

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 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:	-			
<p>Learning outcomes:</p> <p>Upon completion of this module students will be able to ...</p> <p>Knowledge and understanding (extension, consolidation and understanding of knowledge)</p> <ul style="list-style-type: none"> ▪ <i>understand the meaning of management and management systems and its relevance for the aviation industry</i> ▪ <i>understand the typical setup of projects with a special focus on aircraft development programmes</i> ▪ <i>highlight the need for an individual management style as a result of the various approaches for management systems</i> <p>Using, applying and generating knowledge (applying and transferring knowledge, Scientific innovation)</p> <ul style="list-style-type: none"> ▪ <i>define and plan a project in the aviation industry</i> ▪ <i>define ways to execute projects under consideration of all internal and external stakeholders</i> <p>Communication and cooperation</p> <ul style="list-style-type: none"> ▪ <i>understand the relevance of communication and collaboration in management and to define individual ways for a systematic implementation in aerospace business</i> ▪ <i>understand how to establish project organizations: focus on specific functions and individual characters</i> <p>Reflection of academic and professional identity</p> <ul style="list-style-type: none"> ▪ <i>develop individual management styles by a discussion of standardized approaches</i> 				
<p>Course content:</p> <ul style="list-style-type: none"> ▪ 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) <ul style="list-style-type: none"> • 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				
Course title	Teaching staff	Contact hours per week	Learning and teaching methods	Examination method(s), scope and duration
Management Systems	Prof. Dr.-Ing Markus Louis	4	S	HA or R