

Trier University  
of Applied Sciences

H O C H  
S C H U L E  
T R I E R

# COMPUTER SCIENCE

## Study Semesters

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$f(x)$

Java

hello,  
world!







# Master Modules

## German Language 6 ECTS

Introductory course into the German Language

## High Performance Computing 6 ECTS

General paradigms for parallel programming, Using the Threading Building Blocks Library for CPU parallelism, Concepts of the task stealing scheduler, Efficient memory management for parallel systems, General parallelism concepts in TBB, Using CUDA for GPGPU computing, Concepts of GPGPU computing, Writing simple CUDA programs, Synchronization in CUDA, Streaming and overlapping in CUDA

## Implementation of ERP Systems 6 ECTS

Architecture of corporate information systems using the example of a popular system, learning an application-oriented programming language, programming of standard use cases and access to an SAP system.

## Advanced Game Technology 6 ECTS

The course deals with advanced methods of image synthesis, both for the interactive presentation, as well as for offline rendering. It is based on the state-of-the-art of research in computer graphics and includes the following topics: Physical Fundamentals of Light Propagation, Reflection Properties and Material Models, Image-Based Techniques, Photorealism, Procedural Modeling, Computer Animation, Volumetric Effects and Participating Media.

## Project 12 ECTS

Project in an area of expertise of one of our faculty members, e.g. Game Development, Business Information systems, Web Technologies, Mobile Systems, Software Engineering, Networks, Distributed Systems, Embedded Systems, Real-time Systems, Data Bases, Artificial Intelligence, Discrete Optimizations and Algorithms, CAD, ERP Software, Computer Graphics, Interactive Media, Medical Informatics. Topics have to be negotiated individually.



## Application

Applications should be submitted by 1st of October for the Study Semester of the following year's summer semester.

You can find the application forms under:  
[www.hochschule-trier.de/en/computer-science/studies/studysemester/](http://www.hochschule-trier.de/en/computer-science/studies/studysemester/)

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## Admission Requirements

Sufficient knowledge of English to follow lectures.

Current enrolment in a course in Computer Science for at least two semesters.

Payment of student Service Contribution including free local transportation and subsidized meals approximately 300€ per semester.

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## Departmental address

Trier University of Applied  
Sciences Computer Science  
Schneidershof  
D-54293 Trier

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## Dean of Faculty

Prof. Dr. Heinz Schmitz  
Phone: +49 651 / 8103 -316  
[R.Oechsle@hochschule-trier.de](mailto:R.Oechsle@hochschule-trier.de)

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## Contact Study Semester

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## Trier

Trier has a population of more than 100,000, and is famous as the oldest city in Germany, founded around 16 AD. In 1984, it celebrated its 2000th anniversary. It was home to six Roman emperors and has preserved several monuments of this time including the impressive Porta Nigra, a four-story structure that was once part of the city's walls. "Roma Secunda", the second Rome, was another name for Trier, and nowhere else in Germany are Roman times so vividly recalled.

Located on the banks of the Mosel River, Trier lies in a valley between low vine-covered hills in the west of the state of Rhineland-Palatinate, near the German border with Luxembourg; in fact, the closest city to Trier is the capital of Luxembourg, some 50 km to the southwest. Its location is ideal for a student interested in seeing a lot of Europe, as it is less than a 30 minute drive from France and Belgium.

Trier is also the birthplace of Karl Marx and a university town, housing Trier University of Applied Sciences and Trier University, about 20,000 of its inhabitants are students. There is a large offer of cultural, geographical and leisure activities.