Amtliches Mitteilungsblatt

Wirtschaftswissenschaftliche Fakultät
Mathematisch-Naturwissenschaftliche Fakultät

Erste Änderung der Studien- und Prüfungsordnung

für den Masterstudiengang Wirtschaftsinformatik (AMB Nr. 50/2009)

Herausgeber:	Der Präsident der Humboldt-Universität zu Berlin Unter den Linden 6, 10099 Berlin	**Nr. 127/2014**
Satz und Vertrieb:	Stabsstelle Presse- und Öffentlichkeitsarbeit	**23. Jahrgang/19. November 2014**

Erste Änderung der Studienordnung
für den Masterstudiengang „Wirtschaftsinformatik“

Gemäß § 17 Abs. 1 Ziffer 3 der Verfassung der Humboldt-Universität zu Berlin (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 47/2013) hat die zuständige Gemeinsame Kommission im Umlaufverfahren am 19. September 2014 sowie der Fakultätsrat der Wirtschaftswissenschaftlichen Fakultät am 15. Oktober 2014 und der Fakultätsrat der Mathematisch-Naturwissenschaftlichen Fakultät am 15. Oktober 2014 die folgende Änderung der Studienordnung (Amtliches Mitteilungsblatt Nr. 50/2009 vom 10. November 2009) erlassen.[*]

Anlage: Modulbeschreibungen

Die Module „Advanced Information Systems I” und „IT Security & Privacy“ ersetzen die gleichnamigen Module aus der Anlage der Studienordnung von 2009.

Die Module „Applied Predictive Analytics“, „Business Process Management“ und „E-Business & Online Marketing“ ergänzen das Angebot an Wahlpflichtmodulen.

In-Kraft-Treten

Die erste Änderung der Studienordnung (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 50/2009 vom 10. November 2009) tritt mit Wirkung vom 01. Oktober 2014 in Kraft.

[*] Die Universitätsleitung hat die Änderung der Studienordnung am 17. November 2014 bestätigt.

Anlage: Modulbeschreibungen

<table>
<tr><td colspan="3">Pflichtmodul: Advanced Information Systems I</td><td>Studienpunkte: 9</td></tr>
<tr><td colspan="4">Learning Objectives:
The module is concerned with the theories, concepts, and practices of Information Systems, emphasizing the support of managerial decision making by means of formal, data oriented methods. Students have the opportunity to develop a variety of skills, including:
▪ Students understand the peculiarities of analytical as opposed to operational information systems.
▪ Students are aware of the specific requirements of analytical data management and how these are addressed in the context of data warehousing.
▪ Students possess a basic understanding of the three branches of descriptive, predictive and prescriptive analytics and appreciate the relationships between these streams.
▪ Given some data, students are able to select appropriate techniques to summarize and visualize the data so as to maximize managerial insight.
▪ Students understand the potential and also the limitations of predictive analytics to aid decision making. They comprehend when and how business applications can benefit from predictive analytics. Given some decision task, they are able to recommend suitable prediction methods.
▪ Students are familiar with the fundamentals of predictive modelling. Using standard software packages, they can develop basic and advanced prediction models and assess their accuracy in a statistically sound manner.
▪ Students are able to critically appraise recent IS trends and developments using established IS theories and practices.
▪ Students further develop their ability to conduct scholarly research, concentrating on academic writing, information retrieval and literature analysis.
Language: English, Deutsch</td></tr>
<tr><td colspan="4">Fachliche Voraussetzungen für die Teilnahme am Modul bzw. bestimmten Lehrveranstaltungen des Moduls: none</td></tr>
<tr><td>Lehrveranstal-tungsart</td><td>Präsenzzeit, Workload in Stunden</td><td>Studienpunkte, Voraussetzung für deren Erteilung</td><td>Themen, Inhalte</td></tr>
<tr><td>Lecture
Business Analytics & Predictive Modeling</td><td>2 SWS
60 Hours
Contact hours: 25 h
Course preparation: 35 h</td><td>2 SP
Attendance</td><td>▪ Fundamentals of Business Analytics
▪ Making data accessible: Tools for summarization, grouping, and visualization
▪ The business case for predictive modeling
▪ Prediction methods for regression and classification
▪ Advanced data types: time series, text, survival, and network data
▪ Fundamentals of intelligent search</td></tr>
<tr><td>Tutorial
Business Analytics & Predictive Modeling</td><td>2 SWS
60 Hours
Contact hours: 25 h
Course preparation: 35 h</td><td>2 SP
Attendance</td><td>▪ Further elaboration of lecturing material.
▪ Practical PC exercises using various software packages (e.g., Excel, Matlab, Python)</td></tr>
<tr><td>Seminar
Information Systems</td><td>2 SWS
60 Hours
Contact hours: 25 h
Course preparation: 35 h</td><td>2 SP
Attendance</td><td>Students work in groups of two to three members and prepare a seminar thesis. The thesis relates to a current topic in the scope of IS. Seminar topics vary each year and will be announced in due course before the start of the seminar. All papers will be presented and discussed in the seminar sessions.</td></tr>
</table>

Modulabschluss-prüfung	60 Hours Preparation for written exam (90 min): 30 h Assignments: 30 h 30 Hours Preparation of seminar thesis: 20 h Literature retrieval and analysis: 5 h Preparation of oral presentation: 5 h	2 SP Pass written exam Business Analytics & Predictive Modeling (50%), in-course assignments (50%) 1 SP Seminar thesis (50%), Systematic retrieval and analysis of relevant literature (25%), oral presentation (25%)
Dauer des Moduls	☒ 1 Semester	☐ 2 Semester
Beginn des Moduls	☒ WS	☐ SS

<table>
<tr><td colspan="3">Wahlpflichtmodul: IT Security & Privacy</td><td>Studienpunkte: 6</td></tr>
<tr><td colspan="4">Learning Objectives:

The module presents an introduction to engineering and management of IT security and privacy in networked organizations. Students have the opportunity to gain knowledge and develop skills in the following areas:
▪ Security and Privacy Requirements
▪ Cryptography
▪ Network Protocols
▪ System, Network and Web Security
▪ Privacy-Enhancing Technologies
▪ Security Management

Language: English</td></tr>
<tr><td colspan="4">Fachliche Voraussetzungen für die Teilnahme am Modul bzw. bestimmten Lehrveranstaltungen des Moduls: None</td></tr>
<tr><td>Lehrveranstal-tungsart</td><td>Präsenzzeit, Workload in Stunden</td><td>Studienpunkte, Voraussetzung für deren Erteilung</td><td>Themen, Inhalte</td></tr>
<tr><td>Lecture
IT Security & Privacy</td><td>2 SWS
60 Hours
Contact hours: 25 h
Course preparation: 35 h</td><td>2 SP
Attendance</td><td rowspan="2">There will be a lecture-style introduction to IT Security & Privacy.
In parallel, students work together in groups and prepare a seminar thesis. The thesis relates to a current topic or project in the scope of IT Security and Privacy.
Seminar topics vary each year and will be announced in due course before the start of the seminar.
All papers will be presented and discussed in the seminar sessions.</td></tr>
<tr><td>Seminar
IT Security & Privacy</td><td>2 SWS
60 Hours
Contact hours: 25 h
Course preparation: 35 h</td><td>2 SP
Attendance</td></tr>
<tr><td>Modulabschluss-prüfung</td><td>60 Hours
Preparation of seminar thesis: 30 h
Literature retrieval and analysis: 15 h
Preparation of seminar presentation: 15 h</td><td colspan="2">2 SP
Seminar thesis (50%),
Systematic retrieval and analysis of relevant literature (25%),
oral presentation (25%)</td></tr>
<tr><td>Dauer des Moduls</td><td colspan="3">☒ 1 Semester ☐ 2 Semester</td></tr>
<tr><td>Beginn des Moduls</td><td colspan="3">☒ WS ☐ SS</td></tr>
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<table>
<tr><td colspan="3">Wahlpflichtmodul: Applied Predictive Analytics</td><td>Studienpunkte: 6</td></tr>
<tr><td colspan="4">Learning Objectives:
The module give students an opportunity to participate in a real-world forecasting challenge related to planning problems in business areas such as marketing, finance, or others. In this scope, students have the opportunity to develop a variety of skills, including:
▪ Working in a real-world project setting allows students to further develop their team work and project management abilities.
▪ Students get acquainted with contemporary software packages for predict analytics.
▪ Students are able to develop advanced forecasting models using a variety of techniques from statistics, machine learning, and other domains.
▪ Students advance their knowledge in data integration, preparation, and transformation which allows them to create predictive variables from noisy real-world data sets.
Language: Deutsch, English</td></tr>
<tr><td colspan="4">Fachliche Voraussetzungen für die Teilnahme am Modul bzw. bestimmten Lehrveranstaltungen des Moduls: Lecture and Tutorial Business Analytics & Predictive Modeling of module AIS I</td></tr>
<tr><td>Lehrveranstal-tungsart</td><td>Präsenzzeit, Workload in Stunden</td><td>Studienpunkte, Voraussetzung für deren Erteilung</td><td>Themen, Inhalte</td></tr>
<tr><td>Seminar
Applied Predictive Analytics</td><td>4 SWS
120 Hours
Contact hours: 45 h
Preparation and post-processing: 15 h
Model develop-ment and evaluation: 60 h</td><td>4 SP
Attendance</td><td>The module involves participating in a real-world forecasting competition such as the annual data mining cup, the ACM KDD cup, or a kaggle challenge. In this scope, students will experience several typical challenges that arise in real-world modeling projects, and develop the necessary skills to overcome these obstacles.</td></tr>
<tr><td>Modulabschluss-prüfung</td><td>60 Hours
Study of relevant literature: 15 h
Preparation of competition entry: 30 h
Preparation of seminar presentation: 15 h</td><td colspan="2">2 SP
Development of a competition entry (typically a prediction model) for a specified forecasting challenge (50%),
studying relevant literature (25%),
preparation of a seminar presentations (25%)</td></tr>
<tr><td>Dauer des Moduls</td><td colspan="3">☒ 1 Semester ☐ 2 Semester</td></tr>
<tr><td>Beginn des Moduls</td><td colspan="3">☐ WS ☒ SS</td></tr>
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<table>
<tr><td colspan="3">Wahlpflichtmodul: Business Process Management</td><td>Studienpunkte: 6</td></tr>
<tr><td colspan="4">Learning Objectives:

The module is concerned with theories, concepts, methods, and practices to analyze and continuously improve business processes. Students have the opportunity to develop a variety of skills, including:
▪ Students understand the origins, motivations and objectives of business process management and are familiar with the process management lifecycle.
▪ Students appreciate the role and potential of information and communication technology to improve business process performance.
▪ Students are familiar with the basic principles of qualitative and quantitative process analysis.
▪ Students have a sound knowledge of BPMN and are able to create process models for basic and advanced business processes.
▪ Students acquaint themselves with methods for assessing the relative merits and demerits of business process outsourcing.
▪ Students have a basic understanding of process mining and recognize the potential and limitations of automatic process detection.

Language: English</td></tr>
<tr><td colspan="4">Fachliche Voraussetzungen für die Teilnahme am Modul bzw. bestimmten Lehrveranstaltungen des Moduls: none</td></tr>
<tr><td>Lehrver-anstaltungsart</td><td>Präsenzzeit, Workload in Stunden</td><td>Studienpunkte, Voraussetzung für deren Erteilung</td><td>Themen, Inhalte</td></tr>
<tr><td>Lecture
Business Process Management</td><td>2 SWS
60 Hours
Contact hours: 25 h
Course preparation: 35 h</td><td>2 SP
Attendance</td><td>▪ Process management lifecycle
▪ Principles of business process modeling using BPMN
▪ Process analysis
▪ Technologies for business process automation (e.g., BPEL)
▪ Business process outsourcing
▪ Process mining</td></tr>
<tr><td>Tutorial
Business Process Management</td><td>2 SWS
60 Hours
Contact hours: 25 h
Course preparation: 35 h</td><td>2 SP
Attendance</td><td>▪ Further elaboration of lecturing material
▪ Exercises from the field of BPM
▪ Solving process modeling tasks using BPMN</td></tr>
<tr><td>Modulabschluss-prüfung</td><td>60 Hours
Preparation for written exam (90 min)</td><td colspan="2">2 SP
Pass written exam Business Process Management</td></tr>
<tr><td>Dauer des Moduls</td><td colspan="3">☒ 1 Semester ☐ 2 Semester</td></tr>
<tr><td>Beginn des Moduls</td><td colspan="3">☐ WS ☐ SS</td></tr>
</table>

Wahlpflichtmodul: E-Business & Online Marketing	Studienpunkte: 6

Learning Objectives:

The module is concerned with theories, practices and technologies in the field of E-Business and Online Marketing. Students have the opportunity to develop a variety of skills, including:

- Students appreciate the **state-of-the-art in E-Business and Online Marketing** from a theoretical and practical standpoint.
- Students familiarize themselves with core **E-Business applications** (e.g., SCM, CRM, etc.), understand their origins, and how they depend on information and communication technology. Through generalizing these links, students are able to fully appreciate the relationship between internet technologies and E-Business strategy.
- Students are aware of key **E-Business models**, understand their relative merits and demerits, and are able to judge the appropriateness of these models for specific business applications.
- Students gain an overview of **established and emerging internet technologies** and understand the anatomy of web-based information systems. They also become acquainted with key technologies for system integration.
- Students appreciate the **internet marketing mix**, know about the different digital channels for marketing communication, and understand the concept of **multi-channel management**.
- Students are familiar with the **fundamentals of web analytics** to measure the effectiveness of online marketing initiatives.

Language: English

Fachliche Voraussetzungen für die Teilnahme am Modul bzw. bestimmten Lehrveranstaltungen des Moduls: none

Lehrver-anstaltungsart	Präsenzzeit, Workload in Stunden	Studienpunkte, Voraussetzung für deren Erteilung	Themen, Inhalte
Lecture E-Business & Online Marketing	2 SWS 60 Hours Contact hours: 25 h Course preparation: 35 h	2 SP Attendance	▪ E-Business strategy ▪ E-Business infrastructure ▪ E-Business applications ▪ Internet marketing mix ▪ Marketing communication using digital channels ▪ Web analytics fundamentals
Seminar E-Business & Online Marketing	2 SWS 60 Hours Contact hours: 25 h Course preparation: 35 h	2 SP Attendance	Based on the content of the lecture, students prepare a seminar thesis on current and emerging trends in E-business and online marketing and give an oral presentation
Modulabschluss-prüfung	60 Hours Preparation for written exam (60 min): 30 h Preparation of seminar thesis: 30 h	2 SP Pass written exam E-Business & Online Marketing (50%), seminar thesis (30%), oral presentation (20%)	
Dauer des Moduls	☒ 1 Semester	☐ 2 Semester	
Beginn des Moduls	☐ WS	☒ SS	

Erste Änderung der Prüfungsordnung
für den Masterstudiengang „Wirtschaftsinformatik“

Gemäß § 17 Abs. 1 Ziffer 3 der Verfassung der Humboldt-Universität zu Berlin (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 47/2013) hat die zuständige Gemeinsame Kommission im Umlaufverfahren am 19. September 2014 sowie der Fakultätsrat der Wirtschaftswissenschaftlichen Fakultät am 15. Oktober 2014 und der Fakultätsrat der Mathematisch-Naturwissenschaftlichen Fakultät am 15. Oktober 2014 die folgende Änderung der Prüfungsordnung (Amtliches Mitteilungsblatt Nr. 50/2009 vom 10. November 2009) erlassen.[*]

Anlage: Übersicht über die Modulabschlussprüfungen im Studiengang Wirtschaftsinformatik

Ergänzung bzw. Änderung der Übersicht über Modulabschlussprüfungen

In-Kraft-Treten

Die erste Änderung der Prüfungsordnung (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 50/2009 vom 10. November 2009) tritt mit Wirkung vom 01. Oktober 2014 in Kraft.

[*] Die Universitätsleitung hat die Änderung der Prüfungsordnung am 17. November 2014 bestätigt.

Anlage: Übersicht über die Modulabschlussprüfungen im Masterstudiengang Wirtschaftsinformatik

Ergänzung bzw. Änderung der folgenden Module:

Modul	SP	Form und Umfang der Modulabschlussprüfung
Pflichtmodule		
Advanced Information Systems I	**9**	written exam (90 min) Business Analytics & Predictive Modeling (50%), in-course assignments (50%)) and Seminar thesis (50%), Systematic retrieval and analysis of relevant literature (25%), oral presentation (25%)
Wahlpflichtmodule		
IT Security and Privacy	**6**	Seminar thesis (50%), Systematic retrieval and analysis of relevant literature (25%), oral presentation (25%)
Applied Predictive Analytics	**6**	Development of a competition entry (typically a prediction model) for a specified forecasting challenge (50%), studying relevant literature (25%), preparation of a seminar presentations (25%)
Business Process Management	**6**	written exam (90 min) Business Process Management
E-Business & Online Marketing	**6**	written exam (60 min) E-Business & Online Marketing (50%), seminar thesis (30%), oral presentation (20%)