

## Module Handbook

TUK MODHB Homepage

# Module WIW-BWL-WIN1-M-1

Business Information Systems I (M, 3.0 LP)

## Module Identification

Module Number	Module Name	CP (Effort)
WIW-BWL-WIN1-M-1	<i>Business Information Systems I</i>	3.0 CP (90 h)
WIW-BWL-IS1-M-1	<i>Information Systems I</i>	3.0 CP (90 h)

## Basedata

CP, Effort	3.0 CP = 90 h
Position of the semester	1 Sem. in WiSe
Level	[1] Bachelor (General)
Language	[DE] German
Module Manager	Wendt, Oliver, Prof. Dr. (PROF   DEPT: WIW)
Lecturers	Kloster, Konstantin (WMA   DEPT: WIW)
Area of study	[WIW-WIN] Business Information Systems and Operations Research
Reference course of study	[WIW-82.21-SG#2009] B.Sc. Business Studies (2009) [2009]
Lifecycle-State	[NORM] Active

## Courses

Type/SWS	Course Number	Choice in Module-Part	SL	PL	CP	Sem.
1V+1U	WIW-BWL-WIN1-K-1	P	-	PL1	3.0	WiSe

- About [WIW-BWL-WIN1-K-1]: Title: "Business Information Systems I"; Presence-Time: 30 h; Self-Study: 60 h

## Examination achievement PL1

- Form of examination: **written exam (Klausur) (60 Min.)**
- Examination Frequency: each semester
- Examination number: 32320 ("Business Information Systems I")

## Evaluation of grades

The grade of the module examination is also the module grade.

100% written Exam, passing grade might be improved by collecting bonus points during the lecture or the exercise.

### Contents

#### From [WIW-BWL-WIN1-K-1] Business Information Systems I:

Lecture Business Information Systems 1:

- Information and Knowledge Management
  - Management of information
  - Management of knowledge
  - Properties of information objects and processing of information objects
- Planning, implementation, and roll-out of business information systems
  - Development of custom software
  - Choosing standard software
- Design and analysis of processes
  - Data storage and data management
  - Functions modeling
  - Process modeling
- Selected topics in business information systems:
  - Encryption
  - Decentralized databases
  - Standardization in net effect markets

Exercise Business Information Systems 1:

- Data storage and data management
  - Normalization of relational databases
  - Structured query language
  - Entity-relationship models
- Functions modeling
  - Flowcharts
  - Nassi-Shneiderman diagrams
- Process modeling
  - Event-driven process chain
  - Petri nets
  - Project networks
- Standardization and file allocation problems

### Competencies / intended learning achievements

When completing the module, students should be able to

- Recognize tasks for information processing.
- Explain the differences between custom software and standard software.
- Judge what methods are used to develop software.
- Suggest relevant tools to model business processes, single business tasks and the relationship of information.
- Describe algorithms using graphical modeling tools.
- Organize, store and retrieve data from databases using structured languages.
- Know use cases for monolithic and distributed databases.

- Understand the basis of modern encryption methods.
- Analyze economic problems in networks.

## Literature

From [WIW-BWL-WIN1-K-1] Business Information Systems I:

Slides are made available that contains an extensive list of complementary literature.

## Requirements for attendance of the module (informal)

None

## Requirements for attendance of the module (formal)

None

## References to Module / Module Number [WIW-BWL-IS1-M-1]

Course of Study	Section	Choice/Obligation
[WIW-82.21-SG#2009] B.Sc. Business Studies (2009) [2009]	[Fundamentals] Basics in Management and Business Administration	[P] Compulsory
[WIW-82.175-SG#2009] B.Sc. Business Administration and Engineering specialising in Environmental and Process Engineering (2009) [2009]	[Fundamentals] Business and Management - Compulsory	[P] Compulsory
[WIW-82.176-SG#2009] B.Sc. Business Administration and Engineering specialising in Computer Science (2009) [2009]	[Fundamentals] Business and Management - Compulsory	[P] Compulsory
[WIW-82.177-SG#2009] B.Sc. Business Administration and Engineering specialising in Chemistry (2009) [2009]	[Fundamentals] Business and Management - Compulsory	[P] Compulsory
[WIW-82.178-SG#2009] B.Sc. Business Administration and Engineering specialising in Electrical Engineering (2009) [2009]	[Fundamentals] Business and Management - Compulsory	[P] Compulsory
[WIW-82.179-SG#2009] B.Sc. Business Administration and Engineering specialising in Mechanical Engineering (2009) [2009]	[Fundamentals] Business and Management - Compulsory	[P] Compulsory
[WIW-82.789-SG#2009] B.Sc. Business Studies with Technical Qualifications (2009) [2009]	[Fundamentals] Basics in Management and Business Administration	[P] Compulsory
[WIW-82.-SG#2021] B.Sc. Business Studies (2021) [2021]	[Core Modules (non specialised)] Profile Area of Economic Sciences	[WP] Compulsory Elective
[WIW-82.-SG#2021] B.Sc. Business Studies with Technical Qualifications (2021) [2021]	[Core Modules (non specialised)] Profile Area of Economic Sciences	[WP] Compulsory Elective
[WIW-82.-SG#2021] B.Sc. Business Administration and Engineering specialising in Chemistry (2021) [2021]	[Core Modules (non specialised)] Profile Area of Economic Sciences	[WP] Compulsory Elective
[WIW-82.-SG#2021] B.Sc. Business Administration and Engineering specialising in Electrical Engineering (2021) [2021]	[Core Modules (non specialised)] Profile Area of Economic Sciences	[WP] Compulsory Elective

[WIW-82.?-SG#2021] B.Sc. Business Administration and Engineering specialising in Computer Science (2021) [2021]	[Core Modules (non specialised)] Profile Area of Economic Sciences	[WP] Compulsory Elective
[WIW-82.?-SG#2021] B.Sc. Business Administration and Engineering specialising in Energy and Process Engineering (2021) [2021]	[Core Modules (non specialised)] Profile area of Economic Sciences	[WP] Compulsory Elective
[WIW-82.?-SG#2021] B.Sc. Business Administration and Engineering specialising in Mechanical Engineering (2021) [2021]	[Core Modules (non specialised)] Profile Area of Economic Sciences	[WP] Compulsory Elective

**Module-Pool**

**Name**

[MV-MB-BWL-2022-MPOOL-4]	Wahlpflichtmodule Bachelor Maschinenbau mit BWL
[MV-MB-BWL-2022-MPOOL-6]	Wahlpflichtmodule Master Maschinenbau mit BWL
[MV-MBBWL-MPOOL-6]	Wahlpflichtmodule Maschinenbau mit Betriebswirtschaftslehre

**References to Module / Module Number [WIW-BWL-WIN1-M-1]**

Course of Study	Section	Choice/Obligation
[CHE-82.B41-SG#2020] B.Sc. Chemistry with Focus Economics [2020]	[Compulsory Elective Modules] Module der Wirtschaftswissenschaften (Wahlpflichtmodule)	[WP] Compulsory Elective
[CHE-88.707-SG#2020] M.Sc. Business Chemistry [2020]	[Compulsory Elective Modules] Grundmodule der Wirtschaftswissenschaften	[WP] Compulsory Elective