Master in Computer Science (M.Sc.) - Hof University — Hof University

Source: https://www.hof-university.com/studying-at-hof-university/our-degree-programs/computer-science-msc.html

The Master of Computer Science prepares you for complex development tasks in the interconnected and digitalized world. The main focus is placed on the topics of cyber security, usability and user experience, data engineering, and software architecture.

How can applications be designed to be secure and yet comfortable to use?

How can data be analyzed in a meaningful way without violating data protection?

How can applications be developed in an agile and customer-oriented manner and still remain future-proof and scalable?

In addition to the technical content, you will also acquire competencies in the areas of IT law, organization and leadership in order to prepare yourself for later management tasks.

Key areas of the program are:

Cyber-Security

Usability and User Experience

Data engineering

Software Architecture

If you are thinking about doing a PhD, you can either get a taste of the Institute of Information Systems during your Master's degree in Computer Science, or take the Master's degree in Applied Research in Computer Science to work intensively in a research group.

Thanks to Einstein1, founders can advance their startup directly after graduation or as a spin-off from iisys. But also as preparation for a demanding job in the free economy, the Master of Computer Science is the right step after the bachelor's degree.

Requirements:

The master's program in Computer Science is designed for graduates of undergraduate Computer Science programs (e.g., Computer Science, Media Informatics, Business Informatics, Mobile Computing) with an interest in in-depth specialized knowledge and cross-disciplinary skills. Admission to the Master's program is possible in every winter and summer semester. However, usually you start in the summer semester. We recommend starting in the winter semester especially for students who have completed a bachelor's program with less than 210 ETCS and want to use the first semester to make up the missing credit points.

Program Structure:

The master's program comprises three semesters. In the first two semesters, you will gather the theoretical and practical foundation in our mandatory modules.

The main areas of trainingare:

Cyber Security

Usability and user experience

Data science

Software Architecture

Questions are addressed such as: How can applications be designed to be secure yet convenient to use? How can data be analyzed in a meaningful way without violating data privacy? How can applications be developed in an agile and customer-oriented manner and still remain future-proof and scalable?

Mandatory modules

New Techniques in Computer Science

Human Computer Interaction (HCI)

Modern Software Architecture

Security of Information Systems

IT and data protection law

Data Engineering and Analysis Methods

Internship Software Development

Computer Science and Society

Developing and Designing Business Models

Introduction to Management, Organization and Leadership

Selection of possible elective modules

Data Mining and Machine Learning

Information Structuring and Visualization

Hybrid Apps for Desktop, Browser and Smartphone

Software Architecture in the Internet of Things (IoT)

Mixed Media

Usability Testing

Security Research Seminar

Current topics in IT security

In the third semester you will write yourMaster's thesis (30 ECTS). This can be done in cooperation with a company or at the Institute of Information Systems.

With theMaster in Computer Scienceyou qualify for a number of highly interesting jobs:

Software Architect

Full-stack developer

Backend application developer

Usability Engineer, HCI Developer

VR/AR developer

Requirements Engineer, Business Analyst

Data Scientist, Data Engineer

IT Security Consultant or Developer

IT Project Manager

Consultant for digital transformation

Founder of own IT company

Scientific assistant FH/University

In addition to abachelor's degreein computer science, you should have above-average qualifications in object-oriented programming, software engineering, computer networks and databases. The program is taught mainly in German. Non-native German speakers need at least a German B2 certificate. German C1 is recommended.

Application process

Winter semester May 01 - July 15 / Summer Semester November 15 - January 15:

You register on thePrimuss portaland fill out the form there with your personal details. Directly in the portal you can see your application documents to Hof University of Applied Sciences

For WiSe beginning of August / For SuSe beginning of February:

You will receive your admission letter from Hof University of Applied Sciences

For WiSe September / For SuSe March:

Online enrollment - you do not have to come to Hof in person for this

WiSe October 01 / SuSe March 15:

The program starts at Hof University.

Your benefits

Attractive study content

Excellent supervision ratio

Top marks in university rankings (CHE, StudyCheck)

Intensive contacts with professional practice

Modern campus with low cost of living

Top equipped laboratories

Exciting student initiatives (eSports, motorsports, environmental initiative and many more)

Best prospects on the job market

Master Computer Science

SuSe: Nov. 15 - Jan. 15

WiSe: May 01 - July 15

Info and services

Timetable

Here you find your timetable.

The campus is the management and administrative center of the university. Here you will find the university library, high-tech laboratories and university sports facilities.

More about Campus Hof

Head of Program

Student Affairs - Program Manager

Prof. Dr. habil. Thomas Buchmann

Tuesday: 11:30 -12:30

Michael Luft