OTTO VON GUERICKE
**UNIVERSITÄT
MAGDEBURG**

EIT

FAKULTÄT FÜR
ELEKTROTECHNIK UND
INFORMATIONSTECHNIK

Faculty of Electrical Engineering and Information Technology

Catalog of Elective Modules

for the Master's program

Electrical Engineering and Information Technology

This document is for information only.

The German version is legally binding!

6th March 2019

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, whe reby 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.

Catalog of Elective Modules for the Master's program

Electrical Engineering and Information Technology

Legend:

S = weekly hours per semester (SWS)
A = kind of course
  V = lecture
  S = seminar
  Ü = exercises
  K = colloquium
  LP = laboratory
  PRO = scientific project
  E = excursion
CP = Credit Points = credits
LN = required precondition (examination credits)
PL = kind of examination
  K = exam
  M = oral examination
  H = thesis
  EA = experimental work
  PRO = scientific project
  R = presentation

Time of the examination

In the examination period at the end of the semester during what the module was used.

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Technical Elective Modules

Automation Systems	1. Semester (W)			2. Semester			3.Semester			4. Semester			Summe		
	CP	S	A	CP	S	A	CP	S	A	CP	S	A	CP	S	A
Distributed Control System (wird ab SS 20 gestrichen)				5	4	V/Ü/LP							5	4	V/Ü/LP
Automation Lab							5	2	LP				5	2	LP
Non-linear Control				5	3	V/Ü							5	3	V/Ü
Process Control				5	3	V/Ü							5	3	V/Ü
Structure and Behaviour Modelling-UML (wird ab SS 20 gestrichen)							5	3	V/Ü				5	3	V/Ü
Optimal Control / Predictive Control							5	3	V/Ü				5	3	V/Ü

Information and Communication Technology	1. Semester (W)			2. Semester			3.Semester			4. Semester			Summe		
	CP	S	A	CP	S	A	CP	S	A	CP	S	A	CP	S	A
Introduction to RF Communication Systems				5	3	V/Ü							5	3	V/Ü
Image Coding							5	3	V/Ü				5	3	V/Ü
Medical Imaging CT				5	3	V/Ü							5	3	V/Ü
Speech Recognition				5	4	V/Ü/LP							5	4	V/Ü/LP
FPGA and Microcontroller Programming 1 u. 2				2	2	LP	3	3	LP				5	5	LP
Theoretical Neuroscience II				5	5	V/Ü							5	5	V/Ü
Digital Information Processing Laboratory				5	3	S/LP							5	3	S/LP

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Microsystems	1. Semester (W)			2. Semester			3.Semester			4. Semester			Summe		
	CP	S	A	CP	S	A	CP	S	A	CP	S	A	CP	S	A

The Field of Study „Mikrosystems" is not offered at the moment

Power and Energy	1. Semester (W)			2. Semester			3.Semester			4. Semester			Summe		
	CP	S	A	CP	S	A	CP	S	A	CP	S	A	CP	S	A
Electromagnetic Compatibility (EMC)							5	4	V/Ü				5	4	V/Ü
Power Electronic Components and Systems							5	3	V/Ü				5	3	V/Ü
Renewable Energy Resources				5	3	V/Ü							5	3	V/Ü
Power System Ecomomics and Special Topics							5	3	V/Ü				5	3	V/Ü
Digital Protection of Power Networks				5	3	V/Ü							5	3	V/Ü
Control of AC Drives							5	3	V/Ü				5	3	V/Ü

General	1. Semester (W)			2. Semester			3.Semester			4. Semester			Summe		
	CP	S	A	CP	S	A	CP	S	A	CP	S	A	CP	S	A
Integrated Project							10	6	PRO				10	6	PRO
Ultrasonic Sensors for Imaging				5	3	V/Ü							5	3	V/Ü
Introduction to Medical Imaging Technologies							5	3	V/Ü				5	3	V/Ü
Power Systems Control and Optimization				5	3	V/Ü							5	3	V/Ü

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Automation Systems	LN	PL	CP
Distributed Control Systems	---	K90	5
Automotion Lab	---	M	5
Non-linear Control	---	M	5
Process Control	---	M	5
Structure and Behaviour Modelling - UML	---	M	5
Optimal Control / Predictive Control	---	K120	5

Information and Communication Technology	LN	PL	CP
Introduction to RF Communication Systems	---	K90	5
Image Coding	---	M	5
Medical Imaging CT	---	M	5

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Speech Recognition	Übungsschein	K90	5
FPGA and Microcontroller Programming 1 u. 2	---	M	5
Theoretical Neuroscience II	---	M	5
Digital Information Processing Laboratory	Praktikumschein	M	5

Microsystems	LN	PL	CP

Die Option „Mikrosystems" wird zurzeit nicht angeboten

Power and Energy	LN	PL	CP
Electromagnetic Compatibility (EMC)	---	M	5
Power Electronic Components and Systems	---	M	5
Renewable Energy Resources	---	K90	5
Power System Ecomomics and Special Topics	---	K90	5

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Digital Protection of Power Networks	---	K120	5
Control of AC Drives	---	K90	5

General	LN	PL	CP
Integrated Project	---	PRO	10
Ultrasonic Sensors for Imaging	---	M	5
Introduction to Medical Imaging Technologies	---	K90	5
Power Systems Control and Optimization	---	M	5