inf650 - Transport Systems

Module label          Transport Systems
Module code           inf650
Credit points         6.0 KP
Workload              180 h

Used in course of study
- Master's Programme Business Informatics > Akzentsetzungsmoduls Bereich Wirtschaftsinformatik
- Master's Programme Computing Science > Angewandte 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
- Axel Hahn
- Die im Modul Lehrenden

Authorized examiners
- Axel Hahn
- Die im Modul Lehrenden

Entry requirements
Skills to be acquired in this module

Objective of the module/skills:
The Module Transport systems deals with planning and controlling systems of internal and external company logistics as well as public transport. It provides basic knowledge and recent research topics. The focus is on a resource orientated holistic view of company logistics as well as the planning of transport infrastructure. Furthermore, trends such as autonomous vehicles and intelligent transport systems are discussed.

Professional competence
The students:

- name the basics of planning and controlling company logistics
- assess transport systems of companies
- name methods and approaches of computer aided transport systems and classify them
- characterise software to plan complex logistics

Methodological competence
The students:

- display topics and concepts of transport systems
- simulate transport and its systems with appropriate methods

Social competence
The students:

- work in groups
- discuss their results appropriately

Self-competence
The students:

- realise their limits while working on a project containing aspects of modelling and implementation
- question the presentation of their results

Module contents
- Transport and logistics concepts
- Data acquisition of company logistics
• Planning- and simulation software for complex logistics- and transport processes
• Energy- and resource efficient transport systems
• Resource oriented transport cost calculations (e.g. CO2, noise pollution)
• Planning models for transport infrastructure

Reader's advisory

Suggested reading:


Links
http://wi-ol.de

Languages of instruction
German, English

Duration (semesters)
1 Semester

Module frequency
jährlich

Module capacity
unlimited

Modullevel
AS (Akzentsetzung / Accentuation)

Modulart
Pflicht o. Wahlpflicht / compulsory or optional

Lern-/Lehrform / Type of program
V+Ü

Vorkenntnisse / Previous knowledge
Produktionsorientierte Wirtschaftsinformatik

Examination
Final exam of module
At the end of the lecture period
Exercises and written exam

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