2.2 Simulation of Logistic Aviation Systems (SLAS)

Module leader: Prof. Dr.-Ing. Hans-Martin Niemeier

ECTS points: 6 ECTS
Workload (h): 180

Type of module and position in the course of study: Mandatory module taught in the 2. semester
Contact hours (h): 56

Scope und frequency of teaching: 14 classes in winter term
Self-study (h): 124

Type of module and position in other study programs or continuing education offers: -

Learning outcomes:
Upon completion of this module students will be able to ...
Knowledge and understanding (extension, consolidation and understanding of knowledge)
- understanding and application of the interdependency between the various parties in the aviation industry
- understanding of the role and connectivity of aircraft producers, airlines, air traffic systems, airports and legal authorities

Using, applying and generating knowledge (applying and transferring knowledge, Scientific innovation)
- define an entry into service program of a new aircraft model
- design an aircraft rotation planning
- create a crew management and capacity planning

Communication and cooperation
- terminology in the aviation industry
- understand the importance of comprising various stakeholders in the aviation industry

Reflection of academic and professional identity
- develop individual management skills in the frame of the airline industry
- develop team skills within various departments and aspects of the airline industry

Course content:
- Aviation systems and its interdependences
- Business processes in the aviation
- Airline Management
  - Airline Law, Commercial Law, Accountability and Management
  - Aircraft orders, economical aspects, strategic decisions
  - Introduction of a new aircraft model
  - Entry into service program
- Fleet and Capacity Planning
- Dispatch and Operations Control
- Aviation Security
- Safety and Risk Management
- Crisis Management
- Complexity in the Airline Management

Language of teaching: English

Prerequisites: None

Preparation/literature: To be presented and discussed in the first session of the course

Further information: Aulis platform to be used

Courses of the module

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