



Engineering - Course Offer 2023/2024

Core Courses/Lectures, Campus Friedrichshafen

Field of Study	Fall (Oct – Dec 2023) (ECTS)	Winter (Jan – Mar 2024) (ECTS)	Spring (Apr- Jun 2024) (ECTS)
Electrical Engineering	Mobile Communications (3)	Industrial Bus Systems (2)	Visualization and Optimization (5)
	High-Frequency Technology incl. Communication Technology Lab (5)	Control Technology (5)	
	Systems Theory (5)	Electronics (2.5)	
	Introduction to Robotics (3) (ab Oct. 2024)		
Mechanical Engineering	Engineering Design & Development (3-5)	Engineering of Lightweight Structures (5)	
	Quality Management (3-5)		
	Finite Elements (3)		
Informatics	Mobile Sensors and Actuators, (2.5)	Operating Systems, (2.5)	Network Architectures and Management (3)
	Artificial Intelligence 1 (2.5)		Artificial Intelligence 2 (2.5)
	Database Applications (?) (2.5)		





Field of Study	Fall (Oct – Dec 2023) (ECTS)	Winter (Jan – Mar 2024) (ECTS)	Spring (Apr- Jun 2024) (ECTS)
Aerospace Engineering	Flight Dynamics 2 (3.5)*	Flight Dynamics 1 (3.5)*	
		Simulation Technology 1 (1.5)	Simulation Technology 2 (1.5)
Industrial Engineering	Industry 4.0 / Smart Factory (2.5)		Industry 4.0 Digitalization / Blockchain Technology (2.5)
	Digital Transformation (2.5)		
	Production and Logistics (5)		International Marketing (2.5)
Embedded Systems	Automotive Software Engineering		
	Aerospace Software Engineering		

^{*} Note: Lecture series (Flight Dynamics 1 und Flight Dynamics 2) starts with Flight Dynamics 1 in Jan for 4th semester students and continues in Oct with Flight Dynamics 2 for 5th semester students.





Engineering Projects, Campus Friedrichshafen

(Study Projects, Self-Directed Projects, Bachelor Thesis, Master Thesis)

The Department of Engineering offers opportunities for the following study modules:

- Student Research Project (3 months fulltime or 6 months part-time) with 10 credits
- Bachelor Thesis (3 months fulltime) with 12 credits
- Master Thesis (6 months fulltime) with 25 credits

The projects can be carried out at <u>any time in the period from October to June</u>. The respective subjects (project contents) can be selected from current topics, see below. Prior detailed agreement with the supervisor is necessary!

Field of Study	Study Modules	
Electrical Engineering	High-Frequency Technology and/or Electro Magnetic Compatibility	
	Racing Car Development (GFR Team)	
	Autonomous/Connected Vehicles	
Mechanical Engineering	Lightweight Construction	
	Industrial Measurement and Sensor Technology	
Informatics	Offensive Security	
Aerospace Engineering	Flight Simulation	
	Flight Control/Handling Qualities	
	Aerodynamics/CFD	
	Drivetrains for Aircraft and Engines	
	UAV/Lighter-than-air	
Industrial Engineering	Electro mobility: Project "eMule 5.0"	





Elective Courses, Campus Ravensburg

Additional Course of the International Business Department and the International Study Program.

Module	Fall (Oct – Dec 2023) (ECTS)	Winter (Jan – Mar 2024) (ECTS)	Spring (Apr- Jun 2024) (ECTS)
Marketing	Marketing (International Business) (2)	Marketing (International Business) (2)	
Branch Specific Management	Current Data Science-Developments: Intelligent Text Analysis (2)		
Intercultural Management	Cultural Aspects of Germany (2)	Cultural Aspects of Germany (2)	Cultural Aspects of Germany (2)
	Leadership, Ethics and Sustainability (3)	Leadership, Ethics and Sustainability (3)	Intercultural Management in Selected Operational Areas (3)

Language Courses, Campus Friedrichshafen

Module	Fall (Oct – Dec 2023) (ECTS)	Winter (Jan – Mar 2024) (ECTS)	Spring (Apr- Jun 2024) (ECTS)
Language	Business English for technical careers B2+/C1 (2)	Business English for technical careers B2+/C1 (2)	Business English for technical careers B2+/C1 (2)

Language Courses, Campus Ravensburg

All our language courses take place in the early evening, but please note that we are not a linguistic university. For example, the German course is principally intended as a form of intercultural class.

Module	Fall (Oct – Dec 2023) (ECTS)	Winter (Jan – Mar 2024) (ECTS)	Spring (Apr- Jun 2024) (ECTS)
Language	German for beginners (2)	German for beginners (2)	German for beginners (2)
	Business English (2)	Business English (2)	Business English (2)
	English for Presentations (2)	English for Presentations (2)	English for Presentations (2)
	Spanish (2)*	Spanish (2)*	Spanish (2)*

^{*} Please note; the language of instruction on the Spanish course is German