

# Aviation Curriculum (part-time)

Valid from Autumn Semester 2020/2021 / 02.06.2022

Semester	Context Modules	Project Modules	Subject-Specific Modules				Mathematics and Natural Science Modules			
Semester 8		Bachelor Thesis: Aviation DE/EN 12	Specialisation Module 2 4	Specialisation Module 4 4	Specialisation Module 6 4					
Semester 7		Project Thesis: Aviation DE/EN 6	Specialisation Module 1 4	Specialisation Module 3 4	Specialisation Module 5 4		Optional Module Cross-Curricular 4			
Semester 6	Elective Module Context 2	Aviation Projects 4 DE 4			Elective Module 8 4	Infrastructure - Aerodromes DE 4	Materials Technology for Aviation DE 4		Numerics DE 4	
Semester 5	Elective Module Context 2	Elective Module Context 2	Aviation Projects 3 DE 4		Elective Module 7 4	Infrastructure - Airspace and Air Navigation Services DE 4			Stochastics and Statistics DE 4	Physics 3: Atmospheric Physics and Applied Meteorology EN 4
Semester 4	Intercultural Communication and Management EN 2	Aviation Projects 2 DE 4	Aircraft Systems- Propulsion Systems and Performance EN 4	Aircraft Systems- Electrotechnics and Electrical Systems EN 4	Aviation Systems Engineering EN 4				Physics 2 DE 4	
Semester 3	Communication Competence 3 DE/EN 2	Aviation Projects 1 DE 4	Aircraft Systems- Structure and Mechanical Systems EN 4	Human Factors EN 4	Safety Risk Management – Quality Management DE 4				Physics 1 DE 4	
Semester 2	Communication Competence 2 DE/EN 2		Principles of Flight EN 4	Business Administration EN 4	Computer Science Tools DE 2	CAD for Aviation DE 2		Analysis 2 DE 4	Linear Algebra 2 DE 4	
Semester 1	Communication Competence 1 DE/EN 2		Aviation Basics DE 4	Aviation Law DE 4		Computer Science Programming 1 DE 4		Analysis 1 DE 4	Linear Algebra 1 DE 4	

Module Name  
Language of Instruction  
Credits

## Designation in English

During your fourth year of study, you will choose one of the following three specialisations:

Technical Engineering			
Semester 8	Aircraft Systems– Flight Propulsion EN	Aircraft Systems– Structural Testing and Repairs DE	Flight Mechanics and Simulation EN
Semester 7	Aircraft Systems– Control Systems EN	Advanced Mechanics EN	Systems Reliability, Availability, Maintainability and Safety EN

Operational Engineering			
Semester 8	Aviation Management EN	Traffic Systems Operations DE	Infrastructure - Integration DE
Semester 7	Flight Operations EN	Human Factors in Engineering DE	Systems Reliability, Availability, Maintainability and Safety EN

Airline Transport Pilot <small>(successful completion of the aptitude test as a commercial pilot required)</small>			
Semester 8	Airline Transport Pilot Preparation 3 DE	Airline Transport Pilot Preparation 4 DE	Airline Transport Pilot Preparation 5 DE
Semester 7	Flight Operations EN	Airline Transport Pilot Preparation 1 DE	Airline Transport Pilot Preparation 2 DE