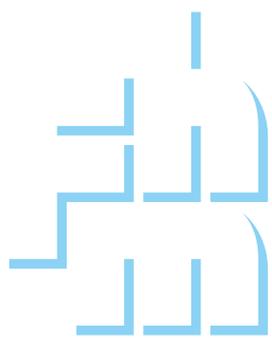# Information Systems and Management Master

fachhochschule münchen

munich university of applied sciences

ECTS Information Package

General Description

The Computer Science/Mathematics Department 07 offers programs of study in two different areas:
• Computer Science (Bachelor and Master)
• Information Systems and Management (Bachelor and Master, in cooperation with the Business Administration Department 10)
This brochure only describes the Information Systems and Management Master Program of study. There are separate brochures for the Bachelor Degree Program, and for the programs of study in Computer Science.

There are approximately 800 students enrolled in Computer Science and 350 students enrolled in Information Systems and Management at the Department of Computer Science/Mathematics. Approximately 35 full-time professors teach students, as well as a changing number of guest lecturers from industry. (In the Information Systems and Management programs, these are supplemented by another 10 professors from the Business Administration Department.) Hence, the Department is able to offer a wide range of courses from a broad canon of current themes relevant to practice. Close relations with many companies in the greater Munich area make it possible to offer internships or case study projects in cooperation with the industry.

The following 15 laboratories with about 100 workstations are available to students:

• Laboratory for Chip Cards,
• Laboratory for Computer Anatomy,
• Laboratory for Computer Graphics and Image Processing,
• Laboratory for Autonomous Systems,
• Laboratory for Microcomputers,
• Laboratory for Computer Vision and Pattern Recognition,
• Laboratory for Computer Integrated Manufacturing,
• Laboratory for Computer Organisation,
• Laboratory for Software Development,
• Laboratory for Java,
• Laboratory for Knowledge-Based Systems
• Laboratory for e-Commerce,
• Laboratory for Database Systems and Information Management,
• Laboratory for Highly Reliable Systems
• Laboratory for Mathematics.

Qualification achieved

After successful completion of the Master program, students will gain the Academic degree: Master of Science (M.Sc.)

The Master degree program was accredited by the ASIIN, including the qualification for higher service positions in German public service.

Concurrently to the Master program of study, students may enrol in the supplemental program „Privacy and Data Protection" (21 ECTS credits). Successful graduates of this supplemental program will receive a state-approved university certificate. The list of required courses and their descriptions are contained in the brochure for the Bachelor degree program.

Admission requirements

• A university degree with a total grade of at least "good" which conveyed deepened knowledge in the areas of management and computer science.
• Evidence of the above-average ability for analytical and structured thinking, which can be shown by the GRE (Graduate Record Examination) - General Test, or an equivalent test, taken with at least good success.

Recommendations for exchange students
The study period at the Munich University of Applied Sciences (MUAS) can be one or more semesters in length. Most courses are one semester in length and conclude with an examination at the end of the semester. Only the course "Information Systems and Management" in the Bachelor degree program extends over the first and second semester. Note, however, that not all courses are offered in every semester. Some courses will only be offered in summer semester, others only in winter semester. In each semester, only a choice of the electives will be offered.
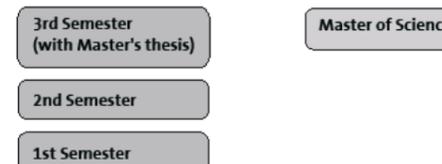
Exchange students are free to make a course selection that most complements the course requirements of their home university. When making their choice, it is irrelevant whether the chosen courses are required courses, or electives, or whether the courses are from different programs of study or take place in different semesters of study. It is, however, the student's own responsibility to make sure that there are no scheduling conflicts in the student's weekly lecture schedule. Such conflicts can generally be avoided by choosing courses that all are assigned the same semester of study.

Each semester, a small number of the courses will be offered in English language. However, in order to allow for a useful and flexible selection of courses, it is strongly recommended that exchange students be able to attend courses in German language.
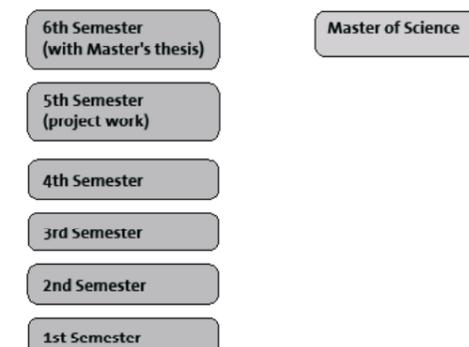
Students interested in a practical study semester in industry should apply directly with the company. However, since the department has a list of companies which are hiring students for internships, and close relations with many of them, you might want to contact the department first.

Information Systems and Management Master

Master's program of study in Information Systems and Management (Full-time)

3rd Semester (with Master's thesis)		Master of Science
2nd Semester		
1st Semester		

Master's program of study in Information Systems and Management (part-time, 50% course load)

6th Semester (with Master's thesis)		Master of Science
5th Semester (project work)		
4th Semester		
3rd Semester		
2nd Semester		
1st Semester		

Examination regulations and grading procedures:

In most courses, students will have to pass a written exam at the end of the semester. Others require students to also hand in practicum assignments or research project reports, or to give presentations. Most of these assignments receive a grade. Some are marked on a „pass" or „fail" basis.

1.0 is the highest grade and 5.0 the lowest; a grade of 4.0 means you have just passed the exam.

1,0 or 1,3	means: very good
1,7 or 2,0 or 2,3	means: good
2,7 or 3,0 or 3,3	means: satisfactory
3,7 or 4,0	means: adequate
5,0	means: insufficient (failed)

Students may repeat any failed exam once. A limited number of exams may be repeated twice upon applying to do so.
You will find the binding rules for exams in the current course calendar (Studienplan) as well as in the conditions of study and exam ordinance (Studien- und Prüfungsordnung).

International Student Advisor

Name: Prof. Dr. Christian Vogt
Responsible for all of the department's partner universities.

For information about internships and practical study semesters:
Prof. Dr. Georg Peters
Prof. Dr. Robert Lindermeier

Description of the individual courses in each semester

Abbreviations:

DCE = Departmental Compulsory Elective
H/W = Hours per Week
CE = Compulsory Elective (elective to be chosen from
      a particular group of compulsory electives)

Master Program of Study Information Systems and Management (Full Time)

This course of studies can be taken full-time in 3 semesters, or part-time (50% course load) in 6 semesters. In both cases, studies can be started at the beginning of any semester. When starting in summer semester, the semesters are taken in the order 2 - 1 - 3.

1. Semester (winter)				
Course-Nr.	Title	Type	H/W	Credits
IF-WI-M01	Information Systems *	CE	4	5
IF-WI-M03	Distributed Systems *	CE	4	5
IF-WI-M05	Controlling **	CE	4	5
IF-WI-M06	Finance and Investment Management **	CE	4	5
IF-WI-M09	Knowledge Discovery in Databases (Data Mining)	Mandatory	4	5
IF-WI-M13	Departmental Compulsory Elective I	DCE	4	5
IF-WI-M14	Departmental Compulsory Elective II	DCE	4	5

2. Semester (summer)				
Course-Nr.	Title	Type	H/W	Credits
IF-WI-M02	Database Systems *	CE	4	5
IF-WI-M04	IT Infrastructures *	CE	4	5
IF-WI-M07	Corporate Strategy**	CE	4	5
IF-WI-M08	Social Skills**	CE	4	5
IF-WI-M10	Decision Theory	Mandatory	4	5
IF-WI-M11	Project and Quality Assurance Management	Mandatory	4	5
IF-WI-M15	Departmental Compulsory Elective III	DCE	4	5

* Students must choose three courses from M01-M04 (computer science compulsory electives group).
** Students must choose three courses from M05-M08 (economics compulsory electives group).

3. Semester (winter)				
Course-Nr.	Title	Type	H/W	Credits
IF-WI-M12	Project Study	Mandatory	8	10
IF-WI-M16	Master's Seminar, and Master's Thesis	Mandatory	4	20

Master Program of Studies (Part-Time, 50%)
Studies can be started at the beginning of any semester. When starting in summer semester, the semester are taken in the order 2-1-4-3-5-6.

1. Semester (winter)

Course-Nr.	Title	Type	H/W	Credits
IF-WI-M03	Distributed Systems *	CE	4	5
IF-WI-M05	Controlling**	CE	4	5
IF-WI-M09	Knowledge Discovery in Databases (Data Mining)	Mandatory	4	5

2. Semester (summer)

Course-Nr.	Title	Type	H/W	Credits
IF-WI-M04	IT Infrastructures *	CE	4	5
IF-WI-M07	Corporate Strategy **	CE	4	5
IF-WI-M11	Project and Quality Assurance Management	Mandatory	4	5

3. Semester (winter)

Course-Nr.	Title	Type	H/W	Credits
IF-WI-M01	Information Systems *	CE	4	5
IF-WI-M06	Finance and Investment Management **	CE	4	5
IF-WI-M13	Departmental Compulsory Elective I	DCE	4	5

4. Semester (summer)

Course-Nr.	Title	Type	H/W	Credits
IF-WI-M02	Database Systems *	CE	4	5
IF-WI-M08	Social Skills **	CE	4	5
IF-WI-M10	Decision Theory	Mandatory	4	5

5. Semester

Course-Nr.	Title	Type	H/W	Credits
IF-WI-M12	Project Study	Mandatory	8	10
IF-WI-M13	Departmental Compulsory Elective II	DCE	4	5

6. Semester

Course-Nr.	Title	Type	H/W	Credits
IF-WI-M15	Departmental Compulsory Elective III	DCE	4	5
IF-WI-M16	Master's Seminar, and Master's Thesis	Mandatory	4	20

* Students must choose three courses from M01-M04 (computer science compulsory electives group).
** Students must choose three courses from M05-M08 (economics compulsory electives group).

Course Description

1. Information Systems

Course Nr.: IF-WI-MO1

4 H/W

1. Master-Semester

5 ECTS-Credits

Contents

Introduction to:
* selected R/3 modules
* customizing of R/3 software
* the ABAP programming language

Prerequisites	standard information and control systems used in companies (principles) (e.g. IF-WI-B14)
Objectives	This module conveys advanced knowledge and skills in the field of standard information systems such as SAP R/3 and includes customizing and programming (e.g. ABAP), in particular. Students will be able to customise standard information systems to the corporate organisation, design enhancements and develop those in the appropriate programming languages.
Recommended literature	SAP-Handbücher *Gürkaynar, Eren:* ABAP/4, bhv-Verlag, Kaarst, 2000
Method of instruction	seminars
Method of examination	written exam
Language of instruction	German
Instructor(s)	Stützle, Zimmer

2. Database Systems

Course Nr.: IF-WI-MO2

4 H/W

2. Master-Semester

5 ECTS-Credits

Contents
* Relational databases: logical database design, normal forms, decomposition and synthesis
* Distributed systems: principles and particular aspects such as fragmentation, allocation strategies, transaction concepts, etc.
* Selected implementation strategies such as query optimisation, concurrency control, recovery strategies, etc.
* Object-oriented relational databases: data models and extensions of SQL;
* Multi-dimensional databases: data warehousing and OLAP;
* Particular applications and aspects such as active and deductive database systems, knowledge discovery in databases, etc.

Prerequisites	• principles of computer science obtained for example in a course on information systems, computer science theory etc • solid knowledge of the foundations of ER modelling, the relations model and physical composition of the database systems, e.g. from the Bachelor programme of study (Database Systems module or Data Management module) • programming skills in an object-oriented programming language such as Java, C++ or C# e.g. from the Bachelor programme of study (Software Development module)and SQL (minimum standard: SQL92)
Objectives	This module aims to go beyond the theoretical principles of database systems and to advance skills in the implementation of database systems in practice. Students will acquire advanced knowledge of database systems and their use in practice.
Recommended literature	*Blaha, M.R.:* A Manager's Guide To Database Technology, Prentice-Hall, 2001. *Cremers, A.B.; Griefahn, U.; Hinze, R.:* Deduktive Datenbanken, Vieweg, 1994. *Dittrich, K.; Gatziu, S.:* Aktive Datenbanksysteme, dpunkt, 2.Auflage, 2000. *Elmasri, R.; Navathe, S.:* Fundamentals Of Database Systems, Pearson Education, 3.Auflage, 2000. *Ester M.; Sander J.:* Knowledge Discovery in Databases, Springer, 2000. *Panny, W.; Taudes, A.:* Einführung in den Sprachkern von SQL-99, Springer, 2000. *Stonebraker M.; Moore, D.:* Objektrelationale Datenbanken, Hanser, 1999. *Türker, C.:* SQL: 1999 & SQL: 2003, dpunkt, 2003. *Vossen, G.:* Datenbankmodelle, Datenbanksprachen und Datenbankmanagement-Systeme, Oldenbourg, 3.Auflage, 1999
Method of instruction	seminars with a practicum
Method of examination	written exam
Language of instruction	German
Instructor(s)	Schwenkert

3. Distributed Systems

Course Nr.: IF-WI-MO3

4 H/W

1. Master-Semester

5 ECTS-Credits

Contents

Distributed IT system architectures: topologies, components, structure, functionality, application areas, hard- and software considerations.

Software engineering models for distribution application systems (remote procedure call, distributed objects, distributed components, message queuing systems).

Software engineering: special development aspects of distributed IT systems, development of distributed application systems, design of architectures for distributed systems, formal interface description

Distributed transaction concepts, distributed transaction theory and formal criteria for correctness.

Middleware technologies and applications servers.

Prerequisites	• Principles of data communications, e.g. from the Bachelor programme of studies (Data Communications module) • programming skills in an object-oriented programming language such as Java, C++ or C# e.g. from the Bachelor programme of study (Software Development module) • software engineering e.g. from the Bachelor programme of studies (Software Engineering module)
Objectives	The objective of this course is to expand on theoretical and practical knowledge in the field of software engineering and data communication with aspects of distributed information processing. Students will gain advanced theoretical knowledge and skills that can be used in practice with regard to the development of distributed application systems for corporate information systems using suitable techniques and technologies. They should be able to assess distributed problems in corporate information systems and develop solutions to those problems using adequate technologies.
Recommended literature	*Bernstein, P.A.; Hadzilacos, V.; Goodman, N.:* Concurrency Control and Recovery in Database Systems, Addison-Wesley, 1987. *Comer, Douglas, E.:* Computernetzwerke und Internets, 3. überarbeitete Auflage, Pearson Studium, 2002
Method of instruction	seminars with exercises
Method of examination	written exam
Language of instruction	German
Instructor(s)	Mandl, Pleier, Heigert

4. IT Infrastructures

Course Nr.: IF-WI-MO4

4 H/W

2. Master-Semester

5 ECTS-Credits

Contents
• Modern IT infrastructures and important aspects of technology selection and assessment: networks, systems, computer centres, databases, security functions, etc.
• Aspects of planning, operating and organisation of complex IT infrastructures and the managerial assessment of IT infrastructure decisions
• Planning and use of support infrastructures for information processing systems

Prerequisites	• Principles of data communications • Basic knowledge of databases • Programming skills
Objectives	This module will convey knowledge and understanding of the planning, organisation and operation of complex information and communication infrastructures required for leadership tasks in the IT departments of large corporations. Students will gain knowledge and skills in the planning, organisation and operation of complex information and communication infrastructures, particularly those in large corporations. They will be able to gauge relations between IT infrastructures of large corporations, assess infrastructure decisions and make well-founded technology selections during periods of change.
Recommended literature	*Hegering, Abeck, Neumair:* Integriertes Management ver-netzter Systeme, dpunkt-Verlag, 1999. *IT Service Management - Pocket Guide, OGC, UK, 2001.* *Keen, Digrius:* Making Technology Investments Profitable, John Wiley, 2003. *Krcmar:* Informationsmanagement, Springer, 2003. *Limoncelli, Hogan:* The Practice of System and Network Administration, Addison-Wesley, 2002. *Microsoft Operations Framework - MOF Pocket Guide, 2002. Murphy:* Achieving Business Value from IT, John Wiley 2002. *Van Bon et al:* IT Service Management – eine Einführung, van Haren Publishing, 2002.
Method of instruction	seminars with exercises
Method of examination	written exam. case study with a presentation
Language of instruction	German or English
Instructor(s)	Heigert, Mandl

5. Controlling

Course Nr.: IF-WI-MO5

4 H/W

1. Master-Semester

5 ECTS-Credits

Contents

Introduction to:
• Strategic controlling
• Operations management
• Budgeting processes
• Transfer prices

Prerequisites	• Principles of business economics • Cost accounting
Objectives	This module provides basic theoretical knowledge of planning, budgeting and control in corporations. It will round out the business core courses, particularly cost accounting, from the Bachelor programme of studies. Students will gain continuative knowledge of planning and budgeting procedures and processes and be able to undertake sensible cost accounting and variance analysis.
Recommended literature	*Bachmann, Peter: Grundlagen des Controllings, 2001 Hahn, Dietger:* PuK, 2001. *Horváth, Péter:* Controlling, 2002. *Horváth, Péter:* Controlling umsetzen, 2001. *Peemöller, Volker H.:* Controlling, 2002. *Preißler, Peter R.:* Controlling, 2000. *Reichmann, Thomas:* Controlling mit Kennzahlen und Managementberichten, 2001. *Ziegenbein, Klaus: Controlling, 2002*
Method of instruction	seminars
Method of examination	written exam
Language of instruction	German
Instructor(s)	Stützle, D. Fischer

6. Finance and Investment Management

Course Nr.: IF-WI-MO6

4 H/W

1. Master-Semester

5 ECTS-Credits

Contents

Introduction to:
• Static and dynamic investment processes
• Investment under uncertain expectations
• Tax considerations when investing
• Business appraisal considerations
• Internal and external financing sources
• tax considerations for different financing forms
• special situations requiring external financing

Prerequisites	• principles of business economics • tax theory
Objectives	The objective of this module is to provide basic knowledge of investment processes, appraisal of businesses as well as internal and external financing. It will round out the business core courses from the Bachelor programme of studies. The theoretical knowledge should be applicable to current balance sheets or investment programmes. Students will be able to calculate and assess the advantageousness of investments and investment programmes by companies and make decisions regarding financing measures and capital structure.
Recommended literature	*Hahn, Oswald:* Allgemeine Betriebswirtschaftslehre, neueste Auflage, München, Wien. *Hax, Herbert:* Finanzierung, neueste Auflage, Stuttgart. *Drukarzyk, Jochen:* Finanzierung, neueste Auflage, Stuttgart. *Wöhe, Günter:* Einführung in die Allgemeine Betriebswirtschaftslehre, neueste Auflage, Vahlen, München.
Method of instruction	seminars
Method of examination	written exam
Language of instruction	German
Instructor(s)	Stützle, Zielke

7. Corporate Strategy

Course Nr.: IF-WI-MO7

4 H/W

2. Master-Semester

5 ECTS-Credits

Contents
Among others, the course will cover the following topics:
• Traditional versus modern management strategies
• Causes for change in the corporation
• Strategies and tools for managing change
• Causes for resistance to change
• Roles and challenges for the corporate manager

Prerequisites	• Basic knowledge in the field of corporate management and organisation • An understanding of teamwork
Objectives	The objective of this module is to provide knowledge of the strategies and tools required for the management of a corporation. Students will be able to actively contribute to and guide development in the future corporation and thereby professionally manage change.
Recommended literature	*Senge, Peter M. et al 1996:* Das Fieldbook zur Fünften Disziplin. Stuttgart. *Handy, Charles 1993:* Understanding Organizations. Oxford
Method of instruction	seminars with exercises
Method of examination	written exam or presentation
Language of instruction	German
Instructor(s)	Greiner, Habelt

8. Social Skills

Course Nr.: IF-WI-MO8

4 H/W

2. Master-Semester

5 ECTS-Credits

Contents
• Principles:
  different aspects of social skills (personality traits, active behaviour, passive tolerance); business demands.
• Conceptual exercises:
  students will learn about different soft skills (e.g. values, personality, team leadership and team building, dealing with conflict, ability to criticise, communication, work processes).

Prerequisites	• Basic knowledge in the areas of facilitating, presenting, creativity, work processes, and decision-making theory is desirable • Basic knowledge of information systems and management
Objectives	The objective of this module is to introduce psycho-social problems in the field of information systems and strengthen the student's social competence through methodological hermeneutic analysis. Students will be able to analyse personal or interpersonal problems arising in the field of information systems and make them operational using methodological approaches and social competence in a suitable manner.
Recommended literature	*Covey, S. R.:* Die sieben Wege zur Effektivität, Heyne Business, München. *Seiwert L. J., Gay F.:* Das 1 x 1 der Persönlichkeit, Gabal, Offenbach. *Pell A.:* The complete idiots Guide to team building, alpha books, West. *Robbins S. P.:* Organisation der Unternehmung, Pearson Education, München. *DeMarco T., Lister T.:* Wien wartet auf dich, Hanser, München
Method of instruction	practicum
Method of examination	verbal colloquium, presentation
Language of instruction	German
Instructor(s)	Lindermeier, Regier

9. Knowledge Discovery in Databases (Data Mining)

Course Nr.: IF-WI-M09

4 H/W

1. Master-Semester

5 ECTS-Credits

Contents
- Exploratory and validating data analysis
- Selected methods of data analysis such as cluster analysis and forecasting
- Operations research methods
- Applications of data analysis in management

Prerequisites	Bachelor in Information Systems Particularly the contents of the following courses: • Business Mathematics I and II • Statistics and Operations Research • Business Economics • Software Engineering • Software Development • Database Systems
Objectives	The objective of this module is to provide knowledge of the goals, theory and practice of data analysis and the automated analysis of large amounts of data. Examples: credit checks (Protection Association for General Credit Security, credit cards, etc), classification of customer data (customer relationship management, etc) up to the controversially debated search for wanted persons. Students will become familiar with the use of the methods, techniques, processes and tools of data analysis.
Recommended literature	*Berthold, M; Hand, D. J.:* Intelligent Data Analysis: An Introduction. Springer, Berlin, 1999. *Han, J.; Kamber, M.:* Data Mining. Morgan Kaufmann, San Fransisco, 2000
Method of instruction	seminars
Method of examination	written exam
Language of instruction	German oder Englisch
Instructor(s)	Peters

10. Decision Theory

Course Nr.: IF-WI-M10

4 H/W

2. Master-Semester

5 ECTS-Credits

Contents
- Normative and descriptive decision models
- Decision Making with complete/incomplete information
- Multi criteria and objective decisions making
- Rational decision-making, bounded rationality
- DSS - Decision Support Systems
- Games theory
- Case studies in decision theory

Prerequisites	• Business Mathematics I and II • Statistics and Operations Research • Intermediate Business Administration and Economics
Objectives	The objective of this module is to recognise, assess and optimise one's own decision-making behaviour. Knowledge of significant methods, processes and tools from decision theory and familiarity with computer-assisted decision processes will be provided. Example: more and more decisions are prepared or even made with computer assistance (e.g. automated trade systems for stocks, street lights as aggregated state information). Students will get to know the options for making human decisions more rational and see the inadequacies of human decisions.
Recommended literature	*Eisenführ, F.; Weber, M.:* Rationales Entscheiden. 4. Auflage, Springer, Berlin, 2003. *Meixner O.; Haas, R.:* Computergestützte Entscheidungsfindung. Expert Choice und AHP - innovative Werkzeuge zur Lösung komplexer Probleme, Redline Wirtschaft, Frankfurt, 2002. *Laux, H.:* Entscheidungstheorie. Springer, Berlin, 2002
Method of instruction	seminars with exercises
Method of examination	written exam
Language of instruction	German oder Englisch
Instructor(s)	Peters

11. Project Management and Quality Assurance

Course Nr.: IF-WI-M11

4 H/W

2. Master-Semester

5 ECTS-Credits

Contents
• Project management: principles; project definition, planning, development and implementation; project organisation and controlling; project environment.
• Quality assurance: principles, product quality, process quality, methods, quality policy

Prerequisites	• Basic knowledge in the areas project management and software qualitiy engineering • Basic knowledge of information systems and management is desirable
Objectives	The objective of this module is to convey knowledge of project- and quality-specific aspects from selected information systems areas. Possible areas include the acquisition, use, development and maintenance of IT systems in a corporate environment. Students will learn project- and quality-specific aspects which can be applied to IT projects.
Recommended literature	*Balzert H.:* Lehrbuch der Software-Technik, Band 2, Spektrum, Heidelberg. *Kerzner H.:* Projektmanagement Fallstudien, mitp, Bonn. *Süß G., Ehrl-Gruber B.:* Praxishandbuch Projektmanagement, WEKA, Augsburg. *Myers G. J.:* Methodisches Testen von Progammen, Oldenbourg, München. *Riedemann E. H.:* Testmethoden für sequentielle und nebenläufige Software-Systeme, Teubner, Stuttgart. *Wallmüller E.:* Software-Qualitätsmanagement in der Praxis, Hanser, München
Method of instruction	seminars
Method of examination	written exam
Language of instruction	German
Instructor(s)	Lindermeier, Regier

12. Project Study

Course Nr.: IF-WI-M12

8 H/W

3. Semester

10 ECTS-Credits

Contents
The course topics will be chosen in order to enable effective work and timely achievement of goals. The goal is to participate in projects taking place in corporate practice.

Aspects of the project may include: defining demands, setting up project infrastructure, configuration management, change management, development. Quality assurance, approval of project results

Prerequisites	• Basic knowledge of information systems • Basic knowledge of project management e.g. from the Bachelor programme of studies (Information Systems and Management module)
Objectives	The objective of this module is training the use of work practices and techniques during project development as well as situational learning based on a concrete, complex project in the field of information systems under realistic conditions. Students will acquire the ability to implement solution-oriented work practices and techniques during the project in order to apply theoretically acquired learning material to concrete projects.
Recommended literature	*Süß G., Ehrl-Gruber B.:* Praxishandbuch Projektmanagement, WEKA, Augsburg. *Kellner H.:* Die Kunst DV-Projekte zum Erfolg zu führen, Hanser, München. *DeMarco T., Lister T.:* Wien wartet auf dich, Hanser, München. *DeMarco T.:* Der Termin, Hanser, München
Method of instruction	practicum
Method of examination	project and verbal colloquium
Language of instruction	German
Instructor(s)	Heigert, Lindermeier, Mandl, Peters

Course Nr.: IF-WI-M13

4 H/W

1. Semester

5 ECTS-Credits

Contents

Immersion in special topics: independent, scientific work by students on a topic. Self-confident presentation and defence: presentation of results through adequate use of multimedia tools.

Prerequisites	basic knowledge of information systems Basic skill in producing research projects Basic abilty to present results
Objectives	Objectives: The objective of this module is the immersion in independent study, presentation and representation of selected topics in information systems. Comptencies: Students will advance their ability to work on complex matters in a scientific manner as well as to present and defend them.
Method of instruction	seminars
Recommended literature	*Disterer, Georg:* Studienarbeiten schreiben, Springer Verlag, 1998 Student selection based on research project Selection of literature according to individual lecture topics
Method of examination	The student's theoretical knowledge will be tested though a colloquium. In addition, the student must work out and present a research project.
Language of instruction	German
Instructor(s)	Mandl, Heigert, Möncke, Greiner and others

Course Nr.: IF-WI-M14

4 H/W

1. Semester

5 ECTS-Credits

Contents

Immersion in special topics: independent, scientific work by students on a topic. Self-confident presentation and defence: presentation of results through adequate use of multimedia tools.

Prerequisites	basic knowledge of information systems Basic skill in producing research projects Basic abilty to present results
Objectives	*Objectives:* The objective of this module is the immersion in independent study, presentation and representation of selected topics in information systems. *Comptencies:* Students will advance their ability to work on complex matters in a scientific manner as well as to present and defend them.
Method of instruction	seminars
Literatur	*Disterer, Georg:* Studienarbeiten schreiben, Springer Verlag, 1998 Student selection based on research project Selection of literature according to individual lecture topics.
Method of examination	The student's theoretical knowledge will be tested though a colloquium. In addition, the student must work out and present a research project.
Language of instruction	German
Instructor(s)	Mandl, Heigert, Möncke, Greiner and others

15. Departmental Compulsory Elective III

Course Nr.: IF-WI-M15

4 H/W

2. Semester

5 ECTS-Credits

Contents

Immersion in special topics: independent, scientific work by students on a topic. Self-confident presentation and defence: presentation of results through adequate use of multimedia tools.

Prerequisites	basic knowledge of information systems Basic skill in producing research projects Basic abilty to present results
Objectives	Objectives: The objective of this module is the immersion in independent study, presentation and representation of selected topics in information systems. Comptencies: Students will advance their ability to work on complex matters in a scientific manner as well as to present and defend them.
Method of instruction	seminars
Recommended literature	*Disterer, Georg:* Studienarbeiten schreiben, Springer Verlag, 1998 Student selection based on research project Selection of literature according to individual lecture topics
Method of examination	The student's theoretical knowledge will be tested though a colloquium. In addition, the student must work out and present a research project.
Language of instruction	German
Instructor(s)	Mandl, Heigert, Möncke, Greiner and others

16. Master's seminar and Master's thesis

Course Nr.: IF-WI-M16

Seminar: 4 H/W

3. Master-Semester

20 ECTS-Credits

Contents

• Master's seminar: the lectures will provide students with enriched skills necessary to work in an independent, methodical and scientifically-based manner. Presentation and discussion of the thesis.
• Master's thesis: independent study of a demanding interdisciplinary problem statement based on scientific and methodical principles. The thesis should demonstrate a connection to practice. The study of topics from industry is encouraged.

Prerequisites	Fundamental knowledge of information systems commensurate with the 2. semester of the Master's programme of study
Objectives	The objective of this module is the realisation of a final work with advanced supervision during the course. Students will advance their ability to write a complex and comprehensive scientific final work.
Method of instruction	seminars
Method of examination	presentation and a Master's thesis
Language of instruction	German or Englisch
Instructor(s)	all professors in Information Systems

38. Field Trip

Course Nr.: IF-WI-M17

1. - 3. Semester

Contents

The length and extent of the field trip depends on the situation at hand. The maximum investment generally should not exceed a weeks effort. Students do not have to make up the hours in other courses lost due to the field trips. Therefore, the total amount of hours remains the same.

Prerequisites	None
Objectives	Knowledge of operational processes and the ability to integrate the knowledge gained in class in real-world business settings. Study of current situations considering particularly national and international factors.
Method of instruction	field trip
Examination	none