

# · successfully-completed qualification leading to a first higher education degree in Traffic, Civil, Mechanical or Electrical Engineering or similar programme (minimum: 180 ECTS Credits or similar equivalent outside EU)

• English language proficiency (minimum level: B2 or similar)

### APPLICATION DOCUMENTS

- degree diploma and transcript of records
- personal statement
- language certificate (English instruction language is not sufficient)

# **APPLICATION PERIOD**

- National applicants: until August 31st
- EU and Non-EU applicants:



Applications are also possible after the deadlines for course with free capacities. Please contact us for more information.









# **NUMBERS AND FACTS**

144 **PROFESSORS** 

INTERNATIONAL **STUDENTS** 

3.000 **STUDENTS** 



INTERNATIONAL **PARTNER** UNIVERSITIES

**COURSES OF STUDY** 

# **FIELDS OF STUDY**

**TECHNOLOGY ECONOMICS HEALTHCARE** LANGUAGES **APPLIED ARTS** 

### DEGREES

**BACHELOR GERMAN DIPLOM MASTER** 

### WESTSÄCHSISCHE HOCHSCHULE ZWICKAU

Kornmarkt 1, 08056 Zwickau www.whz.de

### Information on studying and applying

National applicants:

Dezernat Studienangelegenheiten/Studienberatung +49 375 536-1184; studieren@fh-zwickau.de

EU and Non-EU applicants: International Office +49 375 536-1061; study@fh-zwickau.de

### Information about the course

Fakultät Kraftfahrzeugtechnik www.whz.de/Road\_Traffic\_Engineering

Die Westsächsische Hochschule Zwickau wird mitfinanziert durch Steuermittel auf der Grundlage des vom Sächsischen Landtag beschlossenen Haushaltes. Änderungen aller Angaben im Sinne der weiteren Ausgestaltung des Studienangebots sind vorbehalten

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WHZ, K&M, 09/2024



# **FULL-TIME PROGRAMME**

# Road Traffic Engineering

Master of Sciences (M.Sc.)



# **Road Traffic Engineering**

### **OVERVIEW**

Road traffic plays a crucial role in the global economy. However, the availability of space for road expansion is increasingly limited. To ensure smooth and safe traffic flow, intelligent transport systems are indispensable. There is a growing demand for the exchange of large datasets to facilitate communication between road infrastructure, drivers and vehicles. However, the realization of such data exchange relies on the implementation of intelligent road and traffic facility designs, as well as precise assessments of traffic infrastructures. This not only paves the way for the advancement of autonomous driving but also enhances overall traffic management, traffic operation and traffic safety process.

Our master's degree program in Road Traffic Engineering aims to educate and train engineers capable of designing and operating future road transport systems. Equipped with practical experience and language skills, graduates can effectively collaborate in international teams and expertly manage global projects.



Semester start: winter semester

Type of programme: full-time programme

No. of semesters/Credits: 4 semester / 120 ECTS

Admission restriction: restricted entry

Tuition fees: no tuition fees / only administrative fee

### **CAREER PROSPECTS**

After completing the Masters, graduates will:

- possess the ability to solve complex tasks in traffic flow and traffic infrastructure optimization aimed at reducing emissions, impoving traffic safety and develop corresponding strategies.
- demonstrate proficiency in planning and designing roads and traffic facilities, complete with communication infrastructures.
- exhibit competence in the development of Intelligent Transport Systems (ITS).

- acquire practical experience, enabling the effective implementation of designs.
- have proficiency in technical English language, enabling them to expertly manage international projects.

Graduates can expect to find employment opportunities in a variety of sectors, including national and international corporations, engineering firms, traffic and transport control centers, governmental departments, state-owned enterprises, and research institutes.



# STUDY SCHEDULE / STRUCTURE OF DEGREE

## 1. Semester

Dimensioning and Assessing of Urban Road Traffic Infrastructure Intelligent Highway Design

Sustainable Mobility

Car-to-Car Communication

Information Systems

Elective Courses\*

### 2. Semester

Urban Traffic Facilities Design Project Intelligent Traffic Light Control Systems

Large Scale Data Processing

Master Your Projects in English

**Traffic Simulation** 

# 3. Semester

Introduction Autonomous Driving

**Elective Courses\*** 

### 4. Semester

Masters Project

Traffic Noise, Research Project Participation, Advanced Powertrain Engineering, Advanced Highway Design Models, Transport Safety and Security, Microscopic Traffic Simulation -Project, Product Lifecycle Management, International Economy, Sustainable Supply Chain Management

Please note that the study schedule shown above is a simplified representation. You can find the detailed schedule, the module list as well as study and examination regulations in the Modulux database of the University of Applied Sciences Zwickau. >>>

