# Appendix 2 Module catalogue

Please note: The German version of this document is the legally binding version. The English translation provided here is for information purposes only.

### **1st Semester**

|     |   | E             | nterprise In      | formation S                    | ystems   |             |            | Module ID<br>5 WI 61 |  |
|-----|---|---------------|-------------------|--------------------------------|--|-------------|------------|----------------------|--|
| No. | Workload  | Credit points | Study<br>semester | Frequency                      | Sem.   | Duration    | Туре       | Q-level              |  |
|     | 150 h   | 6             | 1st sem.          | Annual                         | Winter   | 1 sem.      | Compulsory | M.Sc.                |  |
| 1   | Course<br>type  |               |                   | Planned<br>group size          | Language   |             |            |                      |  |
|     | Sem. tuition  |               | 4 SCH/60 h        | 90 h                           | Lecture, gro<br>case studies<br>internships<br>application | in selected | 25         | German               |  |
| 2   | Learning out  | comes/        | competence        | S                              | l  |             |            |                      |  |
| 3   | <ul> <li>On successful completion of the module, students have the following knowledge and skills:         <ul> <li>They have a basic understanding of Enterprise Architecture Management.</li> <li>They are able to classify the key applications in the enterprise solution landscape.</li> <li>They are able to classify and evaluate enterprise applications in different areas such as business intelligence, business operations and supporting systems.</li> <li>They can explain industry-neutral, industry-specific and inter-company application systems.</li> <li>They are able to apply their knowledge to the development, deployment and operation of application systems.</li> </ul> </li> <li>Students can explain the integration of different applications in the solution landscape of a company.</li> <li>Contents         <ul> <li>Introduction to the categories of enterprise application systems and their organisational classification in the corporate context.</li> <li>Case studies to develop the following skills:</li></ul></li></ul> |               |                   |                                |  |             |            |                      |  |
|     |   | _             | _                 | on of systems<br>ation systems |  |             | -          | -                    |  |
|     | busines   | ss archite    | cture             | •                              |  |             |            |                      |  |
| 4   | Participation Basic knowled "ERP Systems  | ge of IT      | infrastructure    |                                |  |             |            | the modules          |  |
| 5   | Form of asse<br>Written exam  |               |                   |                                |  |             |            |                      |  |
| 6   | Condition for Module exami  |               |                   | : points                       |  |             |            |                      |  |
| 7   | Application of Business Info  |               |                   |                                | dy programn  | nes):       |            |                      |  |
| 8   | Module coor   | dinator       |                   |                                |  |             |            |                      |  |
|     | Prof. Dr. Volke   |               | nn                |                                |  |             |            |                      |  |
| 9   | Other inform  | nation        |                   |                                |  |             |            |                      |  |

|     | Bu   | ısiness M   | 1odels and P  | Processes in                              | the netEco  | nomy           |                       | Module ID<br>5 WI 62 |  |  |  |
|-----|--|---|---|---|---|----------------|-----------------------|----------------------|--|--|--|
| No. | Workload   | Credit points   | Study<br>semester   | Frequency                                 | Sem.  | Duration       | Туре                  | Q-level              |  |  |  |
|     | 150 h  | 6   | 1st sem.  | Annual                                    | Winter  | 1 sem.         | Compulsory            | M.Sc.                |  |  |  |
| 1   | Course<br>type   |   | Contact<br>hours  | study                                     | Forms of to<br>(learning<br>methods)  | eaching        | Planned<br>group size | Language             |  |  |  |
|     | Sem. tuition   |   | 4 SCH/60 h  |   | Lecture, group work,<br>exercises on the PC,<br>project work, case<br>studies |                |                       | German               |  |  |  |
| 2   | Learning out   | comes/  | competence  | S   |   |                |                       |                      |  |  |  |
|     | <ul> <li>On successful completion of the module, students have the following knowledge and skills:</li> <li>They are able to explain and differentiate between basic subjects and terms of e-business and the net economy.</li> <li>They are able to design, categorise, implement and evaluate digital business models.</li> <li>They are able to use concepts and methods for the digital marketing of an e-business offer.</li> <li>They are able to take advantage of the opportunities offered by e-business and critically assess risks.</li> <li>They are able to adapt concepts of the net economy to internal processes and use appropriate tools.</li> </ul> |   |   |   |   |                |                       |                      |  |  |  |
| 3   | Contents   |   |   |   |   |                |                       |                      |  |  |  |
|     | <ul> <li>Digital buse concepts,</li> <li>Online marketing</li> <li>Electronic</li> <li>Mobile buse</li> </ul>  | siness mo<br>analysis,<br>arketing: S<br>markets:<br>siness: te | odels: concept<br>market poter<br>SEM (Search<br>: classification | engine marken, auction systoplications, m | ematic devel<br>ting), newsl<br>tems, tender                                  | etter, affilia | nte marketing         | n<br>g, social media |  |  |  |
| A   | Participation  |   | ·   | , 0 10 1 1 10                             |   |                |                       |                      |  |  |  |
| 4   | Knowledge of<br>modules "Web   |   |   |   |   |                |                       |                      |  |  |  |
| 5   | Form of asse<br>Portfolio as a   |   | ion of project  | and term pap                              | per   |                |                       |                      |  |  |  |
| 6   | Condition for Module exami   |   |   | t points                                  |   |                |                       |                      |  |  |  |
| 7   | <b>Application</b> 6<br>Business Info  |   | •   |   | dy programn   | nes):          |                       |                      |  |  |  |
| 8   | Module coord<br>Prof. Dr. Hans   |   | Pook  |   |   |                |                       |                      |  |  |  |

#### 9 Other information

Possible literature:

Clement, Schreiber: Internet-Ökonomie; Springer 2013.

Kollmann: E-Business: Grundlagen elektronischer Geschäftsprozesse in der Net Economy;

Gabler 2016

Kollmann: Online-Marketing: Grundlagen der Absatzpolitik in der Net Economy; Kohlhammer

2013.

Heinemann, Gaiser: Social - Local - Mobile: The Future of Location-based Services; Springer

2015.

Meier, Lütolf, Schillerwein: Herausforderung Intranet; Gabler 2015

|     | IT Project Management  |   |                  |           |                                      |          |                       |          |  |  |  |  |
|-----|------------------------|---|------------------|-----------|--------------------------------------|----------|-----------------------|----------|--|--|--|--|
| No. | Workload Credit points |   | Study semester   | Frequency | Sem.                                 | Duration | Туре                  | Q-level  |  |  |  |  |
|     | 150 h                  | 6 | 2nd sem.         | Annual    | Summer                               | 1 sem.   | Compulsory            | M.Sc.    |  |  |  |  |
| _   | type                   |   | Contact<br>hours | study     | Forms of te<br>(learning<br>methods) | _        | Planned<br>group size | Language |  |  |  |  |
|     |                        |   | 4 SCH/60 h       |           | 1                                    |          | 25                    | German   |  |  |  |  |

## 2 Learning outcomes/competences

On successful completion of the module, students are able to:

- successfully prepare, plan and manage projects in an IT context,
- handle project crises when dealing with clients, project team members and other stakeholders, and moderating differences of opinion,
- secure project success by active risk, stakeholder, change, conflict, change and quality management,
- evaluate, prepare and execute IT implementation projects, including with regard to technical, economic and social aspects,
- define creativity techniques.

## 3 Contents

- Project management (PM) duties
- Agile vs. traditional project management
- Project controlling: progress, cost and effort tracking; quality tracking
- Documentation and change management
- Communication in the context of change, stakeholder and risk management
- Project success measurement
- Reporting resp. project communication
- Creativity techniques

In addition, the following aspects of the management of IT implementation projects are acquired using case studies and problem-based learning:

- Requirement management
- System selection, assurance of benefits resulting from the use of IT systems
- Design thinking and other models and their effects on PM methods

| 4 | Participation requirements   |
|---|--|
|   | Basic knowledge of project management in general, and in particular target planning, structure |
|   | planning, process and schedule planning and reporting. These are taught, for example, in the   |
|   | module WI 29 "Communication and Project Management" in the Business Information Systems        |
|   | bachelor study programme.  |
| 5 | Form of assessment   |
|   | Combination examination consisting of project and term paper                                   |
| 6 | Condition for the award of credit points   |
|   | Examination pass   |
| 7 | Application of the module (in the following study programmes):                                 |
|   | Business Information Systems (M.Sc.)   |
|   |  |
| 8 | Module coordinator   |
|   | Prof. Dr. Ulrich Schäfermeier  |
| 9 | Other information  |
|   |  |
|   |  |

|     |   |  | Data N   | 1anagement   | ;  |   |  | Module ID<br>5 WI 64    |  |
|-----|---|--|--|--|--|---|--|-------------------------|--|
| No. | Workload  | Credit points  | Study semester   | Frequency  | Sem.   | Duration  | Туре   | Q-level                 |  |
|     | 150 h   | 6  | 1st sem.   | Annual   | Winter   | 1 sem.  | Compulsory   | M.Sc.                   |  |
| _   | Course<br>type  |  | Contact<br>hours   | Self-<br>study   | Forms of te<br>(learning<br>methods)   |   |  |                         |  |
|     | Sem. tuition 4 SCH/60 h 90 h Talk, group work/PBL, 25 German exercises on the PC                              |  |  |  |  |   |  |                         |  |
| 2   | managem They are a a data wa They are a the areas They are a They are thematica processes They are specialist | able to exect and be able to dead be able to ap able to able t | plain the bas ig data and o plain the pha and create a r fine the conc ss intelligenc ply an up-to- identify sp evelop applica | ic terms and of lifferentiate the ses of data woultidimension epts, method e, knowledge date business ecific knowled in scenarion material | objects of but<br>nem from one<br>arehousing,<br>nal database<br>s and techno<br>managemen<br>s intelligence<br>edge probler<br>s for the tech | siness intererance another. assess the schema. logies for cot and big dotool. ms in organical suppointeration | reference and leveloping apata.  anisations, ort of knowled in on topics | wledge<br>chitecture of |  |

| 3 | Contents  |
|---|---|
|   | Knowledge management  |
|   | Architecture of business intelligence applications  |
|   | Data warehouse  |
|   | Quality of data and importance of the ETL (extract, transform, load) process  |
|   | Multidimensional data modelling   |
|   | Concepts of data evaluation with OLAP (Online Analytical Processing) and data mining processes  |
|   | Definition, properties and technological principles of big data applications, current application scenarios for big data                                |
| 4 | Participation requirements  |
|   | Basic knowledge of databases and information systems, as taught in the basic modules on software technology (WI 18, 19 and 21) and ERP systems (WI 01). |
| 5 | Form of assessment  |
|   | Presentation  |
| 6 | Condition for the award of credit points  |
|   | Module examination pass   |
| 7 | Application of the module (in the following study programmes):  |
|   | Business Information Systems (M.Sc.)  |
| 8 | Module coordinator  |
|   | Prof. Dr. Peter Hartel  |
| 9 | Other information   |
|   |   |
|   |   |

|     |  |   | Business Ga   | ame: Going (  | Global   |  |   | Module I<br>5 CFR 61                             |
|-----|--|---|---|---|--|--|---|--|
| No. |  |   | Q-level   |   |  |  |   |  |
|     | 150 h  | 6   | 1st sem.  | Annual  | Winter   | 1 sem.   | Compulsory  | M.Sc.  |
| 1   | Course<br>type   |   | Contact<br>hours  | study   | Forms of to<br>(learning<br>methods)   | _  | Planned<br>group size                                     | Language   |
|     | Sem. tuition   |   | 4 SCH/60 h  | 90 h  | Group work   |  | 25  | German   |
|     | <ul><li>They are a competitive</li><li>Students</li><li>Students</li><li>Students</li><li>Students</li></ul> | proficient able to de veness of are able t are profic are able t are profic | in the comprefine and purse a company into interpret butten in the had to organise detent in cross- | ehensive expense expense expenses a dynamic e usiness figure andling of comecision-making divisional thin ems in a structure. | erience and of goals and of a goals and of a goals and converted by the co | recognition<br>concrete me<br>t them into<br>ns under co<br>in a team ir | of business of assures to see practical de inditions of u | contexts.<br>cure the<br>cisions.<br>ncertainty. |
| 3   | Contents Implementation questions at convironment affinancing, involudecisions in the simulation.            | company<br>analyses,<br>estment a   | management<br>competition i<br>and accountin  | level on topic<br>monitoring, er<br>g. For this pu  | s such as pr<br>mployee mai<br>rpose, stude  | oduct and r<br>nagement, p<br>nts work in                                | market devel<br>production co<br>groups to do             | opment,<br>ontrol,<br>evelop sour                |
| 4   | Participation<br>Basic knowled<br>accounting, sa   | lge of ger  | neral business  |   |  | ledge of inv   | vestment/fina   | ance,  |
| 5   | Form of asse<br>Project work   |   | examination   | or, if necessa  | ıry, an oral e   | examination  |   |  |
| 6   | Condition fo<br>Regular partic<br>and passing t  | cipation (a   | as the simulat  | ion cannot be   | done from  | home and is  | s done in gro   | oup work)  |
| 7   | Application of Business Info   |   |   |   |  |  | 1   |  |
| 8   | Module coor<br>Prof. Dr. Jürge   |   | ider  |   |  |  |   |  |
| 9   | Other inform   | nation  |   |   |  |  |   |  |

# **2nd Semester**

|     |   | Cons          | sulting and S     | Strategic Ma   | nagement                                   |          |                       | Module ID<br>5 WI 65 |  |  |  |
|-----|---|---------------|-------------------|----------------|--|----------|-----------------------|----------------------|--|--|--|
| No. | Workload  | Credit points | Study<br>semester | Frequency      | Sem.                                       | Duration | Туре                  | Q-level              |  |  |  |
|     | 150 h   | 6             | 2nd sem.          | Annual         | Summer                                     | 1 sem.   | Compulsory            | M.Sc.                |  |  |  |
| 1   | Course<br>type  |               | Contact<br>hours  | Self-<br>study | Forms of to<br>(learning<br>methods)       | eaching  | Planned<br>group size | Language             |  |  |  |
|     | Sem. tuition  |               | 4 SCH/60 h        | 90 h           | Lecture, group 25<br>work, case<br>studies |          |                       | German               |  |  |  |
| 2   | <ul> <li>Learning outcomes/competences</li> <li>On successful completion of the module, students have the following knowledge and skills:</li> <li>Students can differentiate between the central concepts of consulting and structure and implement consulting projects independently as required.</li> <li>They are proficient in the central concepts of strategic management as well as the tools and frameworks that are typically used in consulting projects in the business and IT area and can apply these independently.</li> <li>They are able to identify critical points between business and IT and recognise the impact of IT decisions on employees, companies and society.</li> <li>They are able to further develop key skills in consulting such as structured work and planning, as well as basic interview, moderation and presentation techniques.</li> </ul> |               |                   |                |  |          |                       |                      |  |  |  |
| 3   | <ul> <li>Contents</li> <li>Target systems and stakeholders</li> <li>Constitutive decisions (company forms, location factors, etc.)</li> <li>Basic structural and procedural concepts</li> <li>Consulting tools and frameworks (portfolio analyses, Porter's Five Forces, SWOT, etc.)</li> <li>Principles of IT consulting, including basic framework concepts such as CobiT (Control Objectives for Information and Related Technology), ITIL (IT Infrastructure Library) etc.</li> <li>Strategic decisions</li> <li>Implementation of consulting projects (basic process, implementation of interviews and</li> </ul>  |               |                   |                |  |          |                       |                      |  |  |  |
| 4   | Participation<br>None   | require       | ments             |                |  |          |                       |                      |  |  |  |
| 5   | Form of asse<br>Oral examinat   |               |                   |                |  |          |                       |                      |  |  |  |
| 6   | Condition for Module exami  |               |                   | t points       |  |          |                       |                      |  |  |  |
| 7   | Application of Business Information   |               | -                 | _              | dy programn                                | nes):    |                       |                      |  |  |  |
| 8   | Module coor<br>Prof. Dr. Alexa  |               | ster              |                |  |          |                       |                      |  |  |  |
| 9   | Other inform  | nation        |                   |                |  |          |                       |                      |  |  |  |

|     |   | E             | Business Pro      | ocess Manag                    | ement                                |              |                       | Module I<br>5 WI 66 |  |  |
|-----|---|---------------|-------------------|--------------------------------|--------------------------------------|--------------|-----------------------|---------------------|--|--|
| No. | Workload  | Credit points | Study<br>semester | Frequency                      | Sem.                                 | Duration     | Туре                  | Q-level             |  |  |
|     | 150 h   | 6             | 2nd sem.          | Annual                         | Summer                               | 1 sem.       | Compulsory            | M.Sc.               |  |  |
| 1   | Course<br>type  |               | Contact<br>hours  | study                          | Forms of te<br>(learning<br>methods) | eaching      | Planned<br>group size | Language            |  |  |
|     | Sem. tuition  |               | 4 SCH/60 h        | 90 h                           | Lecture, gr                          | oup work     | 25                    | German              |  |  |
| 2   | Learning out  | tcomes/c      | competence        | es .                           |                                      |              |                       |                     |  |  |
|     | <ul> <li>They are able to explain the basic terms of business process management and differentiate them from one another.</li> <li>They are able to apply business process management methods and techniques in a business environment.</li> <li>They are able use tools for process modelling and process implementation and thus design and implement process-oriented solutions.</li> <li>They are proficient in reproducing fundamental aspects of IT corporate architectures.</li> <li>They have basic knowledge of service-oriented systems and their development, which enables them to explain the relationship between business processes and service-oriented systems.</li> <li>They are able to successfully apply methods, techniques and tools for the conceptualisation and implementation of services realised on the basis of various technologies.</li> <li>They are able to acquire, classify and present materials and information on current</li> </ul> |               |                   |                                |                                      |              |                       |                     |  |  |
|     |   | ents in th    | is subject are    | ea.                            |                                      |              |                       |                     |  |  |
| 3   | Contents  Business processes and their importance in the company Modelling business processes with BPMN (Business Process Model and Notation) Best practice examples for BPMN Object life cycles, business rules and their modelling Optimisation and simulation of processes in the business environment Implementation of processes with BPM tools Current developments in the field of BPM IT enterprise architecture: definition and characteristics Realisation of services with different technologies Development of SOA (Service-oriented architecture) systems with Java technologies  |               |                   |                                |                                      |              |                       |                     |  |  |
| 4   | Participation   |               |                   | processes and                  |                                      |              |                       |                     |  |  |
|     |   |               |                   | oftware engin<br>I 18, 19, and |                                      | lught, for e | xample, in th         | ne basic            |  |  |
| 5   | Form of asse  |               | ation and ora     | al or written e                | xamination                           |              |                       |                     |  |  |
| 6   | Condition fo<br>Module exami  |               |                   | t points                       |                                      |              |                       |                     |  |  |
| 7   | Application of Business Info  |               | -                 | _                              | dy programn                          | nes):        |                       |                     |  |  |
| 8   | Module coor   |               |                   |                                |                                      |              |                       |                     |  |  |
|     | Other inform  |               |                   |                                |                                      |              |                       |                     |  |  |

|     |   |               | IT Servic         | ce Manageme                  | ent   |                  |                       | Module ID<br>5 WI 67 |  |  |  |
|-----|---|---------------|-------------------|------------------------------|---|------------------|-----------------------|----------------------|--|--|--|
| No. | Workload  | Credit points | Study<br>semester | Frequency                    | Sem.  | Duration         | Туре                  | Q-level              |  |  |  |
|     | 150 h   | 6             | 2nd sem.          | Annual                       | Summer  | 1 sem.           | Compulsory            | M.Sc.                |  |  |  |
| 1   | Course<br>type  |               | Contact<br>hours  | study                        | Forms of te<br>(learning<br>methods)                          | _                | Planned<br>group size | Language             |  |  |  |
|     | Sem. tuition  |               | 4 SCH/60 h        |                              | Group work,<br>studies, if ap<br>simulation g<br>project work | oplicable a ame, | 25                    | German               |  |  |  |
| 2   | Learning out  | tcomoc /      | compotonco        |                              |   |                  |                       |                      |  |  |  |
|     | <ul> <li>They are able to differentiate IT operations and IT services from other operational IT activities.</li> <li>They have a comprehensive understanding of the fields of application, processes, procedures, tasks, roles and functions of IT service management (ITSM).</li> <li>They are able to participate in the design of the orderly definition, introduction and operation of IT services.</li> <li>They are able to evaluate elements of the ITSM and the various current standards in terms of their suitability for different types of IT organisations.</li> <li>They are able to develop an organisational framework in terms of IT governance for the ITSM.</li> </ul> |               |                   |                              |   |                  |                       |                      |  |  |  |
|     |   |               |                   |                              |   |                  |                       |                      |  |  |  |
| 3   | First, an introductory explanation is given of the subject area, which includes:  • Elements of the ITSM life cycle  • ITIL and ISO/IEC 20000 in the current version  On this basis, the students develop the following implementation aspects with the lecturer in the sense of problem-based learning or a simulation:  |               |                   |                              |   |                  |                       |                      |  |  |  |
|     |   |               |                   | ign of ITSM in               | a practical o   | context          |                       |                      |  |  |  |
|     | ,   | •             | •                 | art of an ITSM               | _   |                  |                       |                      |  |  |  |
|     | · ·   |               |                   | arios: IT servi              | ce provider,  | consumptio       | on of cloud           |                      |  |  |  |
|     |   | •             | e in SMEs, etc    | C.                           |   |                  |                       |                      |  |  |  |
| 4   | Participation<br>Basic knowled<br>Systems II" (\  | lge of IT i   | nfrastructure     | components,<br>Networks" (WI | as taught, fo   | or example       | , in the mod          | ules "ERP            |  |  |  |
| 5   | Form of asse<br>Combined exa  |               | consisting of     | f project and t              | erm paper   |                  |                       |                      |  |  |  |
| 6   | Condition for Module exami  |               |                   | t points                     |   |                  |                       |                      |  |  |  |
| 7   | <b>Application o</b> Business Infor   |               | -                 | _                            | dy programm   | nes):            |                       |                      |  |  |  |
| 8   | Module coord<br>Prof. Dr. Achir   |               | ltmann            |                              |   |                  |                       |                      |  |  |  |
| 9   | Other inform  | nation        |                   |                              |   |                  |                       |                      |  |  |  |

|     | Res  | search Se  | eminar on B       | usiness Info   | rmation Sys                          | stems       |                       | Module ID<br>5 WI 68 |  |  |  |  |  |
|-----|--|--|-------------------|----------------|--------------------------------------|-------------|-----------------------|----------------------|--|--|--|--|--|
| No. | Workload   | Credit points  | Study<br>semester | Frequency      | Sem.                                 | Duration    | Туре                  | Q-level              |  |  |  |  |  |
|     | 300 h  | 12   | 2nd sem.          | Annual         | Summer                               | 1 sem.      | Compulsory            | M.Sc.                |  |  |  |  |  |
|     | Course<br>type   |  | Contact<br>hours  | study          | Forms of te<br>(learning<br>methods) | eaching     | Planned<br>group size | Language             |  |  |  |  |  |
|     | Seminar  |  | 4 SCH/60 h        | 240 h          | Seminar, stu<br>talks                | udent       | 15                    | German               |  |  |  |  |  |
|     | <ul> <li>Students of it in writing the property of the propert</li></ul> | <ul> <li>On successful completion of the module, students have the following knowledge and skills:</li> <li>Students can work on a research-oriented question of business information systems, present it in writing and present it to an expert audience.</li> <li>They are able to describe research methods in business information systems and assess their useful application.</li> <li>Students are able to conduct extensive research, place a question in a scientific context, design an appropriate structure, and comprehensively apply the rules of scientific writing.</li> <li>They are also able to design an oral lecture on a question according to scientific principles, enrich it with visualisations, and give it.</li> </ul> |                   |                |                                      |             |                       |                      |  |  |  |  |  |
|     | Contents The topics of to  |  |                   |                |                                      |             |                       | Topics on            |  |  |  |  |  |
|     | Participation<br>Basic knowled<br>(WI 15) modu   | ge of scie   |                   | such as that a | cquired in the                       | e "Business | s Information         | n Systems"           |  |  |  |  |  |
| 5   | Form of asse<br>Term paper, in   |  | a specialist le   | ecture         |                                      |             |                       |                      |  |  |  |  |  |
|     | Condition for Module exami   |  |                   | t points       |                                      |             |                       |                      |  |  |  |  |  |
|     | <b>Application o</b> Business Infor  |  | •                 |                | dy programm                          | nes):       |                       |                      |  |  |  |  |  |
|     | <b>Module coor</b><br>Prof. Dr. Hans   |  | Pook              |                |                                      |             |                       |                      |  |  |  |  |  |
| 9   | Other inform   | nation   |                   |                |                                      |             |                       |                      |  |  |  |  |  |

#### **3rd Semester**

|     | Master's Project in Business Information Systems |               |                   |           |                                      |          |                       |          |  |  |  |  |  |
|-----|--|---------------|-------------------|-----------|--------------------------------------|----------|-----------------------|----------|--|--|--|--|--|
| No. | Workload   | Credit points | Study<br>semester | Frequency | Sem.                                 | Duration | Туре                  | Q-level  |  |  |  |  |  |
|     | 450 h  | 18            | 3rd sem.          | Annual    | Winter                               | 1 sem.   | Compulsory            | M.Sc.    |  |  |  |  |  |
| _   | Course<br>type                                   |               | Contact<br>hours  | study     | Forms of te<br>(learning<br>methods) | _        | Planned<br>group size | Language |  |  |  |  |  |
|     | Project  |               | 4 SCH/60 h        | 390 h     |                                      |          | 4-6                   | German   |  |  |  |  |  |

### 2 Learning outcomes/competences

On successful completion of the module, students have the following knowledge and skills:

- Students are able to work in a project-related and target-oriented manner.
- They are proficient in project management with regard to economic and social aspects.
- They have competence in the sound preparation, coordination, communication and implementation of decisions.
- They are able to use their knowledge and acquired key competences appropriately in consulting.
- They are able to apply creativity techniques.
- Students are able to prepare professional meetings and reviews.
- They are proficient in the systematic approach and publication in scientific projects, provided that the project task is located in the research environment.

## 3 Contents

Participants work on an extensive project task in a group of 4-6 students during the lecture period. The outcomes are presented in status meetings. The teaching staff member oversees the projects as a coach and consultant in classroom hours.

The problems of the projects are outlined individually and in coordination with clients (usually external companies), and can cover the entire content of business information systems. The projects are formally implemented in a client-contractor relationship, so that, in addition to consolidating previous knowledge of the subject, students can also acquire the aforementioned practical skills with the support of the supervising teacher in the role of coach. During the implementation of the project, a project report detailing both the management and the outcomes of the project must be prepared.

### 4 Participation requirements

Formal examination requirements: none

Content requirements:

- Depending on the subject area, the content of the modules from the previous semester can be expected as a prerequisite
- Generally, however: IT project management, consulting

#### 5 Form of assessment

Combination examination consisting of project work and an oral examination

| 6 | Condition for the award of credit points  |
|---|---|
|   | Passing of the project work with at least half of the possible points and pass in the oral examination with at least half of the possible points, whereby both parts are weighted equally in the overall grade. |
| 7 | Application of the module (in the following study programmes):  |
|   | Business Information Systems (M.Sc.)  |
|   |   |
| 8 | Module coordinator  |
|   | Study programme director  |
| 9 | Other information   |
|   |   |
|   |   |

| IT Governance, Compliance and Security |   |               |                  |                |                                      |          |                       | Module ID<br>5 WI 70 |
|--|---|---------------|------------------|----------------|--------------------------------------|----------|-----------------------|----------------------|
| No.                                    | Workload  | Credit points | Study semester   | Frequency      | Sem.                                 | Duration | Туре                  | Q-level              |
|  | 150 h   | 6             | 3rd sem.         | Annual         | Winter                               | 1 sem.   | Compulsory            | M.Sc.                |
| 1                                      | Course<br>type  |               | Contact<br>hours | Self-<br>study | Forms of te<br>(learning<br>methods) |          | Planned<br>group size | Language             |
|  | Sem. tuition  |               | 4 SCH/60 h       | 90 h           | Group work,                          | lecture  | 25                    | German               |
| 2                                      | <ul> <li>Learning outcomes/competences</li> <li>On successful completion of the module, students have the following knowledge and skills:</li> <li>They are able to obtain information on topics of IT governance, compliance and security that have not yet featured in the specialist literature. They are also able to gather materials and extract the essential information.</li> <li>Based on the knowledge gained, students are able to define a well-founded opinion on the topic and derive the necessary consequences for IT security and IT organisation.</li> <li>They are able to develop and explain solutions that ensure the IT operation of a company from legal, economic and social perspectives.</li> <li>They are able to describe the organisational framework for sustainable IT processes.</li> </ul> |               |                  |                |                                      |          |                       |                      |

| 2 | Contents   |
|---|--|
| 3 | After an introductory explanation of the subject complex (justification, overview of selected IT compliance regulations and governance frameworks), students work on current topics from the field of IT security in coached group work. These can include:  Experience and work of security experts who highlight current technical or organisational security gaps and implementation examples  Current incidents in companies and institutions that have occurred in the recent past  Analysis of the technical, organisational and legal regulations and safety measures for the latest technical innovations  Papers that deal with the social responsibility of companies to ensure secure IT operations  Current security concepts of companies and institutions, taking into account the latest threats  Current methods for promoting awareness of IT security amongst all employees  The individual groups explain their outcomes to all participants in the style of seminar tuition. The course is complemented by specialist talks by external experts. |
| 4 | Participation requirements In-depth basic knowledge of IT security, such as that taught in module WI 11 "Operating Systems and IT Security".   |
| 5 | Form of assessment   |
|   | Written elaboration and presentation   |
| 6 | Condition for the award of credit points  Module examination pass  |
| 7 | Application of the module (in the following study programmes): Business Information Systems (M.Sc.)  |
| 8 | Module coordinator   |
|   | Prof. Dr. Jörg-Michael Keuntje   |
| 9 | Other information  |
|   |  |

|     |   |               | :                    | IT Law          |                               |          |                       | Module ID<br>5 RE 72 |
|-----|---|---------------|----------------------|-----------------|-------------------------------|----------|-----------------------|----------------------|
| No. | Workload  | Credit points | Study<br>semester    | Frequency       | Sem.                          | Duration | Туре                  | Q-level              |
|     | 150 h   | 6             | 3rd sem.             | Annual          | Winter                        | 1 sem.   | Compulsory            | M.Sc.                |
| 1   | Course<br>type  |               |                      | Self-<br>study  | Forms of (lear)               | ning     | Planned<br>group size | Language             |
|     | Sem. tuition  |               | 4 SCH/60 h           | 90 h            | Group w<br>lecture,<br>studie | case     | 25                    | German               |
|     | <ul> <li>Students are able to reproduce the principles of German contract law, including the principles of the law of general terms and conditions.</li> <li>They are able to analyse simple contracts, including general terms and conditions, and are able to evaluate the special features of contracts in electronic business transactions.</li> <li>They are able to apply the learned principles of intellectual property law in relation to information technology and can make references to trademark law, copyright law and competition law, particularly with regard to the use of domains.</li> <li>Students are able to grasp the peculiarities of criminal law in the area of information technologies and apply data protection regulations to informational issues.</li> <li>They are also able to apply the provisions of the Telecommunications Act and the Telemedia Act.</li> <li>They are able to describe the main features of international Internet law.</li> </ul> |               |                      |                 |                               |          |                       |                      |
| 3   | Contents  General contract law  Electronic commerce law  Industrial property rights and copyright; competition law; data protection law  Communication law (Telemedia Law, Telecommunication Law)  International Internet law, including international private law  Criminal law in the field of information technology   |               |                      |                 |                               |          |                       |                      |
| 4   | Participation<br>None   | require       | ments                |                 |                               |          |                       |                      |
| 5   | Form of asse  |               | , if applicable      | e, oral examina | ation                         |          |                       |                      |
| 6   | Condition fo<br>Module exami  |               |                      | t points        |                               |          |                       |                      |
| 7   | Application of Business Info  | of the mo     | <b>odule</b> (in the |                 | ly programn                   | nes):    |                       |                      |
| 8   | Module coor<br>Prof. Dr. Axel   |               |                      |                 |                               |          |                       |                      |
| 9   | Other inform  | nation        |                      |                 |                               |          |                       |                      |

# 4th Semester

|     | er Thesis and   | Colloqui                             | um   |   |   |                                       |                       | Module ID<br>5 WI 89 |
|-----|---|--------------------------------------|--|---|---|---------------------------------------|-----------------------|----------------------|
| No. | Workload  | Credit points                        | Study<br>semester  | Frequency   | Sem.  | Duration                              | Туре                  | Q-level              |
|     | 750 h   | 30                                   | 4th sem.   | continuous  | -   | -                                     | Compulsory            | M.Sc.                |
| 1   | Course type   |                                      |  |   |   |                                       | Planned<br>group size | Language             |
|     | Master thesis 25 ECTS<br>Colloquium 5 ECTS  |                                      | 625 h<br>125 h   |   | -   |                                       | -                     | -                    |
| 2   | <ul> <li>Learning outcomes/competences</li> <li>On successful completion of the module, students have the following knowledge and skills:</li> <li>They are able to work independently with scientific methods on a complex problem from the field of business information systems within a given period.</li> <li>They are able to document scientific work and, if necessary, other outcomes, such as source text, in written form.</li> <li>They understand the initial situation, the approach and the outcome of work on the problem. They can make an oral presentation and successfully face a discussion about it.</li> </ul> |                                      |  |   |   |                                       |                       |                      |
| 3   | Contents  The master thesis allows independent and practical application, as well as critical reflection o methods and content previously learned during the course, and also typically requires the creatio of an eighty-page document. The master thesis is a written paper that must usually be prepared i cooperation with a company.   |                                      |  |   |   |                                       |                       |                      |
| 4   | Participation requirements  Master thesis: pass in all module examinations, except for one, with a value of no more than 6 credit points; Colloquium: pass in all module examinations and thus proof of 90 credit points from the module examinations, minimum master thesis grade of "sufficient" (4.0)  |                                      |  |   |   |                                       |                       |                      |
|     |   |                                      |  |   | s grade of "s                               | ufficient" (2                         | 1.0)                  | e pomes from         |
| 5   | Form of asse  |                                      |  |   |   |                                       | 1.0)                  | points from          |
|     | Final thesis (r   | naster the                           | -  | oquium on the                                     |   |                                       | 4.0)                  | points from          |
| 6   |   | master the<br>r the awa<br>f a maste | ard of credit<br>thesis, with                                      | oquium on the<br>t <b>points</b><br>a a minimum o | e master the                                | sis<br>e of "sufficion                | ent" and pas          | s in the oral        |
|     | Final thesis (r  Condition fo  Submission of  | r the awa<br>f a mastern<br>the form | ard of credit<br>r thesis, with<br>n of a colloqui                 | oquium on the t points I a minimum oium. Weightin | e master thesoverall grade<br>g: Master the | sis<br>e of "sufficion<br>esis 25 ECT | ent" and pas          | s in the oral        |
| 6   | Final thesis (r Condition fo Submission or examination i  | r the awar the farmaster the form    | r thesis, with<br>n of a colloqui<br>odule (in the<br>ystems (M.So | oquium on the t points I a minimum oium. Weightin | e master thesoverall grade<br>g: Master the | sis<br>e of "sufficion<br>esis 25 ECT | ent" and pas          | s in the oral        |