

## Course

# DMC - Digital Motion Control

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### ^ General information

<b>Long name</b>	Digital Motion Control
<b>Approving CModule</b>	<a href="#">DMC_MaET</a> , <a href="#">DMC_MaTIN</a>
<b>Responsible</b>	Prof. Dr. Jens Onno Krahl Professor Fakultät IME
<b>Level</b>	Master
<b>Semester in the year</b>	summer semester
<b>Duration</b>	Semester
<b>Hours in self-study</b>	60
<b>ECTS</b>	5
<b>Professors</b>	Prof. Dr. Jens Onno Krahl Professor Fakultät IME
<b>Requirements</b>	RT, DSS
<b>Language</b>	German
<b>Separate final exam</b>	Yes

## Final exam

### Details

Written module examination - similar to the exercises

### Minimum standard

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### Exam Type

Written module examination - similar to the exercises

## ^ Lecture / Exercises

### Learning goals

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#### Skills

Structure of servo motors  
Structure of servo inverters  
Digital control algorithms  
Process identification  
Design of drive systems

### Expenditure classroom teaching

Type	Attendance (h/Wk.)
Lecture	2
Exercises (whole course)	2
Exercises (shared course)	0
Tutorial (voluntary)	0

### Separate exam

none

## ^ Practical training

### Learning goals

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#### Skills

Direct Digital Control  
Quasi-continuous control  
Predictor / Observer  
Parameterization of a control system  
Evaluation of Bode diagrams  
Demonstrate action competence

Commissioning of a servocontroller

Minimization of following errors

## Expenditure classroom teaching

Type	Attendance (h/Wk.)
Practical training	1
Tutorial (voluntary)	0

## Separate exam

none