullevel
---

Modulart
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
2 courses out of VL, Ü, S, P, PR

Vorkenntnisse / Previous knowledge

Examination

<table>
<thead>
<tr>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exercises or presentation or oral exam or written exam</td>
</tr>
</tbody>
</table>

Course type
Course selection

SWS
4.00

Frequency
SuSe or WiSe
| Workload attendance | 56 h |
inf855 - Application Fields of Computer Science III

Module label
Application Fields of Computer Science III

Module code
inf855

Credit points
6.0 KP

Workload
180 h

Used in course of study
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule

Contact person
Module responsibility
- Die im Modul Lehrenden

Authorized examiners
- Die im Modul Lehrenden

Entry requirements

Skills to be acquired in this module
The students are introduced into a different subject area and its methods.

Professional competence
The students:
- Know a computer science application area
- Transfer computer science methods and development models to/with IT application area requirements

Methodological competence
The students:
- Know and name ways of thinking and methods of other subject areas

Social competence
The students:
- Communicate considerately and appropriately with users and experts

Self-competence
The students:
- Plan their informatical actions independently
- Reflect their contributions critically and discuss them with users and experts

Module contents
According to the assigned task

Reader's advisory
According to the assigned task

Links

Languages of instruction
German, English

Duration (semesters)
1 Semester

Module frequency
halbjährlich

Module capacity
unlimited

Modullevel
---

Modulart
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
2 courses out of VL, Ü, S, P, PR

Vorkenntnisse / Previous knowledge

Examination
Time of examination
Type of examination

Final exam of module
Exercises or presentation or oral exam or written exam

Course type
Course selection

SWS
4.00

Frequency
SuSe and WiSe
| Workload attendance | 56 h |
Inf856 - Application Fields of Computer Science IV

<table>
<thead>
<tr>
<th>Module label</th>
<th>Application Fields of Computer Science IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf856</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>
| Used in course of study | • Fach-Bachelor Informatik > Akzentsetzungsmodule  
                          • Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule |
| Contact person        | Module responsibility                     |
|                       | • Die im Modul Lehrenden                  |
|                       | Authorized examiners                      |
|                       | • Die im Modul Lehrenden                  |
| Entry requirements    | Skills to be acquired in this module      |
|                       | The students are introduced into a different subject area and its methods. |
|                       | **Professional competence**               |
|                       | The students:                            |
|                       | • Know a computer science application area |
|                       | • Transfer computer science methods and development models to/with IT application area requirements |
|                       | **Methodological competence**             |
|                       | The students:                            |
|                       | • Know and name ways of thinking and methods of other subject areas |
|                       | **Social competence**                    |
|                       | The students:                            |
|                       | • Communicate considerately and appropriately with users and experts |
|                       | **Self-competence**                      |
|                       | The students:                            |
|                       | • Plan their informatical actions independently |
|                       | • Reflect their contributions critically and discuss them with users and experts |

| Module contents       | According to the assigned task           |
| Reader's advisory     | According to the assigned task           |
| Links                 |                                          |
| Languages of instruction | German, English                        |
| Duration (semesters)  | 1 Semester                               |
| Module frequency      | halbjährlich                             |
| Module capacity       | unlimited                                |
| Modullevel            | AS (Akzentsetzung / Accentuation)        |
| Modulart              | Pflicht o. Wahlpflicht / compulsory or optioal |
| Lern-/Lehrform / Type of program | 2 courses out of VL, Ü, S, P, PR |

| Vorkenntnisse / Previous knowledge |                                      |
| Examination                  | Time of examination                  |
| Final exam of module         | Exercises or presentation or oral exam or written exam |
| Course type                  | Course selection                      |
| SWS                          | 4.00                                   |
| Frequency                    | SuSe and WiSe                         |
| Workload attendance | 56 h |
inf857 - Application Fields of Computer Science V

Module label: Application Fields of Computer Science V
Module code: inf857
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule

Contact person:
- Module responsibility:
  - Die im Modul Lehrenden

Authorized examiners:
- Die im Modul Lehrenden

Entry requirements:
Skills to be acquired in this module:
The students are introduced into a different subject area and its methods.

Professional competence
The students:
- Know a computer science application area
- Transfer computer science methods and development models to/with IT application area requirements

Methodological competence
The students:
- Know and name ways of thinking and methods of other subject areas

Social competence
The students:
- Communicate considerately and appropriately with users and experts

Self-competence
The students:
- Plan their informatical actions independently
- Reflect their contributions critically and discuss them with users and experts

Module contents:
According to the assigned task

Reader’s advisory:
According to the assigned task

Links
Languages of instruction: German, English

Duration (semesters):
1 Semester

Module frequency: halbjährlich

Module capacity: unlimited

Module level: ---

Moduleart:
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program:
2 courses out of VL, Ü, S, P, PR

Vorkenntnisse / Previous knowledge

Examination:
Time of examination:
Type of examination:

Final exam of module:
Exercises or presentation or oral exam or written exam

Course type:
Course selection

SWS:
4.00

Frequency:
WiSe
| Workload attendance | 56 h |
**wir032 - Managerial Accounting**

**Module label**
Managerial Accounting

**Module code**
wir032

**Credit points**
6.0 KP

**Workload**
180 h

**Used in course of study**
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftswissenschaften > Basismodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Basismodule

**Contact person**
Module responsibility
- Remmer Sassen

Authorised examiners
- Die im Modul Lehrenden

**Entry requirements**

**Skills to be acquired in this module**
This course is an introduction to the use of accounting information by managers for decision-making, planning and control. It is designed to equip students with the concepts and techniques of management accounting for identifying and resolving strategic issues faced by managers in various business contexts.

**Module contents**
See leading textbook

**Reader's advisory**
Seal et al., Management Accounting, Mcgraw-Hill Education Ltd, 5. Edition

**Language of instruction**
English

**Duration (semesters)**
1 Semester

**Module frequency**
jährlich

**Module capacity**
unlimited

**Modullevel**
BC (Basiscurriculum)

**Modulart**
Pflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**
Time of examination
Type of examination

**Final exam of module**
end of term
written exam

**Course type**

<table>
<thead>
<tr>
<th>Type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Tutorial</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**
56 h
**Module label**: Financial Accounting

**Module code**: wir060

**Credit points**: 6.0 KP

**Workload**: 180 h

**Used in course of study**
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Aufbaumodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftswissenschaften > Aufbaumodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Aufbaumodule

**Contact person**
- Module responsibility
  - Remmer Sassen
- Authorized examiners
  - Die im Modul Lehrenden

**Entry requirements**
- none

**Skills to be acquired in this module**
- The students obtain knowledge on IFRS accounting in general and specific topics such as financial instruments, intangible assets and provisions;
- understand the framework of IFRS;
- understand the international focus and necessity of IFRS;
- obtain knowledge on IFRS from both a legal and economic perspective.

**Module contents**
- This module is based on accounting and annual financial statement, while focusing exclusively on the international financial reporting standards (IFRS). In terms of content, the course covers subjects such as the most important concepts, tangible and intangible assets as well as liability items on the basis of the fundamental standards and case studies.

**Reader's advisory**
- International Financial Reporting Standards (IFRS)
- Lecture notes with additional references will be provided via the e-learning platform Stud.IP.

**Links**
- http://www.uni-oldenburg.de/accounting/

**Language of instruction**: English

**Duration (semesters)**
- 1 Semester

**Module frequency**: jährlich

**Module capacity**: unlimited

**Reference text**
- Lectures are held in English; tutorials are held in English or German.

**Modullevel**: BM (Basismodul)

**Modulart**: Pflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>At the end of the semester; a midterm exam might be held during the semester.</td>
<td>written exam</td>
</tr>
</tbody>
</table>

**Course type**

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Tutorial</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td></td>
<td></td>
<td>0 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**: 56 h
**wir070 - Principles of Marketing**

<table>
<thead>
<tr>
<th>Module label</th>
<th>Principles of Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>wir070</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Wirtschaftswissenschaften &gt; Aufbaumodule</td>
</tr>
<tr>
<td></td>
<td>Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften &gt; Mastermodule</td>
</tr>
<tr>
<td></td>
<td>Zwei-Fächer-Bachelor Wirtschaftswissenschaften &gt; Aufbaumodule</td>
</tr>
<tr>
<td>Contact person</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Module responsibility</td>
</tr>
<tr>
<td></td>
<td>» Thorsten Raabe</td>
</tr>
<tr>
<td></td>
<td>Authorized examiners</td>
</tr>
<tr>
<td></td>
<td>» Die im Modul Lehrenden</td>
</tr>
<tr>
<td>Entry requirements</td>
<td></td>
</tr>
<tr>
<td>Skills to be acquired in this module</td>
<td>Upon completion of the module, students will be able to:</td>
</tr>
<tr>
<td></td>
<td>• recognize and provide solutions to challenges in market-oriented business management</td>
</tr>
<tr>
<td></td>
<td>• reflect on market-oriented business management with regard to practise, as well as related societal and ethical implications</td>
</tr>
<tr>
<td></td>
<td>• actively participate in scholarly marketing discourse</td>
</tr>
<tr>
<td></td>
<td>• build their own capacities to acquire knowledge and skills within the discipline</td>
</tr>
<tr>
<td>Module contents</td>
<td>The module focuses on the fundamentals of marketing in the sense of market-orientated management by linking philosophy and theoretical connections, as well as the necessary analytical and methodical knowledge with concrete case studies.</td>
</tr>
<tr>
<td>Links</td>
<td></td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>AC (Aufbaucurriculum)</td>
</tr>
<tr>
<td>Modulart</td>
<td>Wahlpflicht</td>
</tr>
</tbody>
</table>

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>end of term</td>
<td>written exam; voluntary contributions that improve grades may undertaken as 'portfolio-presentations' during tutorials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Seminar und Tutorium</td>
<td></td>
<td>2.00</td>
<td>WiSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

Total time of attendance for the module 56 h
**Module label**: Corporate Finance

**Module code**: wir082

**Credit points**: 6.0 KP

**Workload**: 180 h

**Used in course of study**
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Wirtschaftswissenschaften > Akzentsetzungsmodule
- Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften > Mastermodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Aufbaumodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Schwerpunkt Management und Ökonomie

**Contact person**
- Module responsibility
  - Jörg Prokop
- Authorized examiners
  - Die im Modul Lehrenden

**Entry requirements**
- Students
  - understand the role corporate finance plays in today’s business environment,
  - are able to make consistent investment decisions based on established financial models both under certainty and under uncertainty,
  - are able to place these models in within the broader context of economic theory, including both neoclassical theory and principal-agent theory,
  - are able to assess the limitations of these models,
  - analyze firm’s main sources of (long-term) financing.

**Module contents**
- Course outline:
  1. Introduction
  2. Valuation and Capital Budgeting
  3. Risk and Return
  4. Long-Term Financing
- This course is an introduction to corporate finance. It covers typical tools and techniques used in making investment and financing decisions, and it provides insights into their theoretical foundations. The concept of time value of money and net present value is discussed in detail, first under certainty, and then in the presence of uncertainty. We will examine the relationship between an investment’s risk and its return, and discuss ways to derive risk-adjusted cost of equity capital. In addition, the course provides insights into firms’ main sources of (long-term) financing.
- The topics covered in this course are relevant for financial decision-making in various areas of business management, including operations management, marketing, and in particular corporate strategy.

**Reader's advisory**
- Main textbook:
  Hillier, Ross, Westerfield, Jaffe & Jordan, Corporate Finance, current edition, McGraw-Hill (especially chapters 1, 2, 4-10, 14).
- Supplementary readings:
  Berk & DeMarzo, Corporate Finance, current edition, Boston (Mass.).
  Brealey, Myers & Allen, Principles of Corporate Finance, current edition, Boston (Mass.).

**Links**
- http://www.uni-oldenburg.de/fiwi_bbl/

**Language of instruction**: English

**Duration (semesters)**: 1 Semester

**Module frequency**: jährlich

**Module capacity**: unlimited

**Modulart**: je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**
- Time of examination: within three weeks after the last lecture
- Type of examination: written exam

**Course type**
- Lecture: 2.00 SWS, Frequency: 28 h
<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**

56 h
## wir200 - Principles of Organisation

<table>
<thead>
<tr>
<th>Module label</th>
<th>Principles of Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>wir200</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>Fach-Bachelor Wirtschaftswissenschaften &gt; Studienrichtung Betriebswirtschaftslehre</td>
</tr>
<tr>
<td></td>
<td>Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften &gt; Mastermodule</td>
</tr>
<tr>
<td>Contact person</td>
<td></td>
</tr>
<tr>
<td>Module responsibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thomas Breisig</td>
</tr>
<tr>
<td></td>
<td>Jörg Prokop</td>
</tr>
<tr>
<td>Authorized examiners</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Die im Modul Lehrenden</td>
</tr>
<tr>
<td>Module counseling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teodora Todorova</td>
</tr>
<tr>
<td></td>
<td>Thomas Breisig</td>
</tr>
<tr>
<td>Entry requirements</td>
<td></td>
</tr>
<tr>
<td>Skills to be acquired in this module</td>
<td>Upon completion of the module, students will be able to:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• explain and apply the approaches and instruments of organisational sciences;</td>
</tr>
<tr>
<td></td>
<td>• demonstrate a familiarity with the basic assumptions, strategies, and core themes of organisational theories and are able to compare and reflect upon them;</td>
</tr>
<tr>
<td></td>
<td>• know different forms of organisational design and are able to differentiate them;</td>
</tr>
<tr>
<td></td>
<td>• know how to identify and predict issues and developments within operational and organisational structures and processes;</td>
</tr>
<tr>
<td></td>
<td>• demonstrate an awareness of the relevance of organisational culture, can describe its characteristics and discuss different analytical techniques;</td>
</tr>
<tr>
<td></td>
<td>• describe and analyse processes of organizational change, can point out their influences on strategy, organisational culture, operational and organisational structure, and estimate the relevance of change process initiation;</td>
</tr>
<tr>
<td></td>
<td>• work cooperatively and self-dependant within teams and to present complex professional contents precisely and with profound arguments (if chosen to present a topic within the seminar).</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Furthermore, the students are able:</td>
</tr>
<tr>
<td></td>
<td>• to locate a specific research question within the scientific discussion in this research area and to interlink, reflect and evaluate it accordingly</td>
</tr>
<tr>
<td></td>
<td>• to press their point within the scientific discussion in this research area.</td>
</tr>
<tr>
<td>Module contents</td>
<td>The module contents are arranged in the following way:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Basic concepts and conceptual demarcation</td>
</tr>
<tr>
<td></td>
<td>• Objectives of an organisation</td>
</tr>
<tr>
<td></td>
<td>• Dimensions in formal organisation</td>
</tr>
<tr>
<td></td>
<td>• Organisational culture</td>
</tr>
<tr>
<td></td>
<td>• Organisational structure</td>
</tr>
<tr>
<td></td>
<td>• Operational structure and processes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>These basic principles of organisation are presented and discussed within the lectures. Current economic and business developments are included. Seminars and tutorials are offered to deepen the lecture presentations and to relate them to examples and cases.</td>
</tr>
<tr>
<td></td>
<td>Further literature will be announced during the semester according to the particular lecture/seminar content.</td>
</tr>
<tr>
<td>Links</td>
<td><a href="http://www.uol.de/orgpers">www.uol.de/orgpers</a></td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
</tbody>
</table>
### Lern-/Lehrform / Type of program

<table>
<thead>
<tr>
<th>Vorkenntnisse / Previous knowledge</th>
<th>Basic modules in business administration</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>Written exam: end of the lecture period Presentation: During the lecture period Portfolio: During the lecture period</td>
<td>written exam or presentation or portfolio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

| Total time of attendance for the module | 56 h |
wir400 - Strategic and International Marketing

Module label: Strategic and International Marketing
Module code: wir400
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftswissenschaften > Studiennachricht Betriebswirtschaftlehre
- Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften > Mastermodule
- Master Wirtschaftsinformatik > Module der Wirtschaftswissenschaften (Fachbachelor)

Contact person:
- Module responsibility: Thorsten Raabe
- Authorized examiners: Die im Modul Lehrenden
- Module counseling: Sören Sundermann

Entry requirements:

Skills to be acquired in this module:
- recognize challenges facing marketing strategy in the field of markets and societies and draw conclusions for business management
- elaborate and reflect upon the theoretical and conceptual foundations of strategic marketing planning
- come up with examples that exemplify the systemic connection between strategic and instrumental marketing planning
- discuss core assumptions of internationalization in the context of strategy planning and critically reflect upon its implications
- build market research skills in an international context using different methods
- develop their own perspectives on the conceptualization and implementation of international marketing strategies and advance them in discourses

Module contents:
The core of the module is the application of strategic planning methods in Marketing. A broadened understanding of Marketing in the areas of competitors, market agents and stakeholder orientation will be substantiated in theoretical and practical-normative view. International marketing forms an integrated part of strategic marketing planning; its basics and internal conception are formulated precisely in this course.

Reader's advisory:
Latest editions of:
- Meffert, H., Marketing-Management, Analyse - Strategie - Implementierung, Wiesbaden
- Kreikebaum H., Strategische Unternehmensplanung, Stuttgart/ Berlin/ Köln
- Benkenstein, M., Strategisches Marketing, Stuttgart/ Berlin/ Köln

Links:

Language of instruction: German
Duration (semesters): 1 Semester
Module frequency: jährlich
Module capacity: unlimited
Modulelevel: AS (Akzentsetzung)
Modulart: Wahlpflicht

Lern-/Lehrform / Type of program:

Vorkenntnisse / Previous knowledge:

Examination:
- Time of examination: end of term
- Type of examination: written exam; voluntary contributions that improve grades may undertaken as 'portfolio-presentations' during tutorials

Course type:
- Lecture: 2.00 SWS, 28 h
- Tutorial: 2.00 SWS, 28 h
- Seminar: 0 h
<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total time of attendance for the module</td>
<td></td>
<td></td>
<td></td>
<td>56 h</td>
</tr>
</tbody>
</table>
inf611 - Practice Business Informatics

<table>
<thead>
<tr>
<th>Module label</th>
<th>Practice Business Informatics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf611</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td>Contact person</td>
<td></td>
</tr>
<tr>
<td>Entry requirements</td>
<td></td>
</tr>
<tr>
<td>Skills to be acquired in this module</td>
<td></td>
</tr>
<tr>
<td>Module contents</td>
<td></td>
</tr>
<tr>
<td>Reader's advisory</td>
<td></td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td></td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td></td>
</tr>
<tr>
<td>Vorkenntnisse / Previous knowledge</td>
<td></td>
</tr>
<tr>
<td>Examination</td>
<td></td>
</tr>
<tr>
<td>Time of examination</td>
<td></td>
</tr>
<tr>
<td>Type of examination</td>
<td></td>
</tr>
<tr>
<td>Final exam of module</td>
<td></td>
</tr>
<tr>
<td>Course type</td>
<td>Practical</td>
</tr>
<tr>
<td>SWS</td>
<td>2.00</td>
</tr>
<tr>
<td>Frequency</td>
<td>SuSe or WiSe</td>
</tr>
<tr>
<td>Workload attendance</td>
<td>28 h</td>
</tr>
</tbody>
</table>
inf612 - Re-engineering of business processes

<table>
<thead>
<tr>
<th>Module label</th>
<th>Re-engineering of business processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf612</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>
| Used in course of study | • Fach-Bachelor Informatik > Akzentsetzungsmodul  
  • Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul |
| Contact person|                                       |
| Entry requirements|                                      |
| Skills to be acquired in this module|                                        |
| Module contents|                                       |
| Reader's advisory|                                       |
| Links|                                        |
| Language of instruction| German                                  |
| Duration (semesters) | 1 Semester                            |
| Module frequency|                                        |
| Module capacity| unlimited                              |
| Modullevel | ---                                    |
| Modulart | je nach Studiengang Pflicht oder Wahlpflicht |
| Lern-/Lehrform / Type of program|                                       |
| Vorkenntnisse / Previous knowledge|                                      |
| Examination |                                       |
| Time of examination|                                       |
| Type of examination|                                       |
| Final exam of module|                                       |
| Time of examination|                                       |
| Type of examination|                                       |
| Course type | Comment | SWS | Frequency | Workload attendance |
| Lecture     | 2.00     | SuSe or WiSe | 28 h |
| Exercises   | 2.00     | SuSe or WiSe | 28 h |
| Total time of attendance for the module | 56 h |
inf803 - Special Topics in Computer Science I

Module label
Special Topics in Computer Science I

Module code
inf803

Credit points
6.0 KP

Workload
180 h

Used in course of study
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Master of Education (Wirtschaftspädagogik) Informatik > Praktische Vertiefung der Informatik
- Zwei-Fächers-Bachelor Informatik > Praktische Vertiefung

Contact person
Module responsibility
- Die im Modul Lehrenden

Authorized examiners
- Die im Modul Lehrenden

Entry requirements
Skills to be acquired in this module
This module integrates current computer science developments within appropriate study courses.

Professional competence
The students:
- Know recent technological or scientific computer science developments
- Transfer computer science methods and development models to IT application area requirements
- Evaluate the possibilities and limitations of computer science methods and tools and apply them appropriately

Methodological competence
The students:
- Review problems, formulate them with formal models and explore them appropriately
- Identify and present (one or more) computer science problem solutions
- Select and evaluate appropriate tools and methods
- Examine problems with technical and scientific literature

Social competence
The students:
- Work in a team

Self-competence
The students:
- Plan their informatical actions independently

Module contents
According to the assigned task

Reader's advisory
According to the assigned task

Links

Languages of instruction
German, English

Duration (semesters)
1 Semester

Module frequency
halbjährlich

Module capacity
unlimited

Modullevel
---

Modulart
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
2 courses out of VL, Ü, Tut, SE, PR

Vorkenntnisse / Previous knowledge

Examination
Time of examination
Type of examination
Final exam of module
Exercises or presentation or oral exam or written exam
<table>
<thead>
<tr>
<th>Course type</th>
<th>Course selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWS</td>
<td>4.00</td>
</tr>
<tr>
<td>Frequency</td>
<td>SuSe or WiSe</td>
</tr>
<tr>
<td>Workload attendance</td>
<td>56 h</td>
</tr>
</tbody>
</table>
inf804 - Special Topics in Computer Science II

Module label | Special Topics in Computer Science II
Module code | inf804
Credit points | 6.0 KP
Workload | 180 h

Used in course of study
- Fach-Bachelor Informatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Master of Education (Wirtschaftspädagogik) Informatik > Praktische Vertiefung der Informatik
- Zwei-Fächer-Bachelor Informatik > Praktische Vertiefung

Contact person
Module responsibility
- Die im Modul Lehrenden
Authorized examiners
- Die im Modul Lehrenden

Entry requirements
Skills to be acquired in this module
This module integrates current computer science developments within appropriate study courses.

Professional competence
The students:
- Know recent technological or scientific computer science developments
- Transfer computer science methods and development models to IT application area requirements
- Evaluate the possibilities and limitations of computer science methods and tools and apply them appropriately

Methodological competence
The students:
- Review problems, formulate them with formal models and explore them appropriately
- Identify and present (one or more) computer science problem solutions
- Select and evaluate appropriate tools and methods
- Examine problems with technical and scientific literature

Social competence
The students:
- Work in a team

Self-competence
The students:
- Plan their informatic actions independently

Module contents
According to the assigned task

Reader's advisory
According to the assigned task

Links

Languages of instruction | German, English
Duration (semesters) | 1 Semester
Module frequency | halbjährlich
Module capacity | unlimited

Module frequency | halbjährlich
Module level | ---

Modular / Type of program
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
2 courses out of VL, Ü, Tut, SE, PR

Vorkenntnisse / Previous knowledge

Examination
Time of examination | 
Type of examination | Exercises or presentation or oral exam or written exam

Final exam of module
<table>
<thead>
<tr>
<th>Course type</th>
<th>Course selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWS</td>
<td>4.00</td>
</tr>
<tr>
<td>Frequency</td>
<td>SuSe or WiSe</td>
</tr>
<tr>
<td>Workload attendance</td>
<td>56 h</td>
</tr>
</tbody>
</table>
inf808 - Current Topics in Computer Science

Module label: Current Topics in Computer Science
Module code: inf808
Credit points: 3.0 KP
Workload: 90 h

Used in course of study:
- Fach-Bachelor Informatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Master of Education (Wirtschaftspädagogik) Informatik > Praktische Vertiefung der Informatik
- Zwei-Fächer-Bachelor Informatik > Praktische Vertiefung

Contact person:
- Module responsibility: Die im Modul Lehrenden
- Authorized examiners: Die im Modul Lehrenden

Entry requirements:

Skills to be acquired in this module:

Professional competence:
The students:
- Know recent technological or scientific computer science developments
- Transfer computer science methods and development models to IT application area requirements
- Evaluate the possibilities and limits of computer science methods and tools and apply them appropriately

Methodological competence:
The students:
- Review problems, formulate them with formal models and explore them appropriately
- Identify and present (one or more) computer science problem solutions
- Select and evaluate appropriate tools and methods
- Reflect on a scientific topic and write a scientific seminar paper under guidance and present their findings

Social competence:
The students:
- Use presentation methods purposefully

Self-competence:
The students:
- Plan their informatical actions independently
- Reflect their contributions critically and discuss them with users and experts
- Collect and update their knowledge independently

Module contents:
According to the assigned task

Reader's advisory:
According to the assigned task

Links

Language of instruction:
German

Duration (semesters):
1 Semester

Module frequency:
unregelmäßig

Module capacity:
unlimited

Modulart:
---

Lern-/Lehrform / Type of program:
1 course out of VL, SE, PR

Vorkenntnisse / Previous knowledge

Examination:
Time of examination
Type of examination
<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td></td>
<td>Exercises or presentation or oral exam or written exam</td>
</tr>
<tr>
<td>Course type</td>
<td>Course selection</td>
<td></td>
</tr>
<tr>
<td>SWS</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>SuSe or WiSe</td>
<td></td>
</tr>
<tr>
<td>Workload attendance</td>
<td>28 h</td>
<td></td>
</tr>
</tbody>
</table>
**inf809 - Current Topics in Computer Science II**

<table>
<thead>
<tr>
<th>Module label</th>
<th>Current Topics in Computer Science II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf809</td>
</tr>
<tr>
<td>Credit points</td>
<td>3.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>90 h</td>
</tr>
</tbody>
</table>
| Used in course of study       | • Fach-Bachelor Informatik > Akzentsetzungsmodule  
                               | • Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule  
                               | • Master of Education (Wirtschaftspädagogik) Informatik > Praktische Vertiefung der Informatik  
                               | • Zwei-Fächer-Bachelor Informatik > Praktische Vertiefung |

**Contact person**

**Entry requirements**

**Skills to be acquired in this module**

**Module contents**

**Reader's advisory**

**Links**

**Language of instruction**  German

**Duration (semesters)**  1 Semester

**Module frequency**

**Module capacity**  unlimited

**Modullevel**  ---

**Modulart**  je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**

<table>
<thead>
<tr>
<th>Final exam of module</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Course type**

**Course selection**

**SWS**  2.00

**Frequency**  SuSe or WiSe

**Workload attendance**  28 h
wir041 - Introduction to economics

Module label
Introduction to economics

Module code
wir041

Credit points
6.0 KP

Workload
180 h

Used in course of study
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodule
- Fach-Bachelor Mathematik > Nebenfachmodule
- Fach-Bachelor Nachhaltigkeitsökonomik > Basismodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftswissenschaften > Basismodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Basismodule

Contact person
Module responsibility
- Christoph Böhringer
Module counseling
- Dennis Drews
- Ulrich Scheele
- Anelise Rahmeier Seyffarth
- Jan Schneider

Entry requirements
none

Skills to be acquired in this module
By the end of the course, students shall:
- be aware of the fundamental principles of economics
- be able to approach basic questions of economic policy by applying concise economic reasoning and graphical intuition.

Module contents
The course introduces students to economic thinking and gives an elementary overview of the fundamental themes in economics. Key causal relationships will be verbally, analytically and graphically elucidated and underpinned with real-world examples.
Main contents:
- Introduction to economic thinking;
- Explanation of basic concepts of economic theory;
- Economic cycle and national product;
- Interdependence and trade;
- Functioning and efficiency of markets;
- Market failures and government activity;
- Firms behavior in markets with diverse structures;
- Foundations of game theory.

Reader’s advisory

Links
http://www.vwl.uni-oldenburg.de/

Language of instruction
German

Duration (semesters)
1 Semester

Module frequency
jährlich

Module capacity
unlimited

Reference text
The module consists of lectures and tutorials. The contents of the course will be taught in the lecture. The tutorial sessions are aimed at solving problem sets or exercises to deepen students understanding. Lecture notes and other relevant materials will be uploaded to the learning management system (Stud IP).

Modullevel
BM (Basismodul)

Modulart
Pflicht

Lern-Lehrform / Type of program

Vorkenntnisse / Previous knowledge

Examination
Time of examination
Type of examination
Final exam of module
end of semester
written exam; voluntary contributions that improve
<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>grades may undertaken as 'portfolio-presentations' during tutorials</td>
</tr>
<tr>
<td>Course type</td>
<td>Comment</td>
<td>SWS</td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td>3.00</td>
</tr>
<tr>
<td>Tutorial</td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**

56 h
wir090 - Human Resource Management

Module label Human Resource Management
Module code wir090
Credit points 6.0 KP
Workload 180 h

Used in course of study
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftswissenschaften > Akzentsetzungsmodul
- Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften > Mastermodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Aufbaumodule
- Zwei-Fächer-Bachelor Wirtschaftswissenschaften > Schwerpunkt Management und Ökonomie

Contact person
Module responsibility
- Jörg Prokop
- Thomas Breisig

Authorized examiners
- Die im Modul Lehrenden

Module counseling
- Mareike Junker-Michel
- Thomas Breisig

Entry requirements
Skills to be acquired in this module
Upon completion of the module (two complementary lectures), students will be able to:
- understand the complex issues, challenges and fields of action in organisational Human Resource (HR) Management;
- analyse, interpret and manage HR issues within heterogeneous fields of stakeholders and environments;
- effectively analyse and apply HR instruments according to the specific practical context;
- develop skills to self-reflection by dealing with theoretical as well as practical issues in HR Management and are able to press their point within the scientific discussion;
- are able to locate a specific research question within the scientific discussion in the field of Human Resource Management and to interlink, reflect and evaluate it accordingly.

By attending the non-compulsory tutorials and participating in lecture discussions, students can develop their own position on the inter-linkages between theoretical approaches and practical courses of action. Students will thus be able to identify problems, analyse them critically, and develop solutions. As they have the opportunity to work in small groups within the tutorials and to participate during lecture discussions, students may also learn to handle different points of view and discuss constructively. Overall they will be prepared for the specific requirements faced in the field of HR Management.

Module contents
Students develop theoretical as well as practical insights into the backgrounds and specific characteristics of "Human Resource" Management, in particular the following:
- origins and theoretical basis
- development and framework requirements
- workforce planning
- recruitment and selection
- work organisation
- working time organisation
- leadership
- performance reviews
- training and development
- compensation
- staff reduction

Reader's advisory

Further literature will be announced during the semester according to the particular lecture/seminar content.

Links
www.uol.de/orgpers

Language of instruction
German

Duration (semesters)
1 Semester
<table>
<thead>
<tr>
<th>Module frequency</th>
<th>jährlich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modullevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lern-/Lehrform / Type of program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vorkenntnisse / Previous knowledge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period and at the end of the semester</td>
<td>written exam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>4.00</td>
<td></td>
<td>56 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td>SuSe and WiSe</td>
<td>28 h</td>
</tr>
</tbody>
</table>

| Total time of attendance for the module | 84 h |
The goal of the course is that students are able to
- know and understand basic concepts, instruments, and theories of strategic management
- analyze company strategies by applying conceptual frameworks
- understand the advantages and disadvantages of common instruments and models and critically evaluate their applicability
- independently develop strategic options and derive recommendations for their implementation in real-life settings.

The course offers a comprehensive overview of the models and instruments of strategic management. The first part of the course introduces important concept and models of strategic management and discusses their application using examples from corporate practice. Central topics that are being discussed in this context are the relation between firm strategies and competitive advantage, strategy analysis, strategy formulation, strategy implementation, and strategies in the context of internationalization and innovation. In the second part of the course, students apply and deepen their knowledge by writing a thesis that analyzes the strategy of a specific company.


Language of instruction: German
Duration (semesters): 1 Semester

Lern-/Lehrform / Type of program je nach Studiengang Pflicht oder Wahlpflicht
Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>Thesis to be handed in at the end of semester</td>
<td>Thesis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>2.00</td>
<td></td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Exercise or tutorial</td>
<td>2.00</td>
<td>WiSe</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

Total time of attendance for the module: 56 h
## wir130 - Civil Law and Commercial Law

<table>
<thead>
<tr>
<th><strong>Module label</strong></th>
<th>Civil Law and Commercial Law</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module code</strong></td>
<td>wir130</td>
</tr>
<tr>
<td><strong>Credit points</strong></td>
<td>6.0 KP</td>
</tr>
<tr>
<td><strong>Workload</strong></td>
<td>180 h</td>
</tr>
<tr>
<td><strong>Used in course of study</strong></td>
<td></td>
</tr>
<tr>
<td>Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
<td></td>
</tr>
<tr>
<td>Fach-Bachelor Wirtschaftswissenschaften &gt; Akzentsetzungsmodule</td>
<td></td>
</tr>
<tr>
<td>Zwei-Fächer-Bachelor Wirtschaftswissenschaften &gt; Schwerpunkt Berufliche Bildung</td>
<td></td>
</tr>
<tr>
<td>Zwei-Fächer-Bachelor Wirtschaftswissenschaften &gt; Schwerpunkt Management und Ökonomie</td>
<td></td>
</tr>
<tr>
<td><strong>Contact person</strong></td>
<td></td>
</tr>
<tr>
<td>Module responsibility</td>
<td></td>
</tr>
<tr>
<td>Jürgen Taeger</td>
<td></td>
</tr>
<tr>
<td>Authorized examiners</td>
<td></td>
</tr>
<tr>
<td>Die im Modul Lehrenden</td>
<td></td>
</tr>
<tr>
<td>Module counseling</td>
<td></td>
</tr>
<tr>
<td>Sebastian Louven</td>
<td></td>
</tr>
<tr>
<td><strong>Entry requirements</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Skills to be acquired in this module</strong></td>
<td>The students:</td>
</tr>
<tr>
<td>- are familiar with the legal working methods, basic concepts of law in general and of civil law and commercial law in particular,</td>
<td></td>
</tr>
<tr>
<td>- are familiar with the law of obligation and law of property, in particular with contract law, as well as with commercial law, which are the main fields of interest in the future professional practice,</td>
<td></td>
</tr>
<tr>
<td>- are able to solve legal cases in a goal-oriented way,</td>
<td></td>
</tr>
<tr>
<td>- are able to find approaches for legal problems as well as recognize liability risks and how to deal with them,</td>
<td></td>
</tr>
<tr>
<td>- are in case of contract negotiations able to recognize the requirements for regulations and to evaluate consequences of regulation.</td>
<td></td>
</tr>
<tr>
<td><strong>Module contents</strong></td>
<td>In this module students will learn the basic concepts of civil law, commercial law and company law. The main focus are the first two books and to some extent the third book of the BGB. After an introduction to the legal system and the legal sources of private law, the course will deal with the persons and objects of legal relations (legal subjects and objects). An introduction into general contract law (among others: transaction doctrine, representation, termination of obligations, arrears, defaults) follows then. Subsequently, the lecture will handle the main types of contracts of civil law, commitment and performance of transactions and ownership and possession. The focus of the commercial law will be the determination of traits of merchandiser, the company law, the commercial register and legal liability issues as well as cross-border trade. This is followed by an introduction into company law. Subjects of the module: Introduction into legal studies, basic principles of law, private law / public law, legal sources, general part of the civil code, law of obligations (without law of torts): contracts, type of contracts, defaults / breaches, law of terms and conditions; parts of property law. Traits of merchandiser, company; commercial register; Representation in commercial law (procuration, action and charging power of attorney); commercial transactions; forms and consequences of the change of the owner; commercial agents and brokers; customary law / trade terms; CISG, partnership / corporate law. The module will enable students to evaluate complex legal relationships in the economy discretely.</td>
</tr>
<tr>
<td><strong>Links</strong></td>
<td><a href="http://www.privatrecht.uni-oldenburg.de/">http://www.privatrecht.uni-oldenburg.de/</a></td>
</tr>
<tr>
<td><strong>Language of instruction</strong></td>
<td>German</td>
</tr>
<tr>
<td><strong>Duration (semesters)</strong></td>
<td>2 Semester</td>
</tr>
<tr>
<td><strong>Module frequency</strong></td>
<td>jährlich</td>
</tr>
<tr>
<td><strong>Module capacity</strong></td>
<td>unlimited</td>
</tr>
<tr>
<td><strong>Modullevel</strong></td>
<td>---</td>
</tr>
<tr>
<td><strong>Modulart</strong></td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td><strong>Lern-/Lehrform / Type of program</strong></td>
<td>none</td>
</tr>
<tr>
<td><strong>Vorkenntnisse / Previous knowledge</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Final exam of module</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Examination</strong></td>
<td>Time of examination</td>
</tr>
<tr>
<td><strong>Type of examination</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Course type</strong></td>
<td>Comment</td>
</tr>
<tr>
<td>Lecture</td>
<td>end of semester</td>
</tr>
<tr>
<td>Exercises</td>
<td>written exam</td>
</tr>
<tr>
<td>Course type</td>
<td>Comment</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Total time of attendance for the module</td>
<td></td>
</tr>
</tbody>
</table>
wir160 - Entrepreneurship

Module label: Entrepreneurship
Module code: wir160
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Betriebswirtschaftslehre mit juristischem Schwerpunkt > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodul
- Fach-Bachelor Wirtschaftswissenschaften > Studiendichtung Betriebswirtschaftslehre
- Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften > Mastermodule
- Master Wirtschaftsinformatik > Bereichswahlmodule
- Master Wirtschaftswissenschaften > Module der Wirtschaftswissenschaften (Fachbachelor)

Contact person:
Module responsibility: Alexander Nicolai
Authorized examiners: Die im Modul Lehrenden

Entry requirements:
none

Skills to be acquired in this module:
- understand the challenges of launching an enterprise,
- strategically analyse the structure of market
- understand how employees are able to behave like an entrepreneur in established enterprises
- develop innovative business ideas
- shape the key factors for realizing a business idea
- demonstrate a knowledge of the entrepreneurial process
- demonstrate a knowledge of cost accounting (especially break-even analysis, etc.) and will be able to calculate costs by themselves
- analyse and evaluate business models

Module contents:
The module introduces to the basics of Entrepreneurship
Upon completion of the module, students will be able to:
- understand the challenges of launching enterprises and entrepreneurial behaviour in large companies as well. The content of the module follows the process of an entrepreneur. It starts with business ideas, their perception, and evaluation. In addition, it deals with the most important questions of development and management of new business models. The contents of the courses include the following topics:
  - historical, institutional, and theoretical context
  - development, evaluation, and pitching ideas
  - business models
  - building entrepreneurial teams
  - entrepreneurship in large enterprises
  - resources and finance
  - management of growth

Reader's advisory:

Links:
http://www.uni-oldenburg.de/wire/entrepreneurship/lehrendebot/veranstaltungen/lehrendebot-wise-20162017/

Language of instruction:
German

Duration (semesters):
1 Semester

Module frequency:
jährlich

Module capacity:
unlimited

Reference text:
The lecture “Strategie und Entrepreneurship” must be attended in combination with the “Tutorium”.

Modullevel:
---

Modulart:
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
<table>
<thead>
<tr>
<th>Vorkenntnisse / Previous knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination</td>
<td>Time of examination</td>
</tr>
<tr>
<td>Final exam of module</td>
<td>at the end of the semester</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course or seminar</td>
<td></td>
<td>2.00</td>
<td>WiSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Tutorial</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**  
56 h
**wir210 - Corporate Environmental Management**

<table>
<thead>
<tr>
<th>Module label</th>
<th>Corporate Environmental Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>wir210</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
</tbody>
</table>

**Used in course of study**
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Betriebswirtschaftslehre
- Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Ökologie und Nachhaltigkeit
- Master of Education (Wirtschaftspädagogik) Wirtschaftswissenschaften > Mastermodule
- Master Wirtschaftsinformatik > Module der Wirtschaftswissenschaften (Fachbachelor)

**Contact person**
- Module responsibility
  - Bernd Siebenhüner
- Module counseling
  - Lars Hochmann

**Entry requirements**
- The students:
  - understand the goals and concepts of sustainable development;
  - discuss the importance of sustainability for companies;
  - know basic strategies and instruments that enable companies to achieve sustainable development;
  - acquire conceptual and practical skills using case studies, in particular about which instruments can be used to prepare companies for the challenges of sustainable development.

**Module contents**
The module consists of a lecture and a seminar. While the lecture presents and explains concepts, instruments and strategies for sustainable development, the seminar focuses on the practical relevance of the various instruments, concepts and strategies and discusses these based on case studies.
- Concepts and goals of sustainable development
- Discussion of the current discussion on sustainable development
- Current sustainability instruments and strategies for companies
- Case studies

**Reader's advisory**

**Links**
https://www.uni-oldenburg.de/wire/

**Language of instruction**
German

**Duration (semesters)**
1 Semester

**Module frequency**

**Module capacity**
unlimited

**Modullevel**
---

**Modulart**
je nach Studiengang Pflicht oder Wahlpflicht

**Lern-Lehrform / Type of program**
Lecture with seminar

**Vorkenntnisse / Previous knowledge**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>usually around Mid of March</td>
<td>HA</td>
</tr>
</tbody>
</table>

**Course type**
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment</td>
<td>SWS</td>
</tr>
<tr>
<td>Lecture</td>
<td>2.00</td>
</tr>
<tr>
<td>Seminar</td>
<td>2.00</td>
</tr>
</tbody>
</table>

**Total time of attendance for the module**
56 h
### wir260 - Environmental Economics

<table>
<thead>
<tr>
<th>Module label</th>
<th>Environmental Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>wir260</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td></td>
</tr>
</tbody>
</table>
  - Fach-Bachelor Nachhaltigkeitsökonomik > Vertiefungsmodulle  
  - Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodulle  
  - Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Ökologie und Nachhaltigkeit  
  - Fach-Bachelor Wirtschaftswissenschaften > Studienrichtung Volkswirtschaftslehre |
| Contact person     | Module responsibility                                                                    |
|                    |  
  - Christoph Böhringer                                                                     |
| Authorized examiners |  
  - Die im Modul Lehrenden                                                                    |
| Module counseling  | Module counseling                                                                       |
|                    |  
  - Christoph Böhringer                                                                     |
| Entry requirements | The undergraduates                                                                        |
|                    |  
  - understand the basic subjects of environmental economics                                |
|                    |  
  - know essentials of economic theory in environmental policy                              |
|                    |  
  - know environmental problems and are able to analyze and interpret them economically     |
|                    |  
  - know the mechanics of instruments in environmental policy and also their conditions of usage |
|                    |  
  - are able to evaluate instruments of environmental policy                                 |
|                    |  
  - know about the problems of transnational environmental burdens                          |
|                    |  
  - know methods of environmental assessment                                                 |
| Module contents    | Following topics will be discussed:                                                   |
|                    |  
  - definition and differentiation of environmental economics                               |
|                    |  
  - economic interpretations of environmental problems                                       |
|                    |  
  - objectives and instruments of environmental policy                                       |
|                    |  
  - market economy instruments of environmental policy                                       |
|                    |  
  - conditions of implementation of environmental politics                                   |
|                    |  
  - International environmental problems                                                    |
|                    |  
  - environmental assessment                                                                 |
| Reader's advisory  |                                                                                         |
| Links              |                                                                                         |
| Language of instruction | German                                       |
| Duration (semesters) | 1 Semester                                     |
| Module frequency   |                                                                                         |
| Module capacity    | unlimited                                                                                 |
| Modulelevel        | ---                                                                                      |
| Modulart           | je nach Studiengang Pflicht oder Wahlpflicht                                              |
| Lern-/Lehrform / Type of program |                                              |
| Vorkenntnisse / Previous knowledge | Introduction to economics and Microeconomic theory                                     |
| Examination        |                                                                                         |
| Time of examination |                                                                                         |
| Type of examination |                                                                                         |
| Final exam of module | Final exam of module                                                                 |
| Course type        | Lecture                                                                                  |
| SWS                | 4.00                                                                                     |
| Frequency          |                                                                                         |
| Workload attendance | 56 h                                                                                      |
wir360 - Environmental and Sustainability Policies

Module label: Environmental and Sustainability Policies
Module code: wir360
Credit points: 6.0 KP
Workload: 180 h

Used in course of study:
- Fach-Bachelor Nachhaltigkeitsökonomik > Vertiefungsmodule
- Fach-Bachelor Wirtschaftsinformatik > Akzentsetzungsmodule
- Fach-Bachelor Wirtschaftswissenschaften > Studienerrichtung Ökologie und Nachhaltigkeit
- Master Wirtschaftswissenschaften > Module der Wirtschaftswissenschaften (Fachbachelor)

Contact person:
Module responsibility:
- Jürgen Bitzer
- Bernd Siebenhüner
Authorized examiners:
- Die im Modul Lehrenden
Module counseling:
- Bernd Siebenhüner

Entry requirements:
none

Skills to be acquired in this module:
- students:
  - have basic information about national and European environmental and sustainability governance
  - describe the history of national and European environmental and sustainability governance
  - reflect upon central principles, instruments, players and strategies in environmental and sustainability governance

Module contents:
- Development directions of German and European environmental and sustainability governance;
- Analysis of selected topics like energy, agriculture, chemical industry etc.;
- Principles of environmental and sustainability governance;
- Instruments of environmental and sustainability governance compared on international level;
- New mechanisms in governance;
- Relevant actors of environmental and sustainability governance (administration, industry, media, science, NGOs etc.);
- International environmental and sustainability governance

Reader's advisory:

Links:
- https://www.uni-oldenburg.de/wire/

Language of instruction:
German

Duration (semesters):
1 Semester

Module frequency:
yearly

Module capacity:
unlimited

Module level:
---

Lern-/Lehrform / Type of program:
je nach Studiengang Pflicht oder Wahlpflicht

Vorkenntnisse / Previous knowledge:

Examination:

<table>
<thead>
<tr>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>presentation</td>
</tr>
</tbody>
</table>

Final exam of module:

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
</tbody>
</table>

Total time of attendance for the module:
56 h
inf540 - Applications in Artificial Intelligence

<table>
<thead>
<tr>
<th>Module label</th>
<th>Applications in Artificial Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>inf540</td>
</tr>
<tr>
<td>Credit points</td>
<td>6.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>180 h</td>
</tr>
<tr>
<td>Used in course of study</td>
<td>• Fach-Bachelor Informatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td></td>
<td>• Fach-Bachelor Wirtschaftsinformatik &gt; Akzentsetzungsmodule</td>
</tr>
<tr>
<td>Contact person</td>
<td></td>
</tr>
<tr>
<td>Entry requirements</td>
<td></td>
</tr>
<tr>
<td>Skills to be acquired in this module</td>
<td></td>
</tr>
<tr>
<td>Module contents</td>
<td></td>
</tr>
<tr>
<td>Reader’s advisory</td>
<td></td>
</tr>
<tr>
<td>Links</td>
<td></td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td></td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Modulelevel</td>
<td>---</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td></td>
</tr>
<tr>
<td>Vorkenntnisse / Previous knowledge</td>
<td></td>
</tr>
<tr>
<td>Examination</td>
<td>Time of examination</td>
</tr>
<tr>
<td>Final exam of module</td>
<td>Type of examination</td>
</tr>
<tr>
<td>Course type</td>
<td>Comment</td>
</tr>
<tr>
<td>Lecture</td>
<td>2.00</td>
</tr>
<tr>
<td>Exercises</td>
<td>2.00</td>
</tr>
<tr>
<td>Total time of attendance for the module</td>
<td>56 h</td>
</tr>
</tbody>
</table>
### Abschlussmodul

**bam - Bachelor Thesis and Colloquium**

<table>
<thead>
<tr>
<th>Module label</th>
<th>Bachelor Thesis and Colloquium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>bam</td>
</tr>
<tr>
<td>Credit points</td>
<td>15.0 KP</td>
</tr>
<tr>
<td>Workload</td>
<td>450 h</td>
</tr>
</tbody>
</table>

**Used in course of study**
- Fach-Bachelor Wirtschaftsinformatik > Abschlussmodul

**Contact person**
- Module responsibility
  - Oliver Theel
  - Axel Hahn
  - Lehrende der Informatik
- Authorized examiners
  - Lehrende der Informatik

**Entry requirements**

**Skills to be acquired in this module**

**Module contents**

**Reader's advisory**

**Links**

**Language of instruction**
- German

**Duration (semesters)**
- 1 Semester

**Module frequency**

**Module capacity**
- unlimited

**Modullevel**
- ---

**Modulart**
- je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**

<table>
<thead>
<tr>
<th>Final exam of module</th>
<th>Time of examination</th>
<th>Type of examination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>G</td>
</tr>
</tbody>
</table>

**Course type**
- Seminar

**SWS**
- 2.00

**Frequency**
- SuSe and WiSe

**Workload attendance**
- 28 h