inf336 - Application Area Automotive

Module label Application Area Automotive
Module code inf336
Credit points 6.0 KP
Workload 180 h

Used in course of study
- Master's Programme Computing Science > Technische Informatik
- Master's Programme Engineering of Socio-Technical Systems > Embedded Brain Computer Interaction
- Master's Programme Engineering of Socio-Technical Systems > Human-Computer Interaction
- Master's Programme Engineering of Socio-Technical Systems > Systems Engineering

Contact person
Module responsibility
- Frank Köster
- Die im Modul Lehrenden

Authorized examiners
- Die im Modul Lehrenden
- Frank Köster

Entry requirements
Skills to be acquired in this module
This module introduces the application area Automotive.

Professional competences:
The students:
- Discuss core-concepts of the transportation domain
- Discuss different modes of transportation (focus on the automotive sector)
- Discuss automated and connected driving (short introduction/overview)
- Discuss human factors in the automotive sector
- Discuss traffic infrastructure (focus on intersections)
- Discuss basic principles in traffic management

Methodological competences:
The students:
- Analyze vehicle systems
- Analyze traffic infrastructure
- Analyze cooperative vehicle/infrastructure systems
- Analyze socio-technical systems

Social competences:
The students:
- Work in teams
- Discuss their outcomes appropriately

Self-competences:
The students:
- Acknowledge the limits of their ability to cope with pressure during the work on the topics of the module

Module contents
- Core-concepts of the transportation domain
- Modes of transportation (focus on the automotive sector)
- Automated and connected driving (short introduction/overview)
- Human factors in the automotive sector
- Traffic infrastructure (focus on intersections)
- Basic principles in traffic management
Reader’s advisory


Links

- Language of instruction: English
- Duration (semesters): 1 Semester
- Module frequency: once a year
- Module capacity: unlimited
- Module level: AC (Aufbaucurriculum / Composition)
- Module type: Pflicht o. Wahlpflicht / compulsory or optional
- Lern-/Lehrform / Type of program: V+Ü

Examination

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<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
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<tbody>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
<td>Practical Work and oral Exam</td>
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Course type               | Comment | SWS | Frequency | Workload attendance |
---------------------------|---------|-----|-----------|---------------------|
Lecture                    |         | 2.00| SuSe      | 28 h                |
Exercises                  |         | 2.00| SuSe      | 28 h                |

Total time of attendance for the module: 56 h