OTTO VON GUERICKE
UNIVERSITÄT
MAGDEBURG

Faculty of Electrical Engineering and Information Technology

Catalogue of Elective Modules

for the Master's program

Electrical Engineering and Information Technology

Version from 07. September 2022

This Document is for information only.

The German version is legally binding.

Technical note: The module names in the table of contents are linked to the module descriptions. You can get back to the table of contents via the link below each module description. Alternatively, you can navigate via the bookmark function of various PDF viewers.

Contents

Elective modules

Elective modules in the extent specified in the study regulations have to be chosen. The required number of credit points must be achieved.

Technical elective modules

Technical elective modules can be chosen from th e list provided, whereby it is re commended to set a focus on one specific area.

Non-technical elective modules

Modules from the entire range of OvGU can be selected - but with out engineering modules. Explicitly allowed are also foreign languages, for example German for foreign students.

Attachment: Study- and Examination Schedule of the Master's Degree Program in Electrical Engineering and Information Technology for elective modules

Legend for the study and examination schedule

SWS	=	Semester hour per week (time required for the course per week)
V	=	Lecture
Ü	=	Tutorial
P	=	Internship
S	=	Seminar
CP	=	Credit Points
VL	=	Type of examinations prerequisite
PL	=	Type of examination performance

SoSe	=	Summer semester
WiSe	=	Winter semester
K	=	Written examination (stated duration in minutes)
M	=	Oral examination
ÜS	=	Tutorial certificate
PRO	=	Research Project

Module overview of the technical elective modules

Allocation: Choice of modules according to the study plan. The required number of CP can be taken from the programme-specific study and examination regulation.

Master Electrical Engineering and Information Technology	SWS		Semester												CP
			1. (WiSe)			2. (SoSe)			3.			4.			
Modules	V|Ü|P|S	V|Ü|P|S	CP	VL	PL	CP	VL	PL	CP	VL	PL	CP	VL	PL	Σ
Automation Systems															25
Automation Lab	0|0|2|0								5		M				5
Digital Automation Systems	2|1|0|0								5		K90				5
Non-linear Control	2|1|0|0					5		M							5
Process Control	2|1|0|0					5		M							5
State Estimation	2|2|0|0					5		K90							5
Total credit points by semester in this field						15			10						

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Master Electrical Engineering and Information Technology	SWS		Semester											CP
Modules	V|Ü|P|S	V|Ü|P|S	1. (WiSe)			2. (SoSe)			3.			4.			Σ
			CP	VL	PL	CP	VL	PL	CP	VL	PL	CP	VL	PL	
Information and Communication Technology															41
Digital Information Processing Laboratory	0|0|2|1					5	PS	M							5
FPGA and Microcontroller Programming 1 u. 2	0|0|2|0	0|0|3|0				2			3		M				5
Image Coding	2|1|0|0								5		M				5
Introduction to RF Communication Systems	2|1|0|0					5		K90							5
Medical Imaging CT	2|1|0|0					5		M							5
Microwave Measurement Techniques (µWMT) / Mikrowellenmesstechnik	2|1|1|0								6		M				6
Speech Recognition	2|1|1|0					5	ÜS	K90							5
Theoretical Neuroscience II	3|2|0|0					5		M							5
Total credit points by semester in this field							27			14					
Microsystems															
The field "Microsystems" is currently not offered															
Power and Energy															30
Control of AC Drives	2|1|0|0								5		K90				5
Digital Protection of Power Networks	2|1|0|0					5		K120							5
Electromagnetic Compatibility (EMC)	2|2|0|0								5		M				5
Power Electronic Components and Systems	2|1|0|0								5		M				5
Power System Ecomomics and Special Topics	2|1|0|0								5		K90				5
Renewable Energy Resources	2|1|0|0					5		K90							5
Total credit points by semester in this field							10			20					
General															15
Basics of Medical Image Science	2|1|0|0					5		K90							5
Integrated Project	0|0|0|6								10		PRO				10
Total credit points by semester in this field							5			10					