

# Module Catalog

## Foundations in Business Administration and Information Systems for Students of other fields of studies

University of Mannheim

(Last update: January 2021)

**Index**

Part 1: Course Overview ..... 3

Part 2: Detailed Information on the Courses ..... 4

- 1. Business Administration ..... 4
  - 1.1 Mathematics of Finance ..... 4
  - 1.2 Quantitative Methods ..... 6
  - 1.3 Basics of Financial Accounting..... 7
  - 1.4 Management Accounting ..... 9
  - 1.5 Finance ..... 10
  - 1.6 Marketing ..... 11
  - 1.7 Operations Management ..... 13
  - 1.8 Management ..... 14
  - 1.9. Business Ethics..... 16
- 2. Business Informatics..... 18

## Part 1: Course Overview

Detailed information on the courses can be found in part 2.

### 1. Business Administration

Modules	ECTS
Mathematics of Finance	3
Quantitative Methods	3
Basics of Financial Accounting	6
Management Accounting	6
Finance	6
Marketing	6
Operations Management	6
Management	6
Business Ethics	3

### 2. Information Systems

Modules	ECTS
IS 401 Integrated Information Systems	6

## Part 2: Detailed Information on the Courses

### General Information:

- Every course generally takes one semester.
- Further information regarding requirements for passing exams (prerequisite for gaining credits) can be found in the Examination Regulations.

### 1. Business Administration

#### 1.1 Mathematics of Finance

<b>Module: Mathematics of Finance</b>		
<b>Contents:</b>		
<ul style="list-style-type: none"> <li>• Presentation of different interest models</li> <li>• Valuation of cash flows</li> <li>• Mathematics of bonds and annuities</li> <li>• Bond/yield valuation</li> </ul>		
<b>Learning outcomes:</b>		
Students are supposed to learn about and apply the fundamental methods of the mathematics of finance, as well as its application in business administration. The lecture is concerned with two basic problems. On the one hand, a payment flow will be valued (interests, dividends, bond investment). For that, specific interest models will be introduced. On the other hand, the interest yield of different investments will be defined. In addition, the mathematics of bonds and annuities will be thoroughly discussed.		
<b>Prerequisites:</b>		
<b>Formal:</b> -		
<b>Recommended:</b> -		
<b>Obligatory registration:</b> no		<b>Further information on registration:</b>
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	2*	2*
Exercise class	2*	2*
Tutorial	2*	2*
ECTS in total		3
<b>Form of assessment</b>		Written exam (45 min.)
<b>Preliminary course work</b>		-
<b>Lecturer/Person in charge</b>		Prof. Dr. Peter Albrecht
<b>Duration of module</b>		*1/2 semester

<b>Offering</b>	Fall semester (first half)
<b>Language</b>	German
<b>Grade</b>	graded
<b>Range of application</b>	B.Sc. Economics, B.Sc. Business Education, B.A. Culture & Economy, LL.B. Unternehmensjurist, B.A. Sociology, B.A. Politics, LAG Politics/ Business Economics

## 1.2 Quantitative Methods

<b>Module: Quantitative Methods</b>		
<b>Contents:</b>		
<ul style="list-style-type: none"> <li>• Basics of linear algebra</li> <li>• Solvability of linear systems of equations</li> <li>• Linear optimization</li> <li>• Simplex algorithm</li> </ul>		
<b>Learning outcomes:</b>		
<p>Students are supposed to learn about the fundamental methods of linear algebra and apply them to typical problems in business administration. In particular, different algorithms for the solution of linear systems of equations will be discussed and the concept of linear optimization will be introduced. The solution of these optimization problems plays an important role.</p> <p>After this class, students should be able to demonstrate and apply program-specific knowledge to identify and solve problems in the respective academic areas.</p>		
<b>Prerequisites:</b>		
<b>Formal:</b> -		
<b>Recommended:</b> -		
<b>Obligatory registration:</b> no	<b>Further information on registration:</b> -	
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	2*	2*
Exercise class	2*	2*
Tutorial	2*	2*
ECTS in total	3	
<b>Form of assessment</b>	Written exam (45 min.), optional bonus exercises during the semester	
<b>Preliminary Course Work</b>	-	
<b>Lecturer/Person in charge</b>	Prof. Dr. Cornelia Schön	
<b>Duration of module</b>	*1/2 semester	
<b>Offering</b>	Fall semester (second half)	
<b>Language</b>	German	
<b>Grade</b>	graded	
<b>Range of application</b>	B.Sc. Economics, B.Sc. Business Education, B.A. Culture & Economy, LL.B. Unternehmensjurist, B.A. Sociology, B.A. Politics, LAG Politics/ Business Economics, B.Ed. Lehramt Gymnasium	

### 1.3 Basics of Financial Accounting

<b>Module: Basics of Financial Accounting</b>		
<b>Contents:</b>		
<ul style="list-style-type: none"> <li>• Introduction to accounting <ul style="list-style-type: none"> <li>· Inventory and balance sheet</li> <li>· Business transactions not affecting and affecting profit and loss</li> </ul> </li> <li>• Accounting principles and book-keeping techniques <ul style="list-style-type: none"> <li>· Goods traffic</li> <li>· Value-added tax</li> <li>· Acquisition costs</li> <li>· Revenues and payment transactions</li> <li>· Amortization of fixed and current assets</li> <li>· Accruals and deferrals</li> <li>· Provisions</li> </ul> </li> <li>• Production costs and income statement</li> </ul>		
<b>Learning outcomes:</b>		
<p>The students acquire well-founded knowledge of accounting and accounting techniques, as well as a fundamental understanding of the principles of orderly book-keeping (<i>GoB</i>).</p> <p>Based on relevant business transactions, the double entry book-keeping system is presented and applied to concrete applications in practice. Students can individually book business transactions as well as apply the necessary techniques to both open and close the respective accounts.</p> <p>Within the exercise and tutorial classes, students look more deeply into the topics covered in the lecture.</p>		
<b>Prerequisites:</b>		
<b>Formal:</b> -		
<b>Recommended:</b> -		
<b>Obligatory registration:</b> no		<b>Further information on registration:</b> -
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	2	3
Excercise	1	2
Tutorial	2	2
ECTS in total		6
<b>Form of assessment</b>	Written exam (90 min.)	
<b>Preliminary Course Work</b>		
<b>Lecturer/Person in charge</b>	Prof. Dr. Philipp Dörrenberg, Prof. Dr. Felix Vetter	
<b>Duration of module</b>	1 semester	
<b>Offering</b>	Spring semester	
<b>Language</b>	German	
<b>Grade</b>	graded	

<b>Range of application</b>	B.Sc. Business Informatics, B.Sc. Business Education, B.A. Culture & Economy, LL.B. Unternehmensjurist, B.Sc. Economics, B.Sc. Business Mathematics, B.A. Sociology, B.A. Politics, LAG Politics/Business Economics, M.Sc. Psychology, B.Ed. Lehramt Gymnasium
-----------------------------	--



## 1.4 Management Accounting

<b>Module: Management Accounting</b>		
<b>Contents:</b>		
<ul style="list-style-type: none"> <li>• Basic terms of cost and profit accounting</li> <li>• Calculation, cost center and cost type accounting</li> <li>• Cost schedule and cost function</li> <li>• Profit and loss account</li> <li>• Result analysis (e.g. Break even analysis)</li> <li>• Cost information for operative decisions and deviation analysis</li> <li>• Process cost calculation</li> </ul>		
<b>Learning outcomes:</b>		
Students become familiar with the fundamental concepts of Management Accounting. They can retrace the accounting flow and independently solve calculations from the field of cost and profit accounting, as well as correctly interpret the results of the calculations. Furthermore, the students can manage accounting problems from corporate practice.		
<b>Prerequisites:</b>		
<b>Formal:</b> -		
<b>Recommended:</b> -		
<b>Obligatory registration:</b> no	<b>Further information on registration:</b>	
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Tutorial	2	4
Exercise class	2	4
ECTS in total	6	
<b>Form of assessment</b>	Written exam (90 min.)	
<b>Preliminary Course Work</b>	-	
<b>Lecturer/Person in charge</b>	Prof. Dr. Jannis Bischof	
<b>Duration of module</b>	1 semester	
<b>Offering</b>	Spring semester	
<b>Language</b>	German	
<b>Grade</b>	-	
<b>Range of application</b>	B.Sc. Business Informatics, B.Sc. Business Education, B.A. Culture & Economy, LL.B. Unternehmensjurist, B.Sc. Economics, B.Sc. Business Mathematics, B.A. Sociology, B.A. Politics, LAG Politics/Business Economics, M.Sc. Psychology	

## 1.5 Finance

<b>Module: Finance</b>		
<b>Contents:</b>		
<ol style="list-style-type: none"> <li>1. Principles of finance, decision making and accounting</li> <li>2. Goals, Governance and legal form of the Firm</li> <li>3. Investment calculus, NPV method</li> <li>4. Internal rate of return and Payback period rule</li> <li>5. Financing forms, Equity/Debt Issuing</li> <li>6. Risk and Return</li> <li>7. Portfolio Theory</li> <li>8. CAPM</li> <li>9. Capital Structure and WACC</li> </ol>		
<b>Learning outcomes:</b>		
<p>Participants of this Course are familiar with different investment methods and learn how to make decisions under certainty employing the most prevalent methods from practice. Moreover, they know the most important funding sources of companies and are able to price common securities employing basic methods.</p> <p>Participants of the accompanying tutorials work successfully in teams and are able to present exercises in a clear and convincing manner.</p>		
<b>Prerequisites:</b>		
<b>Formal:</b> -		
<b>Recommended:</b> -		
<b>Obligatory registration:</b> no		<b>Further information on registration:</b> -
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	2	5
Exercise class	1	4
ECTS in total		6
<b>Form of assessment</b>	Written exam (90 min.)	
<b>Preliminary Course Work</b>	-	
<b>Lecturer/Person in charge</b>	Dr. Jiri Tresl, Thomas Johann	
<b>Duration of module</b>	1 semester	
<b>Offering</b>	Fall semester	
<b>Language</b>	German	
<b>Grade</b>	graded	
<b>Range of application</b>	B.Sc. Business Informatics, B.Sc. Business Education, B.A. Culture & Economy, LL.B. Unternehmensjurist, B.Sc. Economics, B.Sc. Business Mathematics, B.A. Sociology, B.A. Politics, LAG Politics/Business Economics, M.Sc. Psychology, B.Ed. Lehramt Gymnasium	

## 1.6 Marketing

<b>Module: Marketing</b>		
<b>Contents:</b>		
<ol style="list-style-type: none"> <li>1. General basics</li> <li>2. Theoretical perspectives: consumer behavior</li> <li>3. Information-related perspective: foundations of market research</li> <li>4. Strategic perspective: strategic marketing</li> <li>5. Instrumental perspective: <ol style="list-style-type: none"> <li>5.1 Foundations of product policy</li> <li>5.2 Foundations of price policy</li> <li>5.3 Foundations of communication policy</li> <li>5.4 Foundations of distribution and sales policy</li> </ol> </li> <li>6. Institutional perspective: <ol style="list-style-type: none"> <li>6.1 Services marketing</li> <li>6.2 Business-to-business marketing</li> <li>6.3 International marketing</li> </ol> </li> </ol>		
<b>Learning outcomes:</b>		
<p>Students gain a thorough overview on relevant questions and functions of marketing and learn basic as well as specific concepts of it. The aim is to provide participants a comprehensive understanding of marketing concepts to apply them for identifying and solving questions related to marketing in business decision making processes. Moreover, students acquire the competence to critically reflect marketing decisions and to apply basic mathematical methods for analyzing and addressing relevant questions of marketing.</p>		
<b>Prerequisites:</b>		
<b>Formal:</b> -		
<b>Recommended:</b> -		
<b>Obligatory registration:</b> no		<b>Further information on registration:</b> -
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	2	3
Exercise class	1	2
Tutorial	2	2
ECTS in total		6
<b>Form of assessment</b>		Written exam (90 min.)
<b>Preliminary Course Work</b>		-
<b>Lecturer/Person in charge</b>		Prof. Dr. Dr. h.c. mult. Christian Homburg / Prof. Dr. Sabine Kuester / Prof. Dr. Florian Stahl / Prof. Dr. Florian Kraus

<b>Duration of module</b>	1 semester
<b>Offering</b>	Fall semester
<b>Language</b>	German
<b>Grade</b>	graded
<b>Range of application</b>	B.Sc. Business Informatics, B.Sc. Business Education, B.A. Culture & Economy, LL.B. Unternehmensjurist, B.Sc. Psychology, B.Sc. Economics, B.Sc. Business Mathematics, B.A. Sociology, B.A. Politics, LAG Politics/Business Economics, M.Sc. Psychology

## 1.7 Operations Management

<b>Module: Operations Management</b>		
<b>Contents:</b> Role of operations management; fundamental planning tasks of operation management; planning methods; main features of production planning, transportation planning and inventory management.		
<b>Learning outcomes:</b> Students acquire and apply basic concepts, theories and methods of operations management. This includes: <ul style="list-style-type: none"> <li>➤ Understanding of essential planning tasks of operations management</li> <li>➤ Understanding of key trade-offs in operations management</li> <li>➤ Ability to structure and model complex planning tasks</li> <li>➤ Familiarity with common solution methods for planning tasks in operations management</li> </ul>		
<b>Prerequisites:</b> <b>Formal:</b> - <b>Recommended:</b> Mathematics, Management		
<b>Obligatory registration:</b> no		<b>Further information on registration:</b> -
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	2	2
Exercise class	2	2
Tutorial	2	2
ECTS in total		6
<b>Form of assessment</b>	Written exam (90 min.)	
<b>Preliminary Course Work</b>	-	
<b>Lecturer/Person in charge</b>	Prof. Dr. Raik Stolletz / Prof. Dr. Moritz Fleischmann	
<b>Duration of module</b>	1 semester	
<b>Offering</b>	Fall semester	
<b>Language</b>	German	
<b>Grade</b>	graded	
<b>Range of application</b>	B.Sc. Business Informatics, B.Sc. Business Education, B.A. Culture & Economy, B.Sc. Economics, B.Sc. Business Mathematics, B.A. Sociology, B.A. Politics, LAG Politics/Business Economics, M.Sc. Psychology	

## 1.8 Management

<b>Module: Management</b>		
<b>Contents:</b> This introductory course provides students who chose business administration as a minor subject with the fundamental understanding of management of organizations. First, the lecture gives an overview about the importance of management in general, and it highlights its relevance as an academic discipline. Furthermore, it discusses its theoretical and conceptual foundations, and elaborates on the management functions planning and control, organization, human resources, and leadership. Working on the topics management and ethics, international management, nonprofit management and public management, the course illustrates current challenges in the field of management.		
<b>Learning outcomes:</b> By the end of the module students will be able to: <ul style="list-style-type: none"> <li>• explain the importance and the historical development of management, and of the academic discipline of management,</li> <li>• explain the theoretical and conceptual foundations of management, and to apply them to real life examples,</li> <li>• explain the process of management including its functions planning and control, organization, human resources, and leadership,</li> <li>• understand the conflict between management and ethics, and to explain problems resulting therefrom,</li> <li>• explain current challenges (e. g. internationalisation) and areas (e. g. public and non-profit management) in the field of management.</li> </ul>		
<b>Prerequisites:</b> <b>Formal:</b> - <b>Recommended:</b> -		
<b>Obligatory registration:</b> no	<b>Further information on registration:</b> -	
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture (online)	-	7
Exercise class	1	4
ECTS in total	6	
<b>Form of assessment</b>	Written exam (90 min.)	
<b>Preliminary Course Work</b>	-	
<b>Lecturer/Person in charge</b>	Prof. Dr. Bernd Helmig	
<b>Duration of module</b>	1 semester	
<b>Offering</b>	Spring semester	
<b>Language</b>	German	

<b>Grade</b>	graded
<b>Range of application</b>	B.Sc. Business Informatics, B.Sc. Business Education, B.A. Culture & Economy, LL.B. Unternehmensjurist, B.Sc. Psychology, B.Sc. Economics, B.Sc. Business Mathematics, B.A. Sociology, B.A. Politics, LAG Politics/Business Economics, M.Sc. Psychology, B.Ed. Lehramt Gymnasium

## 1.9. Business Ethics

Offer of the course Business Ethics by the School of the Humanities.

<b>Module: Business Ethics</b>		
<b>Contents:</b> Presentation and discussion of fundamental approaches in normative ethics (utilitarianism, social contract theory, Kantianism); introduction to the basic terms of business ethics (shareholder vs. stakeholder, relation of ethics and economics/normative vs. empirical projects); fundamental questions in business ethics: moral quality of the free market/of capitalism (distribution/inequality; externalities etc.); presentation and discussion of standard theories of business ethics (Homann, Ulrich etc.). Case studies (variable: e.g. Ford Pinto; corporate downsizing; sweatshops; advertising). Special ethical issues (variable: e.g. insider training; whistle-blowing). Guest lectures on social business etc.		
<b>Learning outcomes:</b> Specialized competence: <ul style="list-style-type: none"> <li>• introductory knowledge of basic positions in business ethics and in corporate ethics</li> <li>• practicing a critical competence on case studies</li> <li>• acquiring background knowledge of this specific area independently</li> <li>• formulating and categorizing the pertinent contents in a written form</li> </ul> Methodical competence: <ul style="list-style-type: none"> <li>• understanding, processing and formulating the contents in a written form</li> <li>• reconstructing and evaluating the contents conveyed</li> <li>• critical and independent thinking and reasoning</li> </ul> Personal competence: <ul style="list-style-type: none"> <li>• identifying the economic function of ethics and morals</li> </ul> The course should increase the motivation to act ethically, e.g. also by broadening the horizon of possibilities.		
<b>Prerequisites:</b> <b>Formal:</b> - <b>Recommended:</b> -		
<b>Obligatory registration:</b> no	<b>Further information on registration:</b> -	
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	4	2
ECTS in total		3
<b>Form of assessment</b>	Written exam (60 min.)	
<b>Preliminary Course Work</b>	-	
<b>Lecturer/Person in charge</b>	PD Dr. Julius Schälike	
<b>Duration of module</b>	1 semester	
<b>Offering</b>	Fall semester	
<b>Language</b>	German	



<b>Grade</b>	graded
<b>Range of application</b>	Bachelor Culture and Economy (subject area: Business Administration), Bachelor Culture and Economy: Philosophy (subject area: Economics), Bachelor Economics and Business Education, Teacher Education Philosophy/Ethics; Master Psychology (minor: Philosophy)

## 2. Business Informatics

<b>Module: IS 401 Integrated Information Systems</b>		
<b>Contents:</b> This course first outlines the basics of data and business process modelling based on wide-spread approaches such as entity relationship diagrams, event-driven process chains (EPC), and business process model and notation (BPMN). The remainder of the course then focuses on the use and purpose of integrated information systems across different functional areas in industrial companies. Finally, basics of management support systems such as business intelligence systems are addressed.		
<ul style="list-style-type: none"> <li>- Business Process Modelling</li> <li>- Application Systems in             <ul style="list-style-type: none"> <li>o Research and Development</li> <li>o Marketing and Sales</li> <li>o Procurement and Warehousing</li> <li>o Production</li> <li>o Shipping and Customer Service</li> <li>o Finance, Accounting, HR</li> </ul> </li> <li>- Planning and Control Systems</li> </ul>		
<b>Literature:</b>		
<ul style="list-style-type: none"> <li>• Mertens et al.: Grundzüge der Wirtschaftsinformatik, 7. Aufl., Springer 2001</li> <li>• Mertens: Integrierte Informationsverarbeitung, 2 Bde., Bd.1, Operative Systeme in der Industrie, 16. Aufl., Gabler 2007</li> <li>• Wigand et al.: Introduction to Business Information Systems, Springer 2003</li> </ul>		
<b>Learning outcomes:</b>		
After attending the lecture, exercises and tutorials students are able to:		
<ul style="list-style-type: none"> <li>• model complex business processes based on popular modelling techniques</li> <li>• discuss the requirements, characteristics and effects of integrated information systems in industrial companies, including complex process interdependencies</li> <li>• complete basic tasks from different functional areas in a wide-spread integrated information system.</li> </ul>		
<b>Prerequisites:</b>		
<b>Formal:</b> -		
<b>Recommended:</b> -		
<b>Obligatory registration:</b> no	<b>Further information on registration:</b> registration for optional tutorials after first lecture session	
<b>Courses</b>	<b>Hours per week</b>	<b>Self-study</b>
Lecture	2	3
Exercise	1	2
Tutorial	2	2

<b>ECTS in total</b>	6
<b>Form of assessment</b>	Written exam (90 min.)
<b>Preliminary Course Work</b>	-
<b>Lecturer/Person in charge</b>	Prof. Dr. Armin Heinzl
<b>Duration of module</b>	1 semester
<b>Offering</b>	Spring semester
<b>Language</b>	English
<b>Grade</b>	graded
<b>Range of application</b>	B.Sc. BWL, B.Sc. Wirtschaftspädagogik, B.A. Kultur & Wirtschaft