1.3 Management Systems (MANS)

| Module leader: | Prof. Dr.-Ing. Markus Louis |
| ECTS points: | 6 ECTS |
| Workload (h): | 180 |
| Type of module and position in the course of study: | Mandatory module taught in the 1. semester |
| Contact hours (h): | 56 |
| Scope and 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)
- understand the meaning of management and management systems and its relevance for the aviation industry
- understand the typical setup of projects with a special focus on aircraft development programmes
- highlight the need for an individual management style as a result of the various approaches for management systems

Using, applying and generating knowledge (applying and transferring knowledge, Scientific innovation)
- define and plan a project in the aviation industry
- define ways to execute projects under consideration of all internal and external stakeholders

Communication and cooperation
- understand the relevance of communication and collaboration in management and to define individual ways for a systematic implementation in aerospace business
- understand how to establish project organizations: focus on specific functions and individual characters

Reflection of academic and professional identity
- develop individual management styles by a discussion of standardized approaches

Course content:
- Management and managements systems: Definition and presentation of specific approaches
- Aircraft development process
- Project Manager in Aerospace Industry: typical job content
- Four phases of project management (aligned to the aviation industry)
  - Initiation phase (e.g. SWOT analysis, SMART objectives)
  - Planning phase (e.g. Work Breakdown Structure, project schedule, risk management, reporting, budget control)
  - Execution phase (e.g. Milestone Trend Analysis, )
  - Closure phase (e.g. Lessons learned)
- Quality management systems
- Agile project management
- Ethics and compliance

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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