

Almost all economic processes are closely linked to IT systems. As a result of the ongoing global digitisation, the demand for IT specialists with top business management skills is constantly rising. Opportunities are continually opening up for roles in software development, business analysis, process management, IT consulting and more—requiring professionals with both technical and business knowledge to fill them.

The IU Bachelor in Business and IT prepares you with contents specifically for such roles. During your studies you will acquire IT expertise, such as in requirements engineering or in the field of data modelling and database systems, and comprehensive business management knowledge. You'll get to know all key aspects of business and master the ability to recognise technological potential and to use it optimally for any company's success. Your bachelor's degree in Business and IT will provide you with interdisciplinary know-how, turning you into a highly employable candidate on the job market after graduation.



Bachelor of Science (B.Sc.)



#### **Study start**

Start online studies: Anytime Start (on campus): October 2022 (then 4 times a year; Oct, Jan, Apr or July)



#### Study model and accreditation

- Online studies or On Campus
  - German accredited institution, recognised by ZFU (German Central Office for Distance Learning)



#### **Duration**

Online: 36, 48, or 72 months On Campus: 36 months



#### Credits

180 ECTS



### **Study Content (180 ECTS)**

| PRESENCE<br>TIMEFRAME                   | MODULE TITLE                                | SEMESTER | CREDITS<br>(ECTS) | TEST<br>TYPE |
|---|---|----------|-------------------|--------------|
| Oct/Nov/Dec                             | Introduction to Computer Science            | 1        | 5 ECTS            | E            |
| Oct/Nov/Dec                             | Object-oriented Programming with Java       |          | 5 ECTS            | Ε            |
| Oct/Nov/Dec                             | Management Accounting                       |          | 5 ECTS            | E/WAWA       |
| Jan/Feb/Mar                             | Mathematics I                               |          | 5 ECTS            | Е            |
| Jan/Feb/Mar                             | Statistics: Probability and Descriptive Sta | tistics  | 5 ECTS            | Е            |
| Jan/Feb/Mar                             | Collaborative Work                          |          | 5 ECTS            | OA           |
| Apr/May/Jun                             | Data Structures and Java Class Library      | 2        | 5 ECTS            |              |
| Apr/May/Jun                             | Business 101                                |          | 5 ECTS            | E/WAWA       |
| Apr/May/Jun                             | Web Application Development                 |          | 5 ECTS            | AWB          |
| Jun/Jul/Aug                             | Programming Information Systems with        |          | 5 ECTS            | Е            |
| Jun/Jul/Aug                             | Java EE                                     |          | 5 ECTS            | WACS         |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Principles of Management                    |          |                   |              |
| Jun/Jul/Aug                             | Introduction to Academic Work               |          | 5 ECTS            | BWB          |
| Oct/Nov/Dec                             | Requirements Engineering                    | 3        | 5 ECTS            |              |
| Oct/Nov/Dec                             | Database Modeling and Database Systems      | s        | 5 ECTS            | WACS         |
| Oct/Nov/Dec                             | Intercultural and Ethical Decision-Making   |          | 5 ECTS            | WACS         |
| Jan/Feb/Mar                             | International Marketing                     |          | 5 ECTS            | Е            |
| Jan/Feb/Mar                             | Fundamentals of IT and ERP systems          |          | 5 ECTS            | Е            |
| Jan/Feb/Mar                             | Project: Software Engineering               | -        | 5 ECTS            | WAPR         |
| Apr/May/Jun                             | IT Project Management                       | 4        | 5 ECTS            |              |
| Apr/May/Jun                             | Introduction to Process Management          |          | 5 ECTS            | E/WAWA       |
| Apr/May/Jun                             | Data Analytics and Big Data                 |          | 5 ECTS            | WACS         |
| Jun/Jul/Aug                             | Corporate Finance and Investment            |          | 5 ECTS            | WAWA         |
| Jun/Jul/Aug                             | Software Quality Assurance                  |          | 5 ECTS            | Е            |
| Jun/Jul/Aug                             | Seminar: Software Engineering               |          | 5 ECTS            | WARE         |
| Oct/Nov/Dec                             | Digital Business Models                     | 5        | 5 ECTS            | E/AWB        |
| Oct/Nov/Dec                             | Organizational Behavior                     |          | 5 ECTS            | WACS         |
| Oct/Nov/Dec                             | Purchasing, Procurement and Distributio     | n        | 5 ECTS            | Е            |
| Jan/Feb/Mar                             | IT Law                                      |          | 5 ECTS            | WACS         |
| Online                                  | Elective A                                  |          | 10 ECTS           |              |
| Online                                  | Electives B & C                             | 6        | 20 ECTS           |              |
| Online                                  | Bachelor Thesis                             |          | 10 ECTS           | WABT & PO    |
|   |   |          |                   |              |

#### **CHOOSE YOUR ELECTIVES**

#### **Choose one elective from**

#### "Electives A" list\*:

- Big Data and Cloud Technologies
- Business Intelligence
- Data Engineer
- Foundations of Programming with Python
- IT Security
- IT-Service Management
- Logic and Artificial Intelligence
- Mobile Software Engineering
- Salesforce Platform Development

#### **Choose one elective from**

#### "Electives B" list\*:

- Applied Sales
- Salesforce Platform Management
- Smart Factory
- Smart Services
- Supply Chain Management

#### **Choose one elective from**

#### "Electives C" list\*:

- Applied Sales
- Business Intelligence
- Data Engineer
- Foundations of Programming with Python
- Internship\*\*
- IT Security
- IT-Service Management
- Logic and Artificial Intelligence
- Mobile Software Engineering
- Salesforce Platform Development
- Salesforce Platform Management
- Smart Factory
- Smart Services
- Studium Generale\*\*
- Supply Chain Management

<sup>\*</sup>Each elective module can only be chosen once.

\*\*These electives cannot be taken if you would like
to receive a dual degree. The elective Internship is
only available for myStudies students.

## **ELECTIVES**

The electives that are a part of this study programme, are a cluster of courses dedicated to diving deep into a specific topic related to the programme. When choosing an elective, you get to explore a potential future career path, or just develop a strong knowledge base about a topic that particularly interests you.

In semesters 5 and 6 of this programme, you'll choose three electives, amounting to 30 ECTS. You have a wide range of options to choose from, according to your interests and ambitions. Some of the electives offered are:

#### **MOBILE SOFTWARE ENGINEERING**

Your introduction to mobile software development. In the Mobile Software Engineering specialisation, you'll get hands-on experience in developing mobile software systems, in an Android mobile environment. Analyse the differences between mobile apps and browser-based information systems, learn how to create mobile software systems and implement them in solving case studies. Build your knowledge of the programming concepts and technologies that make up mobile software building, and develop your cross-platform development skills.

#### IT SERVICE MANAGEMENT

This specialisation covers the foundations of IT Infrastructure Libraries (ITIL), their structures and main components. Get to know how ITIL Governance and operational procedures operate, what the service lifecycle entails, and how IT outsourcing is carried out.

The topics you'll cover:

- IT Service Management
- Project IT Service Management

#### **BUSINESS INTELLIGENCE**

The Business Intelligence (BI) specialisation offers a selection of topics discussing how companies generate business data, and use it to improve and optimize operations. You'll be introduced to models and processes retaining to data analysis, generation and storing, and learn how these types of data are used across a company's different departments.

#### FOUNDATIONS OF PROGRAMMING WITH PYTHON

Cover everything you need to know to start working with one of the most popular programming languages in recent years. The Foundations of Programming with Python module offers an overview of the different applications Python is used for, such as data analysis, software development, artificial intelligence and machine learning. Get to know the data science libraries and modules that are most commonly used by Python developers, and explore its basic programming concepts.

#### **BIG DATA AND CLOUD TECHNOLOGIES**

Big data plays a huge role in our lives, but it remains a mystery to many. This specialisation offers answers to some of the big questions surrounding this topic: how data is categorized, and how binary and text-based data formats are constructed, and plenty of others. Get to know the challenges facing systems of analysis, how cloud computing works, and the service models that are typically associated with it. Gain a clear understanding of the field of today's cloud technologies.

### **CAREER OUTLOOK**

As an expert in Business and IT, you can find a position that is at the interface between concept, design, implementation, and maintenance of technical topics. From start-ups to large international companies, you will ensure all IT systems run efficiently and reliably, and all information is transferred securely. You might even use your business and technical skills to start your own project as an entrepreneur.

#### **IT PROJECT MANAGER**

As an IT Project Manager, you are responsible for the management of IT projects and are always up-to-date on the latest developments. You can intervene if needed, using your specialist knowledge. You determine project processes for IT and create guidelines and policies that ensure project success. You also take into account the needs of the company and create documentation during the project. Consultation with specialist departments and project managers is also part of your job.

#### **SOFTWARE DEVELOPER**

As a software developer, you develop and implement software, from single building blocks to complete applications. In coordination with users from different departments, you program solutions that are tailored to the respective needs and requirements. In doing so, you always keep the economic framework conditions in mind and make sure that they are adhered to.

#### **BUSINESS ANALYST**

As a business analyst you will examine business processes and take care of requirements management. This means you identify, analyse, prioritise and formulate the requirements for processes and IT systems. In doing so, you not only have an excellent eye for spotting challenges and risks but also new opportunities. You coordinate with the IT department and at the same time you pay attention to cost-efficient product solutions for the whole company. You identify new ways to ensure efficiency and optimisation for business, taking multiple factors into account.

### **ADMISSION**

We try to keep admission as simple as possible at IU. To successfully enrol, there are just a few requirements we need you to prove.

#### **ADMISSION REQUIREMENTS**

- Higher Secondary School Leaving Certificate such as A-Levels or IB Diploma and your transcript of records.
- A subject-related higher education entrance qualification.

Depending on your qualifications, you might have to meet additional requirements, such as successfully passing a university entrance examination or one of the following programmes to make sure you are ready to study with us:

- Bachelor Entrance Examination (included in Scholarship Program)
- Pathway Programme (for on-campus studies)

Please get in touch with our Study Advisory Team to find out the exact requirements applicable for your application.

#### **SCHOLARSHIP PROGRAMME**

Start in our Scholarship Programme as a participant with immediate access to 50% of your courses. You can do this by taking our Entrance Examination which will be included in your course as part of the Scholarship Programme. Once admission and the courses are completed, you can finish your degree.

Questions? Speak to your study advisor, they will guide your through every step of the process.

#### **PROOF OF ENGLISH LANGUAGE SKILLS**

We therefore ask for proof of your English language skills\*. If English is your native language or you graduated from an English-speaking school/university, you don't need to prove your English skills.

#### Accepted certifications:

- English Courses (complimentary when signing up with IU)\*\*
- TOEFL (min. 80 points) or
- IELTS (min. Level 6.0 out of 9 points) or
- Duolingo English test (min. 95 points) or
- Cambridge Certificate (min. B grade overall) or
- Equivalent proof

# **8 STEPS TO COMPLETE YOUR STUDIES**

- Register and apply online 1
- Choose your course 2
- Download your study scripts 3
- Work independently with study scripts
- Take part in Q&A sessions 5
- Prepare for exams and take 6 them either:
  - directly online, or
  - at an IU examination centre (remember to register in time).
- Bachelor thesis and colloquium 7
- Complete your studies with 8 certificate

<sup>\*</sup>Proof must be provided before the start of the study and must not be older than five years.

<sup>\*\*</sup>Please note that English Courses aren't accepted as a language certificate for on campus study programmes.