

Module Handbook

TUK MODHB Homepage

Module-Pool EIT-AC-MS-C-TW-MPOOL-7

General Elective Modules Master A&C ([3.0 - 8.0] CP)

Basedata

CP	[3.0 - 8.0] CP
Level	[7] Master (Advanced)
Lifecycle-State	[NORM] Active

Notice

exemplary technical elective modules

You can select from all technical modules offered at TUK with the approval of your model advisor.

All modules from both the core elective domain of both majors can be taken as additional electives (if not used in the core elective part of your current major). In addition, we recommend the following elective modules (continuously updated):

Modules in the Pool

Number	Name	Semester orientation	CP
EIT-DEK-430-M-7	Theory and Application of Probability and Stochastic Processes	1 Sem., in WiSe	3.0 CP
EIT-DEK-433-M-7	Theory and Application of Digital Image Processing	1 Sem., in SuSe	4.0 CP
<i>Area of study Digital Signal Processing</i>			
EIT-DSV-526-M-7	Digital Signal Processor Laboratory	1 Sem., in SuSe	3.0 CP
EIT-DSV-532-M-4	Digital Filters	1 Sem., in SuSe	3.0 CP
<i>Area of study Energy Systems and Energy Management</i>			
EIT-EES-850-M-7	Power Generation I: Thermal Power Plants	1 Sem., in SuSe	4.0 CP
EIT-EES-851-M-7	Power Generation II: Renewable Generation and Storage	1 Sem., in WiSe	3.0 CP
EIT-EES-854-M-7	Power System Planning and Operation II	1 Sem., in WiSe	5.0 CP
<i>Area of study Electronic Design Automatization</i>			
EIT-EIS-550-M-7	Verification of Digital Systems	1 Sem., in WiSe	5.0 CP

EIT-EIS-500-M-7	verification of Digital Systems	1 Sem., in WiSe	3.0 CP
EIT-EIS-566-M-7	Robust Digital Systems	1 Sem., in SuSe	3.0 CP
EIT-EIS-571-M-4	Architecture of Digital Systems I	1 Sem., in WiSe	4.0 CP
Area of study <i>Microelectronic Systems Design</i>			
EIT-EMS-546-M-4	Embedded Processor Lab	1 Sem., in WiSe/SuSe	3.0 CP
EIT-EMS-654-M-4	Microelectronic Circuit and System Design I	1 Sem., in WiSe	4.0 CP
EIT-EMS-708-M-4	Fundamentals of Microelectronics	1 Sem., in SuSe	4.0 CP
Area of study <i>Wireless Communication and Navigation</i>			
EIT-FUN-413-M-7	Information Security Assessment and Operations	1 Sem., in SuSe	8.0 CP
EIT-FUN-414-M-7	Industrial Communication Networks	1 Sem., in SuSe	3.0 CP
No area of study			
EIT-HST-252-M-4	Electromagnetic Compatibility	1 Sem., in WiSe	4.0 CP
Area of study <i>Integrated Sensor Systems</i>			
EIT-ISE-110-M-7	Neurocomputing	1 Sem., in WiSe	4.0 CP
Area of study <i>Electro Mobility</i>			
EIT-JEM-517-M-7	Electric and Hybrid Vehicles	1 Sem., in SuSe	3.0 CP
Area of study <i>Power Electronics</i>			
EIT-LEL-707-M-4	Microcontrollers	1 Sem., in WiSe	3.0 CP
Area of study <i>Control Systems</i>			
EIT-LRS-509-M-7	Control in Power Electronics	1 Sem., in WiSe	3.0 CP
Area of study <i>Mechatronics and Electrical Drives</i>			
EIT-MEA-190-M-6	Analog and Power Electronics in Medicine and Biomedical Research	1 Sem., in WiSe	4.0 CP
EIT-MEA-223-M-7	Simulation mechatronischer Systeme	1 Sem.	- CP
Area of study <i>Communications Engineering</i>			
EIT-NAT-301-M-4	Introduction to Communication Networks	1 Sem., in SuSe	4.0 CP
EIT-NAT-303-M-4	Digital Signal Transmission	1 Sem., in SuSe	4.0 CP
No area of study			
EIT-PAN-304-M-4	System Theory	1 Sem., in SuSe	3.0 CP
Area of study <i>Real Time Systems</i>			
EIT-RTS-541-M-7	Real-Time Systems II	1 Sem., in WiSe	4.0 CP

EIT-RTS-545-M-4	Operating Systems	1 Sem., in WiSe	4.0 CP
Area of study <i>Distributed and Networked Systems</i>			
INF-42-52-M-5	Network Security	1 Sem., irreg. WiSe	4.0 CP
Area of study <i>Embedded Systems and Robotics</i>			
INF-61-33-M-6	Autonomous Mobile Robots	1 Sem., in SuSe	8.0 CP
Area of study <i>Intelligent Systems</i>			
INF-71-56-M-6	Applications of Machine Learning and Data Science	1 Sem., in WiSe	4.0 CP
INF-73-51-M-5	3D Computer Vision	1 Sem., in WiSe	4.0 CP
INF-73-53-M-6	2D Image Processing	1 Sem., in WiSe/SuSe	4.0 CP
INF-74-51-M-6	Embedded Intelligence	1 Sem., in SuSe	4.0 CP
Area of study <i>Max-Planck-Institute</i>			
INF-88-54-M-7	Principles of Cyber-Physical Systems	1 Sem., irreg.	8.0 CP
Area of study <i>Bioprocess Engineering</i>			
MV-BioVT-60-M-4	Fundamentals in bioprocess engineering	1 Sem., in WiSe	3.0 CP
MV-BioVT-61-M-3	Bioprocess Engineering I	1 Sem., in SuSe	3.0 CP
No area of study			
MV-CHE-01-M-1	Chemistry for engineers	1 Sem., in WiSe	5.0 CP
Area of study <i>Mechatronics in Mechanical and Automotive Engineering</i>			
MV-MEC-229-M-4	Mechatronics	1 Sem., in SuSe	5.0 CP
MV-MEC-M169-M-4	Hybrid and discrete-event dynamical systems	1 Sem., in WiSe	5.0 CP
Area of study <i>Machine Tools and Control Systems</i>			
MV-PAK-M153-M-4	Industrial Handling and Robots	1 Sem., in SuSe	4.0 CP
Area of study <i>Engineering Thermodynamics</i>			
MV-TD-298-M-4	Modeling, simulation and optimization in process engineering	1 Sem., in WiSe	3.0 CP
Area of study <i>Separation Science and Technology</i>			
MV-TVT-43-M-4	Process Engineering	1 Sem., in SuSe	6.0 CP

References to Module Pool [EIT-AC-MS-C-TW-MPOOL-7]

Course of Study	Section	Choice/Obligation
[EIT-88.C48-SG#2021] M.Sc. Automation & Control (A&C) [2021]	Major "Real-Time Control Systems" (RCS)	[W] Elective Module
[EIT-88.C48-SG#2021] M.Sc. Automation & Control (A&C) [2021]	Major "Connected Automation Systems" (CAS)	[W] Elective Module