

## Electrical Engineering and Information Technology - International Master of Science (IMSEIT)

1. Semester	2. Semester	3. Semester	3./4. Semester				
Mandatory Basic Module: Technical Management 5 CP	Mandatory Basic Module: Team Project 5 CP	Internship for international students 30 CP  (Skipped for h_da students)	Master Module 30 CP	mandatory module for Automation	mandatory module for Communications	mandatory module for Embedded and Microelectronics	mandatory module for Power Engineering
mandatory module 1 (subject to major) 5 CP	mandatory module 5 (subject to major) 5 CP			Safety in Industrial Automation	Advanced Digital Signal Processing	Advanced Programming Techniques	Advanced High Voltage Technology
mandatory module 2 (subject to major) 5 CP	mandatory module 6 (subject to major) 5 CP			Adaptive Control, Modeling, and Identification	Microwave Components and Systems	VLSI Design and Testing	Power System Operation
mandatory module 3 (subject to major) 5 CP	mandatory module 7 (subject to major) 5 CP			Computer Vision	Advanced Software Design and Development	Advanced Microcontroller Systems and Embedded Operating Systems	Renewable Energy Systems
mandatory module 4 (subject to major) 5 CP	elective module 2 (subject to major) 5 CP			Advanced Programming Techniques	System-Driven Hardware Design	FPGA-based System on Chip Design	Embedded Programming & Design of Real-Time Control Systems
elective module 1 (subject to major) 5 CP	elective module 3 (subject to major) 5 CP			Industry 4.0/IIoT and the Digital Factory	Fields, Waves and Antennas	Embedded Architectures and Applications	Power Electronics for Drives and Energy Systems
German class	German class			Industrial Robotics	Information Networks	System Driven Hardware Design	Advanced Control of Electrical Drives
		State-Space Control Design	Advanced Modulation	Embedded Signal Processing Systems	Model-Based Design, HiL & PiL Systems		

CP: The sizes of the modules correspond to an average study and learn effort. For successfully completed modules, credit points are awarded – as a general rule 60 CP per year.

Colour caption: ■ Mandatory Modules ■ Final thesis ■ Industrial placement

■ Electives ■ General qualification