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# MASTER (M.SC.) DEVOPS AND CLOUD COMPUTING MANAGEMENT 60 ECTS

IT specialists are always needed to help companies build future-proof IT infrastructure. Liaise between software development and IT operations to accelerate the creation and delivery of software and system updates.

The advanced master's program in DevOps and Cloud Computing Management will help you gain a deeper understanding of IT operations: Improve and optimize processes continuously with agile software development. Additionally, you will deal with the organizational and cultural frameworks of the IT industry. Help make a decisive contribution to change management and qualifying yourself for management responsibilities.



**Degree** Master of Science (M.Sc.)

#### Electives

In the DevOps and Cloud Computing Management online programme, you can choose one elective worth 10 ECTS and focus on interesting practical areas.



#### Study model and accreditation

#### – Online

 German accredited institution, recognised by ZFU (German Central Office for Distance Learning)



#### Study start and duration

Official start date: March 1st, 2024\* Afterwards: Anytime Duration: 24, 36, 48 months





spect approval from the International Approximation and the International Approximational Approxim

\*This programme is still in the process of accreditation and recognition. We expect approval from the relevant ministry by the programme's official start date. So far, all IU programmes have been accredited and approved successfully and on time.

## **Study Content (60 ECTS)**

MODULE TITLE	SEMESTER	CREDITS (ECTS)	TEST TYPE
Agile Project Management	1	5 ECTS	WACS
DevOps		5 ECTS	WACS
Introduction to Cloud Computing and		5 ECTS	E
Serverless Computing			
Seminar: Strategic Analysis		5 ECTS	WARE
Business Communication and Storytelling		5 ECTS	СР
Applied Research		5 ECTS	WAWA
Seminar: Computer Science and Society Electives A	2	5 ECTS 10 ECTS	WARE
Master Thesis & Colloquium		15 ECTS	WAMT & PC

#### **CHOOSE YOUR ELECTIVES**

#### Choose one elective from "Electives A" list:

- Applied Container Orchestration
- Continuous and Lifecycle Security
- Internet of Things and Ethical Reflection in Management
- IT Governance, Compliance and Service Management
- IT Services and Architecture Management
- Process Management with Scrum
- Product Development and Design Thinking
- Project Management with PRINCE2®
- Project Management within Operations

E = Exam, OA = Oral assignment, PC = Presentation: Colloquium, WB = Workbook, BWB = Basic Workbook, AWB = Advanced Workbook, WABT = Written assessment: Bachelor thesis, WACS = Written assessment: Case study, WAMT = Written assessment: Master thesis, WAPR = Written assessment: Project report, WARE = Written assessment: Research essay, WAWA = Written assessment: Written assignment, OP = Online Presentation, OPR = Oral project report, P = Portfolio, POP = Proof of Participation

## **ELECTIVES**

#### **PROCESS MANAGEMENT WITH SCRUM**

With Process Management with Scrum, you'll learn how scrum enables software development organizations to prioritize the workload and break it down into manageable chunks. By gaining scrum skills, you can ensure your business is able to increase value by ensuring customers get what they really want.

#### IT SERVICES AND ARCHITECTURE MANAGEMENT

The term "IT Services and Architecture Management" refers to all of the tasks carried out by a company to develop, plan, deliver, run, and manage the information technology (IT) services offered to customers. Architecture blueprints are very important for IT organizations. Understanding IT architecture management will help you ensure that your IT department is supporting and even improving your organization's overall mission by aligning their goals with those of your business.

## **CAREER OUTLOOK**

There are numbers of flexible work opportunities in the IT industry, which can lead to strong compensation potential. Depending on which of the two core areas of your studies you focus on, various lucrative jobs await you. For instance, as a DevOps (Cloud) Engineer, you are overseeing and developing continuous integration and delivery pipelines. Alternatively, you can serve as an agile process consultant to help businesses implement their digitalization plans. You often carry out these tasks in an IT team, demonstrating your proficiency in conversation with your co-workers.

# **ADMISSION**

#### **ADMISSION REQUIREMENTS FOR 60 ECTS**

- Completed, undergraduate degree with 240 ECTS
- Your degree must be from a state or state-recognised higher education institution/university
- You must have achieved a final grade of at least "satisfactory" or Grade C equivalent in your previous undergraduate degree
- Proof of at least one year's professional work experience completed prior to the start of study programme. Work experience must have been gained after completion of your undergraduate studies

### FURTHER ADMISSION OPPORTUNITIES For the 60 ECTS programme:

Depending on your previous education, the following entry options are applicable for the 60-ECTS Master's degree:

- undergraduate degree with 210 ECTS: you can bridge the gap of 30 ECTS with the proof of one-year qualified work experience
- undergraduate degree with 180 ECTS: you can bridge the gap of 60 ECTS with the proof of two years qualified work experience

Recognition of knowledge and abilities acquired outside of higher education is possible in principle.

#### WORK EXPERIENCE

#### For the 60 ECTS programme:

 Proof of at least one year's qualified work experience completed prior to the start of the study programme (the work experience must be gained after the completion of your undergraduate studies).



- Don't have a year's worth of qualified work experience? Don't worry!
  With the Scholarship Programme, you can start your studies right away, and gain your professional experience alongside your studies. You'll need to achieve the one year's worth of experience before you complete your Scholarship Programme.
- You can provide us a translation of your employment contract and your pay slip, or you can ask your company to fill out this form in English, sign it, apply the company stamp and send it to us.

#### SCHOLARSHIP PROGRAMME

Start in our scholarship programme as a participant with immediate access to 50% of your courses. Once admission and the courses are completed, you can finish your degree.

 To start a 60-ECTS degree, you will need a minimum of 240 ECTS credits from your previous studies but can "bridge" up to 60 ECTS with 2 years of professional experience.

**Questions?** Speak to one of our study advisors, they will guide you through every step of the process.

#### **ENGLISH SKILLS**

At IU, we teach in English to prepare you for the international market. 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



