

The background of the slide is a grayscale photograph of an engineering workspace. It features a technical drawing on a white sheet of paper, which includes various geometric shapes, lines, and dimension lines. A blue pen is positioned on the left side of the drawing, and a black pen is on the right. Several metal rods and a small electronic device are also visible in the upper left corner. The overall scene is a typical engineering desk setup.

Master's programme Mechanical Engineering (KIT)

Winter term 2019/2020

Fachschaft MACH/CIW

Consultation hours: Mon-Fri 12:30 – 14:30

Phone: +49 721 608-4 3782

Mail: fachschaft@fs-fmc.kit.edu

Address: Kaiserstraße 10

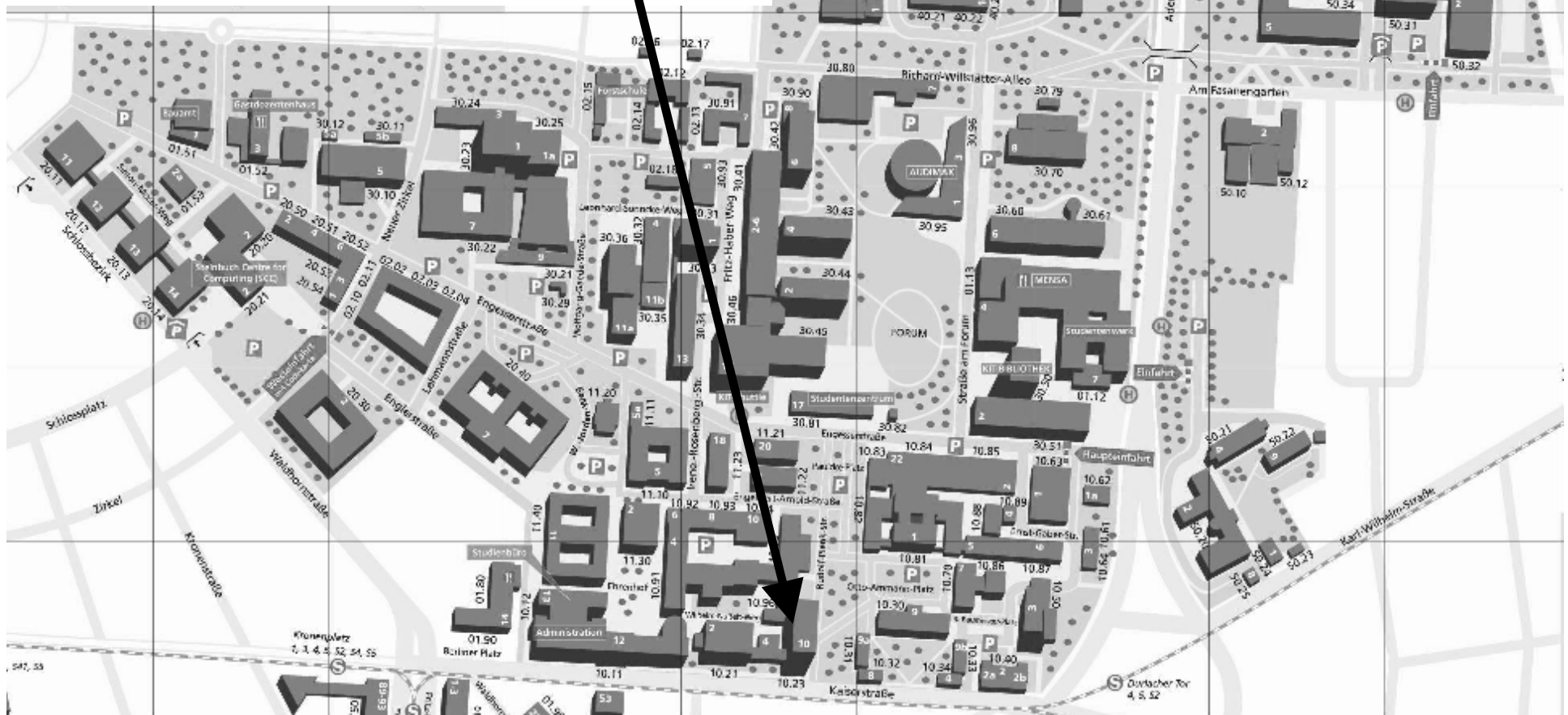
Building: 10.23 Room 106 & 107

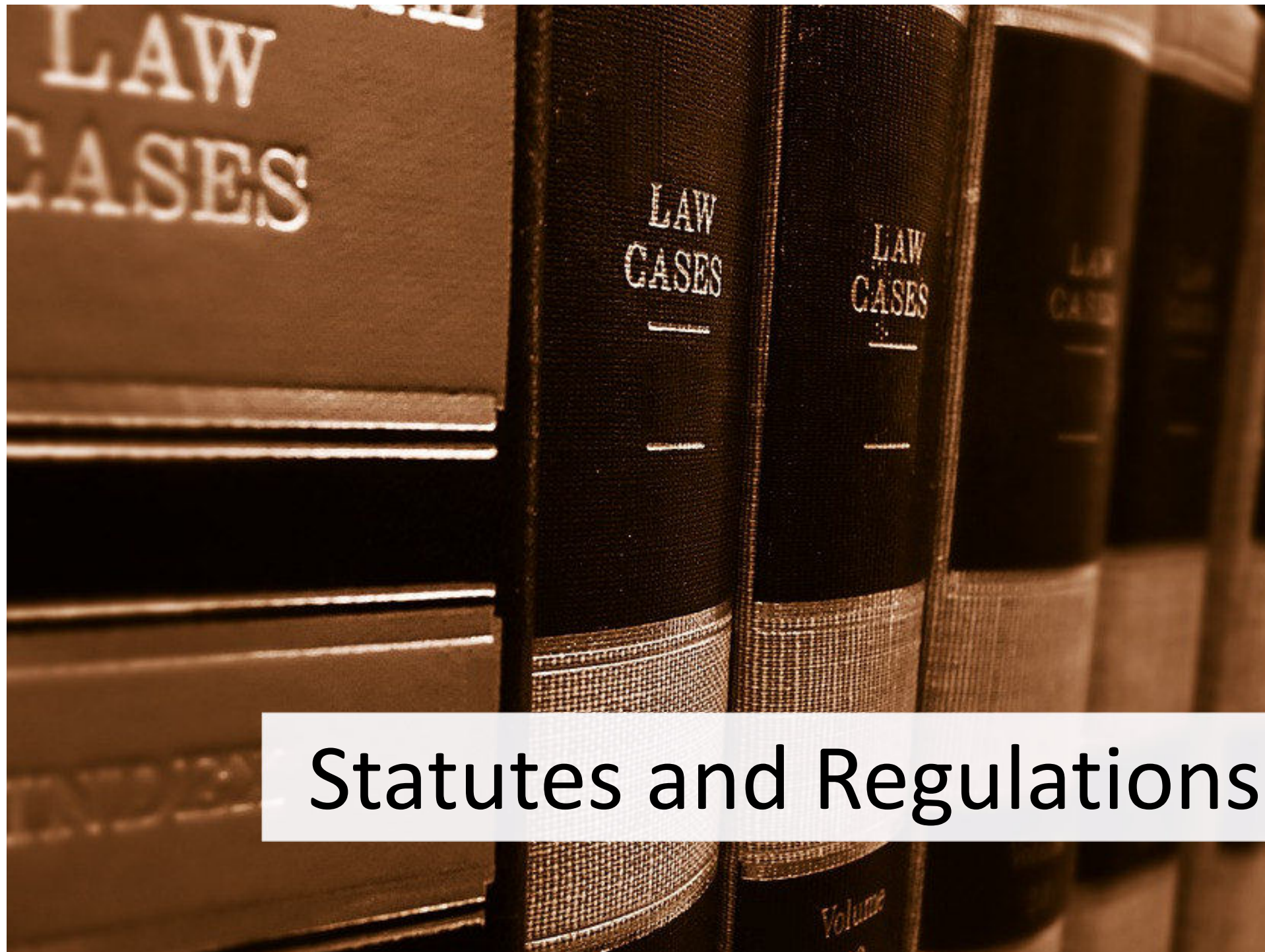
76131 Karlsruhe

Web: fs-fmc.kit.edu

Facebook: [facebook.com/fmc-kit](https://www.facebook.com/fmc-kit)

Instagram: [instagram.com/fmc.kit](https://www.instagram.com/fmc.kit)





Statutes and Regulations

Studien- und Prüfungsordnung (SPO)

Module Handbook



Universität des Landes Baden-Württemberg und
nationales Forschungszentrum in der Helmholtz-Gemeinschaft

Amtliche Bekanntmachung

2015 Ausgegeben Karlsruhe, den 06. August 2015 Nr. 61

Inhalt	Seite
Studien- und Prüfungsordnung des Karlsruher Instituts für Technologie (KIT) für den Masterstudiengang Maschinenbau	366



Modulhandbuch Maschinenbau Master (SPO 2016)

SPO 2016

Gültig für Studienbeginner ab Sommersemester 2019

Stand 01.04.2019

KIT-FAKULTÄT FÜR MASCHINENBAU





Prüfungsausschuss
(examination board)

- Examination concerns
- Legally binding statements
- recognitions
- extensions
- second repetition



Studierenden Center
Maschinenbau
(ME student office)

- Recognition of internships
- Official advice center for general study concerns

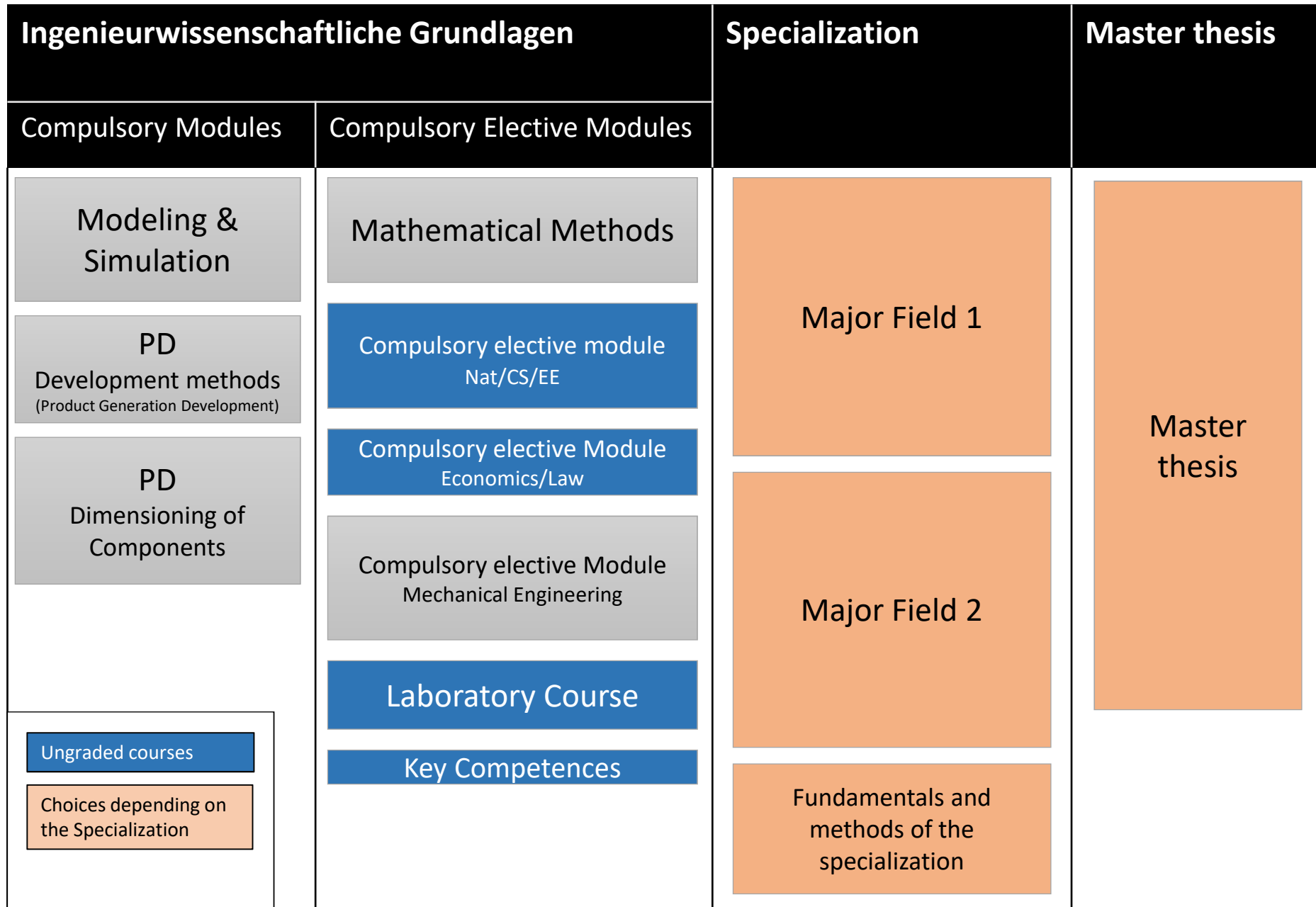


Studienbüro
(Student office)

- matriculation
- deregistration



Module Overview



Some remarks (I)



Compulsory modules Product Development

Currently not taught in English.

English slides and Exam, Lecture Translator



Modeling & Simulation

Slides, Lecture videos, Tutorial available in English



Mathematical Methods

Two English choices:

Mathematical Models and Methods for Production systems

Mathematical Methods of Fluid Dynamics

Mathematical Methods

Bricks						
Identifier	Title	Ver	Wgt	CP	Sem	
Mathematical Methods Count 1						
T-MACH-105293	Mathematical Methods in Dynamics	2	1	6.0	0	
T-MACH-105294	Mathematical Methods of Vibration Theory	2	1	6.0	0	
T-MACH-105295	Mathematical Methods in Fluid Mechanics	1	1	6.0	0	
T-MACH-105189	Mathematical Models and Methods for Production Systems	1	1	6.0	0	
T-MATH-102242	Numerical Mathematics for Students of Computer Science	3	1	6.0	0	
T-MATH-109620	Probability Theory and Statistics	2	1	5.0	0	
T-MACH-110375	Mathematical Methods in Continuum Mechanics	1	1	4.0	0	
T-MACH-110378	Mathematical Methods in Micromechanics	1	1	5.0	0	
Tutorial Mathematical Methods						
T-MACH-110376	Tutorial Mathematical Methods in Continuum Mechanics	1	1	1.0	0	
T-MACH-110379	Tutorial Mathematical Methods in Micromechanics	1	1	1.0	0	

Some remarks (II)



CEM Mechanical Engineering:

Nearly every lecture of the ME faculty can be chosen



CEM Economics / Law, Natural Sciences / CS / EE

Current catalog doesn't contain English lectures

New catalog will be made public in the next term and is available at the Fachschaft on request

You can basically take every lecture from the WIWI resp. PHYS/CHEM/INFO/ETIT faculties, just discuss it with the responsible professor first (Prof. Furmans / Prof. Maas)



Laboratory course

Two english subjects:
Decentrally controlled intralogistics systems and Energy Technology Lab

Some remarks (III)



Key competences

Every course from ZAK (Cultural Studies), HOC (Soft skills) and SpZ (Languages)

Also German course at Studienkolleg -> registration period expired, write an email to ksenija.fazlic-walter@kit.edu




Specialization


Multiple possibilities

Most German students choose General Mechanical Engineering -> no restrictions

Specializations

Fields			
Title	Wgt	CP	Sem
Specialization	Count		1
Specialization: General Mechanical Engineering	1	40.0	0 - 3
Specialization: Energy- and Environment Engineering	1	40.0	0 - 3
Specialization: Vehicle Technology	1	40.0	0 - 3
Specialization: Mechatronics and Microsystems Technology	1	40.0	0 - 3
Specialization: Product Development and Engineering Design	1	40.0	0 - 3
Specialization: Production Technology	1	40.0	0 - 3
Specialization: Theoretical Mechanical Engineering	1	40.0	0 - 3
Specialization: Materials and Structures for High Performance Systems	1	40.0	0 - 3

Major Fields and Fundamentals & Methods in the Specializations

Modules						
Identifier	Title	Ver	Wgt	CP	Sem	
Compulsory						
M-MACH-102405	Fundamentals and Methods of General Mechanical Engineering	1	1	8.0	0	
Major Fields Count  2						
M-MACH-102649	Major Field: Advanced Materials Modelling	1	1	16.0	0	
M-MACH-102598	Major Field: Advanced Mechatronics	2	1	16.0	0	
M-MACH-102646	Major Field: Applied Mechanics	2	1	16.0	0	
M-MACH-102599	Major Field: Powertrain Systems	2	1	16.0	0	

How to find lectures in English

- Filtering the University Calendar by language

Homepage

FAQ

▾ Events

University Calendar

Audience Circles

Extended Search for Events

Booking of Events

Favorites and Appointment List

Timetable and Calendar

Internet Calendar (WebCal)

▸ Examinations

▸ Re-Registration

▸ Certificates

▸ Personal Information

Contact

Extended search for events

🔍 Search

With the extended search for events you can search more precisely for events in the currently selected Winter Semester 2019/2020. Please specify the desired search parameters in the following fields and click on "Search". Please note that no more than 200 events could be shown as the result of the search.

Course number:


Title:

Event type:

Language:

Contact hours:

Appointment:

Date: 

Time: -

Room:

Lecturer:

Degree Program:

88-604-H-20165 - Mechanical Engineering Master 2016 ✕

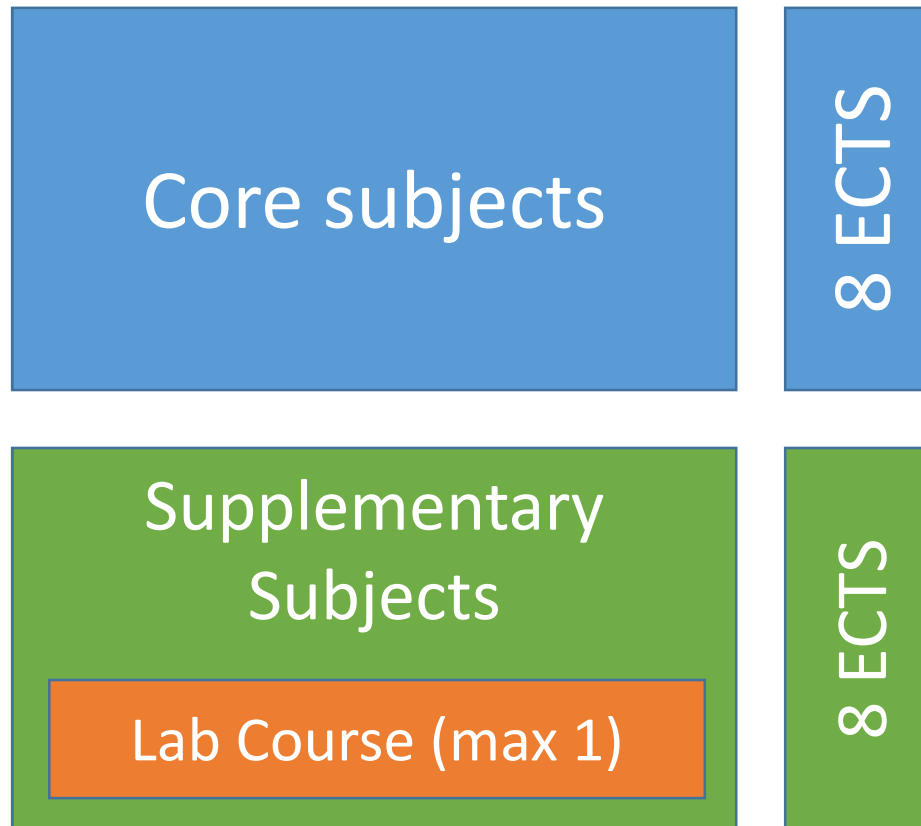
How to find lectures in English

- Filtering the University Calendar by language
- [List](#) on the ISIM Website
- Ask the professors
- Ask the Fachschaft

ISIM List ->



Choosing a major



Major fields

Bricks						
Identifier	Title	Ver	Wgt	CP	Sem	
Microactuators and Microsensors (K)		CP		i min. 8.0		
T-MACH-101910	Microactuators	2	1	4.0	0	
T-MACH-102152	Novel Actuators and Sensors	3	1	4.0	0	
Microactuators and Microsensors (E)		CP		i max. 11.0		
T-MACH-105238	Actuators and Sensors in Nanotechnology	1	1	4.0	0	
T-MACH-100966	BioMEMS - Microsystems Technologies for Life-Sciences and Medicine I	2	1	4.0	0	
T-MACH-105321	Introduction to Theory of Materials	1	1	4.0	0	
T-MACH-102166	Fabrication Processes in Microsystem Technology	1	1	4.0	0	

English major fields

- Requirements can be fulfilled with English courses:
 - SP12 (Vehicle Technology)
 - SP23 (Power Plant Technology)
 - SP33 (Microsystem Technology)
 - SP46 (Thermal Turbomachines)
 - SP56 (Advanced Materials Modeling)
 - SP59 (Entrepreneurship)
- With some small changes (custom Major Field):
 - SP21 (Nuclear Energy)
 - SP24 (Energy Converting Engines)
 - SP60 (Vibration Theory)

How to choose elective subjects?

- Add all courses that interest you to your personal time table on campus.studium.kit.edu

Personal Calendar

KIT
Karlsruhe Institute of Technology

Campus Management for Students

SEARCH: Modelling
SEMESTER: WS 19/20
DEGREE PROGRAM: 88-604-H-2016!

Homepage
FAQ
Events
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Event: 2185227 - Modelling and Simulation (WS 19/20)

Add to favorites iCal export Print

Event details Further information

Course number: 2185227
Title: Modelling and Simulation
Event type: Lecture (V)
Term: Winter Semester 2019/2020
Language: German
Contact hours: 2
Workspace: No workspace available
Link to this page: <https://campus.studium.kit.edu/ev/LewBIZ7qQuiGjFUHIKmNYg/>
E-Mail WhatsApp Facebook Twitter

Appointments

Appointment	Room	Start
> Thu 8:00 AM - 9:30 AM, weekly*	30.95 Forum Hörsaal (Audimax)	10/17/2019

* Appointments have been removed from this series.

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Personal Calendar

app10 (175m)

Timetable and Calendar overview

Remove from timetable Kalenderhöhe ▾ Print

Timetable View Month view Week view Day view

Stundenplan (1962885)

Winter Semester 2019/2020 Weekly appointment Fortnightly appointment One-time appointment

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM				Proppe et al.: 2185227 – Modelling and Simulation (V) 30.95 Forum Hörsaal (Audimax) 8:00 AM - 9:30 AM	
9:45 AM					

How to choose elective subjects?

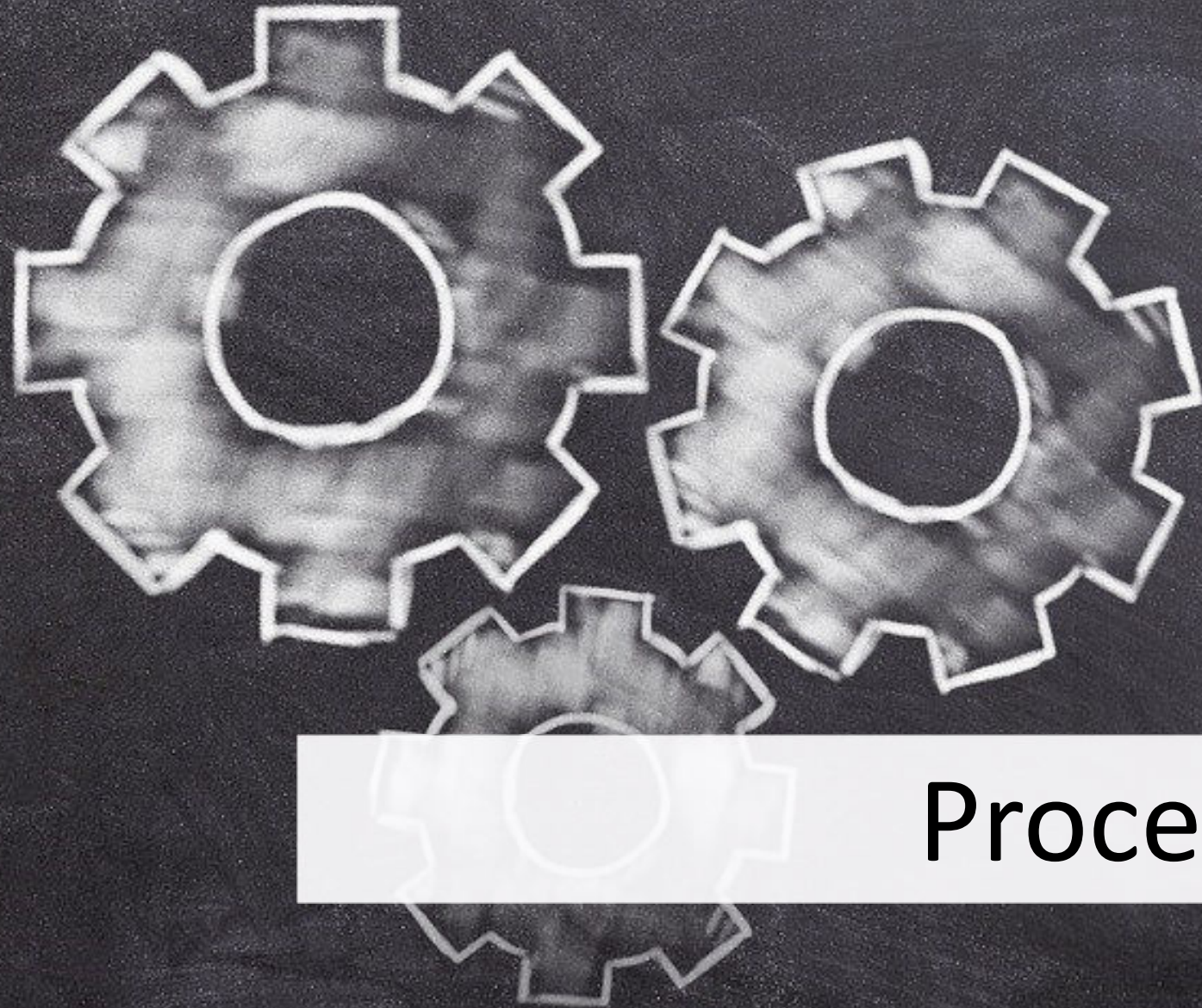
- Add all courses that interest you to your personal time table on campus.studium.kit.edu
- Visit all of them in the first week, then select
- You don't have to register for most courses, just for the exam

SpZ

(and Studienkolleg)

Key Competences





Processes

Registering and unregistering exams

Personal Study Schedule View				
Doe, John (12345678) Modules Bricks				
⌵ Title (with Identifier)	Type Status Grade Date CP (cur.) CP (req.) Sem			
⌵ 88-604-H-20165 –	?	30.0	120.0	1 - 4
⌵ Master Thesis	CO ?	0.0	30.0	4
⌵ M-MACH-102858 – Master's Thesis	CO ?	0.0	30.0	4
T-MACH-105299 – Master's Thesis	CO ?	0.0	30.0	4
⌵ Advanced Engineering Fundamentals	CO ?	20.0	50.0	1 - 4
⌵ M-MACH-102593 – Product Development - Dimensioning of Components	CO ?	0.0	7.0	1
T-MACH-105383 – Product Development - Dimensioning of Components	CO ?	0.0	7.0	1
⌵ M-MACH-102718 – Product Development - Methods of Product Development	CO ?	0.0	6.0	1
T-MACH-109192 – Methods and Processes of PGE - Product Generation Development	CO ?	0.0	6.0	1
⌵ M-MACH-102592 – Modeling and Simulation	CO ?	7.0	7.0	1
T-MACH-105297 – Modeling and Simulation	CO ?	7.0	7.0	1
⌵ M-MACH-102594 – Mathematical Methods 🌱	CO ?	6.0	6.0	1
T-MACH-105298 – Mathematical Methods in Structural Mechanics	CE ?	5.0	5.0	1
T-MACH-106831 – Tutorial Mathematical Methods in Structural Mechanics	CE ?	1.0	1.0	1

campus.studium.kit.edu

Video-Tutorials: <https://www.sle.kit.edu/imstudium/videotutorials-campus.php>

Registering and unregistering exams

Brick: T-MACH-105383 – Product Development - Dimensioning of Components (1962885)

< 1 of 1 >

Brick Details

Further information

→ General View

Identifier: T-MACH-105383

Title: Product Development - Dimensioning of Components

Version: Version 1

Degree Program: [88-604-H-20165 – Mechanical Engineering Master 2016](#)

Module: [M-MACH-102593 – Product Development - Dimensioning of Components](#)

Exam type: Written examination

Assignment type: Compulsory

Term: 1

Grade scale: third grades

Credit points (current): 0.0

Credit points (required): 7.0

Status:  not yet started

Exams (SS 2019)

» Exam no.	Title	Examiner	Examtype	Registration state
76-T-MACH-105383	Product Development - Dimensioning of Components	Schulze	written exam	Not registered Register not possible 

Video-Tutorials: <https://www.sle.kit.edu/imstudium/videotutorials-campus.php>

Voluntary / Unscheduled Exam



KIT-Fakultät für Maschinenbau

Zulassung zu einer außerplanmäßigen Prüfungsleistung am KIT im „Wahlpflichtmodul Maschinenbau“

Familienname: Vorname:
Matrikelnummer: Vertiefung: Bitte auswählen!
KIT-E-Mail-Adresse: Studiengang verwaltet in CAS HIS-POS

Hiermit beantrage ich die nachfolgend genannte Erfolgskontrolle im „Wahlpflichtmodul Maschinenbau“ des Masterstudiengangs Maschinenbau zu genehmigen, da diese im aktuellen Modulhandbuch nicht für das Modul vorgesehen ist. Die entsprechende Modulbeschreibung lege ich der/dem Modulverantwortlichen zur Prüfung vor.

Unterschrift Datum

Titel der Erfolgskontrolle (Deutsch und Engl.)	LP	Prüfer/in	Institut	Fakultät

Die Prüfungsleistung wird im „Wahlpflichtmodul Maschinenbau“ mit 4 LP und Note verbucht. Prüfungsleistungen sind schriftliche, mündliche oder praktische Leistungen. Die fachliche Entscheidung, ob die Lehrveranstaltung den Qualifikationszielen des Moduls entspricht, trifft der Prüfungsausschuss in Vertretung des/der Modulverantwortliche/n.

1. Genehmigung durch Prüfungsausschuss in Vertretung des/der Modulverantwortliche/n

Datum:
Unterschrift & Stempel:

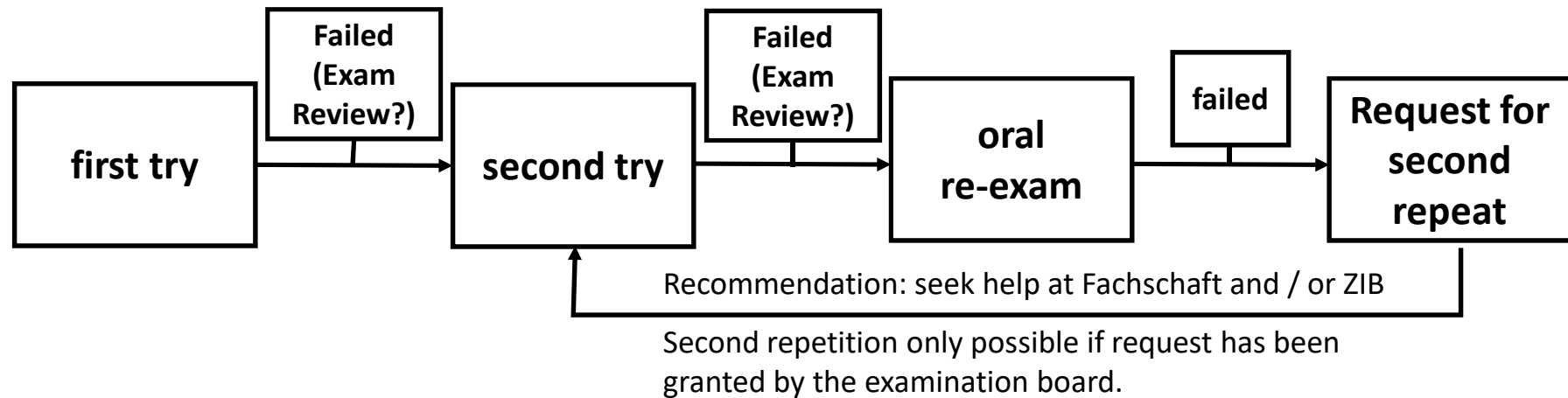
2. Genehmigung durch Prüfer/in

Erfolgskontrolle mündlich schriftlich praktisch
Unterschrift & Stempel:

3. Anmeldung der Erfolgskontrolle beim Studierendenservice

<https://www.mach.kit.edu/1597.php>

Repetition of written exams



Special cases:

- Ungraded modules
- Oral examination

Internship

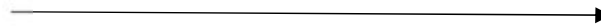
- 18 weeks of internship as Engineer mandatory
- Either before the beginning of the Master's programme (submitted with application)
- Or within the first three semesters
- Internship documents have to be submitted to SCM

Registering your internship



Internship
certificate
(original)

Until 3rd semester



SCM

Where to find an internship

- Institutes often have industry partners
- Internship offers are published on the websites of Fachschaft and KIT Career Service
- Ask your fellow students

Recognition of exams: „Mastervorzug“



KIT-Fakultät für Maschinenbau

Übertragung von Zusatzleistungen aus dem Bachelorstudiengang in den Masterstudiengang Maschinenbau am KIT

ANTRAGSTELLER/IN:

Matrikelnummer

Familienname:

Vorname:

E-Mail:

Ich beantrage, die im Bachelor-Studiengang am KIT erbrachte Zusatzleistung

Titel der Prüfungsleistung	SWS (V+U)	LP ECTS	Note

In den Master-Studiengang für die Vertiefungsrichtung: _____ zu übertragen als (bitte ankreuzen)*:

- GuMdV = Grundlagen und Methoden der Vertiefungsrichtung
- WPM = Wahlpflichtmodul Maschinenbau
- WPM-Nat = Wahlpflichtmodul nat/inf/etit
- WPM-WR = Wahlpflichtmodul Wirtschaft/Recht
- Lab = Laborpraktikum gem. Modulhandbuch
- M = Prüfung im Modul: _____
- MM = Mathematische Methoden
- E = Ergänzungsfach im Schwerpunkt _____ (bitte genehmigten Schwerpunktplan beifügen!)

(Ort) (Datum) (Unterschrift)

Bearbeitungsvermerk: (vom Studiendienst auszufüllen)

Datum

Unterschrift

*Bereits geprüfte Module nach der alten SPO vom 09.09.2008 im Zusatzmodul des Bachelor Maschinenbaus (SPO 2008) können gemäß Umschreibungstabelle http://www-2.mach.kit.edu/smach/Down/25po_Merkblatt_Master.pdf ohne weitere Anerkennung des Prüfungsausschusses übertragen werden.

**Submit form to
Examination Board
Attach Bachelor's
Transcript of Records**



Semester of leave

- You can apply for up to two semesters of leave for important reasons, i.e.
 - Parental leave
 - Medical leave
 - Caring for a relative
 - Founding a startup
 - Exchange semester
- All deadlines are moved by one semester
- You can take exams in a semester of leave
- Semester of leave is granted by the Study Office



More questions?



Search your question on the internet!

Check the module handbook



FAQ on the Fachschaft homepage:

<https://fs-fmc.kit.edu/faq/mach>

(Google Translate)

Visit the Fachschaft or contact us via
email: fachschaft@fs-fmc.kit.edu



Ask ISIM

Ask the Examination Board or SCM





Master Pub Crawl

- Thu, 17.10.18, 18:45
- Meeting point:
Mechanical Engineering
Tower
- Registration:
<http://www.fs-fmc.kit.edu/form/anmeldung-kneipentour-master>



Barbecue and Get Together

Now, in front of the Mechanical Engineering Tower