

## Medicine & Engineering

Our strong combination at FAU Erlangen-Nürnberg

# Welcome, master's students of Medical Engineering!



Master Welcome Day, SS 26  
Claudia Barnickel

# Agenda

---

- **Welcome by Prof. Bernhard Schmauß**  
(Director of the Medical Engineering program)
- **Introduction to the study program and FAU services**  
(Claudia Barnickel, Study Advisor and Coordinator Medical Eng.)
- **Q & A session**
- **Joint walk to the computer science tower & short introduction to the computer rooms (CIP pools)** → opportunity for you to design your course schedule
- **Campus Rallye** (solve small tasks around our campus in groups)
- **3:30 pm: Get-together for students of all study programs on the red square in front of the Mensa building** (with drinks and snacks)

---

Introduce yourself to the person sitting next to you and discuss the following points:

- Why are you here at FAU?
- Why Medical Engineering?

# The Diversity of Medical Engineering in Germany's Medical Valley



## Increase in population and diseases

Demographical development until 2050:

More people, longer life expectancy:

- Diabetes: +50%
- Infarction: +100%
- Cancer: +50%
- Dementia: +100%
- Stroke: +100%

**→ Increasing demand for diagnostic and therapeutic treatment!**



# Your „why“ must go beyond job prospects!

- Potential job prospects are not going to carry you through a 4 + semester master's program.
- You must find something in day-to-day uni life that interests you and motivates you.
- You don't have to be enthusiastic about every lecture every day, but if you are not enthusiastic about any lecture, you should take it as a sign that the program is not for you. → **Look for alternatives early on!**
- Everybody assumes that you are here because you want to learn. Nobody is going to push you towards receiving your degree. → **Self-management, time-management, discipline are your responsibilities.**

# Contact Persons (Medical) Engineering



# Director Medical Engineering Program

---

## **Prof. Dr.-Ing. Bernhard Schmauß**

Department of Electrical-Electronic-Communication  
Engineering

Institute of Microwaves and Photonics (LHFT)

Room 05.233 (5th floor)

Cauerstr. 9, 91058 Erlangen

[bernhard.schmauss@fau.de](mailto:bernhard.schmauss@fau.de)



# Study Advisor and Coordinator Medical Engineering

---

## Claudia Barnickel

Room 02.158 (2nd floor)

Martensstraße 3, 91058 Erlangen (computer science tower)

## Consultation via

- email: [studienberatung-medizintechnik@fau.de](mailto:studienberatung-medizintechnik@fau.de)
- phone: +49 9131 8567337
- zoom (schedule an appointment via email)
- in person-sessions in the office: **only with previous online registration: study program website: [www.medical-engineering.study.fau.eu](http://www.medical-engineering.study.fau.eu)**  
→ “Contact”

## Consultation about

- questions regarding your studies
- accreditation of academic achievements
- help in situations of crisis
- Studying abroad in European countries (Erasmus+ program)
- **questions you cannot solve on your own by reading our website, study guide or FAQs!**

## Helga Jahreis

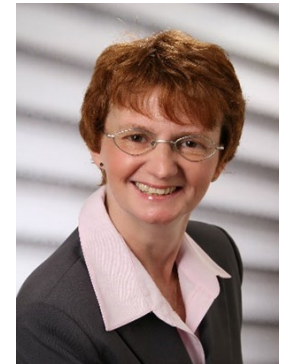
Room 1.042 (1<sup>st</sup> floor)

Halbmondstraße 6, 91054 Erlangen

(City Center)

+49 9131 8524752

[helga.jahreis@fau.de](mailto:helga.jahreis@fau.de)



## Consultation about

- managing exams, credits, grades online via the Campo portal
- last-minute withdrawal from exams due to illness or other severe reasons (submission of medical or other certificate)
- application for extension of studies (7th semester and beyond), see form on website of the Examinations Office

## Elisabeth Grosso

Room 1.031 (1st floor)

Halbmondstr. 6, 91054 Erlangen

(City Center)

+49 9131 8524809

[elisabeth.baechle-grosso@fau.de](mailto:elisabeth.baechle-grosso@fau.de)



## Consultation about

- General study-related questions (e.g. when your program advisor is on holiday or sick leave)
- Advisor for all engineering programs



Christine Mohr & student assistants

**[tf-stib@fau.de](mailto:tf-stib@fau.de)**

(Office with glass walls in the central lecture hall building)

## Consultation about


- Lost & found objects
- Soft skills courses (free of cost), e.g. presentation skills, communicating at the workplace, courses about German culture etc.
- Studying abroad: international partnership programs of the Faculty of Engineering (non-Erasmus = non-European countries)

## Other FAU Services



# FAU Email Account

[www.faumail.fau.de](http://www.faumail.fau.de)

- **Forward emails from your FAUmail account to you private email account!**  
Log into [www.idm.fau.de](http://www.idm.fau.de) – „self service“ – „email“ – click on the magnifying glass  symbol – enter your private email address.
- **All important information regarding your studies will be sent to your FAUmail account. You are responsible for receiving and reading it!**



The image shows a dark-themed login form for FAUmail. At the top left is the FAU logo, followed by the text 'FAUmail'. Below this are two white input fields: the first is labeled 'Benutzername' and the second is labeled 'Passwort'. At the bottom right of the form is a white button with the text 'Anmelden'.

# 24/7 Access to the Computer Science Tower

[www.idm.fau.de](http://www.idm.fau.de)

- Activate the 24/7 access function for your FAUcard in the IDM portal via “Door Access - Computer Science Tower”. Your FAUcard will then function as a key card for the building outside of its regular opening hours.
- You can come anytime to use the computer rooms!



# Foreign Language Training, Part I

## Sprachenzentrum (Language Center): [www.sz.fau.de](http://www.sz.fau.de)

- Courses during the lecture period are **free of cost**.
- Intensive courses during the semester break have a (reasonable) fee.
- **Registration** required for all courses. **Register today!**
- **German courses: For international students, German skills are going to be the decisive factor whether you find a job or not!**
- Languages to prepare for studying abroad:
  - e.g. Spanish, Portuguese, Italian, Finnish, Danish, Dutch...
- Language courses suitable for module group **M8 (Free Choice Uni)**
- Language courses are taught on-site, assistance is mandatory, places are limited. If you get into a course, assist regularly and finish it!
- The Virtual University of Bavaria ([www.vhb.org](http://www.vhb.org)) offers online courses in different languages (for free), but most of them cannot be counted towards your studies. → Still a good alternative if you don't get into the FAU courses right away. **Recommended VHB online course: "German after English"!**

# Foreign Language Training, Part II

---

## Language tandem, offered by FAU Language Center:

<https://sz.fau.eu/departement-media-autonomous-learning/autonomous-language-learning/tandem/>

- Not a course, but you are matched with a native speaker of your desired language who wants to learn your language.
- You meet up regularly to practice both languages.

## Weekly language meetup „Sprachcafé“, organized by Studierendenwerk (Student Services)

- Open event next to cafeteria „Südblick“, on Wednesdays 6-8 pm (starting from next week)
- Current languages on offer: German, English, Farsi, Spanish, French, Chinese, Azerbaijani, Turkish
- You can offer to be a tutor for your own language!

# Career Service

---

[career-service@fau.de](mailto:career-service@fau.de)

[www.career.fau.de](http://www.career.fau.de)



- Support in your job search (for student jobs & after graduation) - *but no placement in companies*
- Professional tips for your application documents
- Simulation of job interviews
- Useful workshops and seminars

**Free of cost – definitely use this service during your studies!**

# Office of Equality and Diversity

---



[www.equality-and-diversity.fau.eu](http://www.equality-and-diversity.fau.eu)

- Support and networking for women in science
- Support and networking for students with a migratory background
- Support and networking for first-generation academics
- Support and networking for the LGBTQ+ student community
- Support for students experiencing discrimination/harassment of any kind (due to gender, ethnicity, religion, sexual orientation/identity etc.)  
→ **Report cases of harassment or discrimination!**

# Family Service

---



<https://www.familienservice.fau.eu/>

- Advice on studying during pregnancy and childcare (special protection measures, benefits and support)
- Information on childcare facilities
- Meetups with other student parents

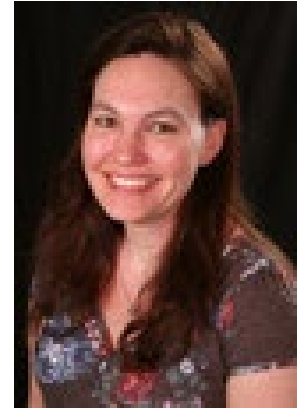
**→ If you came to FAU with children or are pregnant, definitely contact the Family Service!**

# Advice for Students with Disabilities or Chronic Diseases

## Esther Paulmann

[beeintraechtigt-studieren@fau.de](mailto:beeintraechtigt-studieren@fau.de)

- General advice and support (e.g. accessibility of buildings)
- Compensation of disabilities during examinations (e.g. more time)



## What counts as a...

- **disability?** All physical and mental impairments lasting at least 6 months.
- **chronic disease?** Illnesses that require at least one medical treatment per quarter over the course of one year.

# Psychological Counseling at the Faculty of Engineering

**Dipl.-Psych. Elizabeth Provan-Klotz, M.A.**

**Benjamin Ruopp, Mag. rer. nat.**

<https://www.tf.fau.de/studium/beratung/psychologische-beratungsstelle/>



## Assistance with:

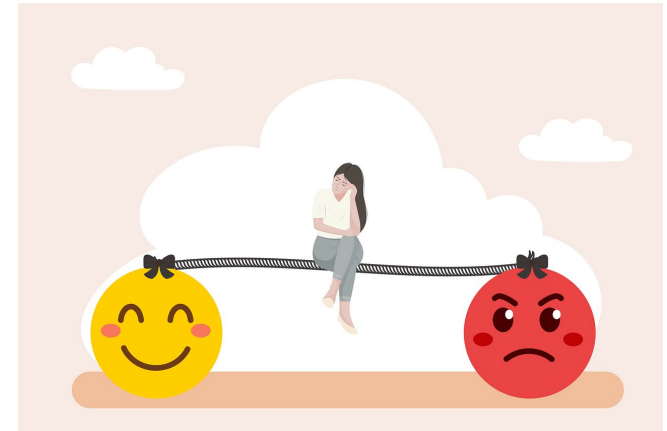
- Fear of speech, writing and exams
- Difficulties with learning, motivation problems
- Stress management
- Anger and impulse control problems
- Loneliness, depression, feelings of guilt, fears, thoughts of suicide
- Studying with a chronic illness or disability
- Relationship, partner and family problems
- Identity and orientation problems
- Displacement from parents/home country
- Questions about addiction and addictions (e.g. nicotine, alcohol, internet)
- Integration and cultural difficulties

# Other mental health-related offers

[www.werkswelt.de](http://www.werkswelt.de)

→ Section „Service and Counselling“

Courses on topics such as exam anxiety,  
exam preparation strategies  
etc....



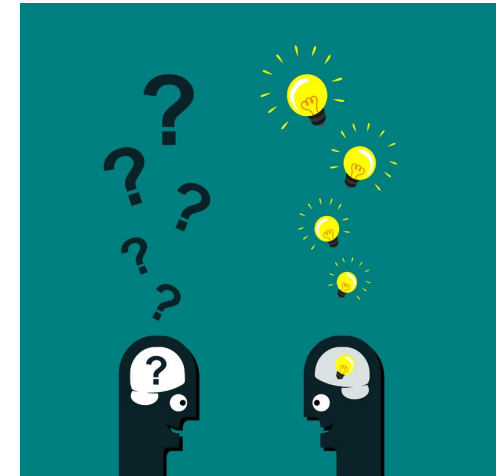
**Registration required! Make sure to take these courses at the beginning of the semester before the exam period approaches/your exam anxiety worsens etc.!**

# Legal Advisory Service

[rechtsberatung@werkswelt.de](mailto:rechtsberatung@werkswelt.de)

<https://www.werkswelt.de/rechtsberatung>

- Free & professional advice on problems with rental contracts, work contracts, visa status etc.



# Student Groups

[www.stuve.fau.de/gruppen/](http://www.stuve.fau.de/gruppen/)

- Groups for all kinds of interests: theater, debate club, robotic soccer, politics, FAUFabLab, mindfulness & meditation, social engagement, national groups (e.g. Chinese or Pakistani students at FAU) etc.
- Just contact the groups and ask about their next meeting.
- You can also found and register your own group!

→ **Tip:** Pick out one group and join it in your 1st semester. It will make your studies easier, more fun and more successful. **You cannot „survive“ in university life without experienced locals who know how things work!!!**



# Buddy program

<https://www.fau.eu/education/international/from-abroad/welcome-programme-for-international-students/buddy-programme/>

- The buddy program puts international students in contact with local students who can answer daily life questions and provide useful tips.
- Buddies are not official advisors – they are volunteer FAU students who are interested in other cultures and would like to help international students.
- They can show you around Erlangen, help you find a used bike, recommend a medical doctor etc. - i.e. support you with questions you wouldn't ask your study advisor.



# University Sports

---

[www.hochschulsport.fau.de](http://www.hochschulsport.fau.de)

- Different sports courses at a low price
- Registration for the current semester has already started, but you might still get a remaining spot.
- If you want to get into the popular courses you have to be really fast on registration day!
- **Don't underestimate the effect of sports on your physical and mental health!**



# How to find information...

---

Your **24/7 source** for all **medical engineering-related** services and information:

- [www.medical-engineering.study.fau.eu](http://www.medical-engineering.study.fau.eu)
- [www.medizintechnik.fau.de](http://www.medizintechnik.fau.de)

**...including today's presentation (section "Current Students"/"Studierende")!**

# How to find information...

---

Your best strategy to access the **other FAU services** mentioned today:

Just type **“FAU” + keyword in google!**

E.g.

“FAU university sports”

“FAU psychologist”

“FAU legal advice”

“FAU language tandem”

“FAU semester dates”

etc.

# Why we expect you to look up information on your own

---

- **University statutes:** FAU provides training to students “to become critical, **self-reliant** personalities, who apply skills and knowledge independently, responsibly and for the good of society” → We provide **help for self-help:** “Give a man a fish and you feed him for a day. Teach him how to fish and you feed him for a lifetime.” (Chinese proverb)
- **You don't pay tuition fees!** Taking care of yourself is the “price“ you pay for not paying for your studies. Currently, everything is payed for by the German tax payer. → **Staff is limited!**
- **DIY culture** vs. “Call the guy” culture: Identify where your culture of origin lies on that spectrum (Who assembles furniture in your country? Who puts in the gas at the gas station? Who cleans the house?). Germany is on the DIY end of the spectrum.
- General rule for all university units (and public service in general): Your own **proactiveness** (looking up information, preparing documents correctly etc.) **makes people more inclined to help you.**
- **Independent problem-solving** is **THE primary skill expected by employers** in Germany. This is the last educational phase in which you can develop it.

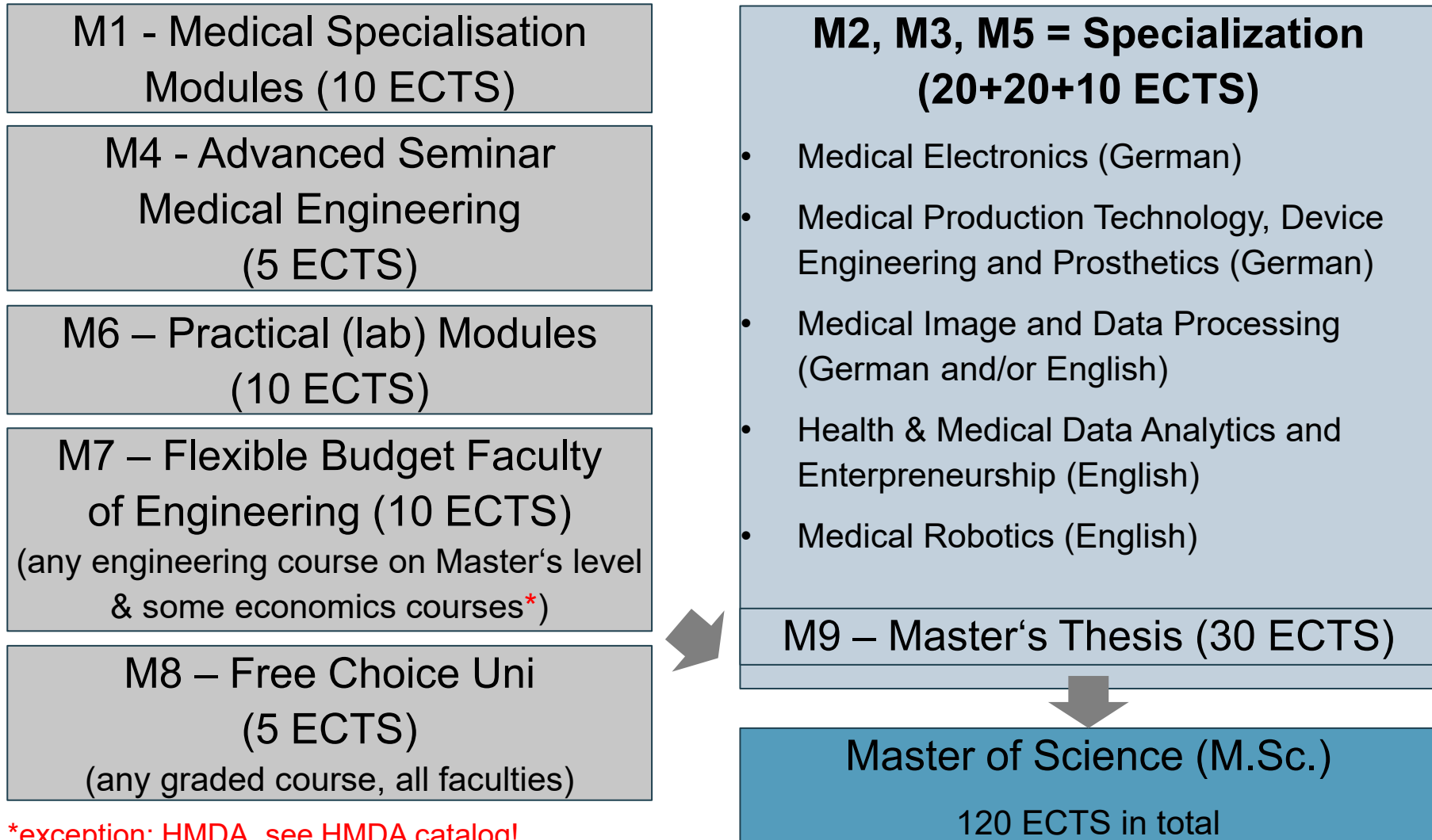
→ **Before you send an email, check if you can solve the problem by looking up information online! Our online resources (FAU website, Medical Engineering website) are reliable.**

# Master's Program Medical Engineering Program Structure



- ***European Credit Transfer and Accumulation System***  
Assessment of student workload required for the learning outcomes of a program
  - 30 credits: recommended workload per semester
  - 1 credit:  $\approx$  30 of hours of work (in class & at home)
- You will find information on ECTS in the module catalogs, in the online information system Campo, on your Master's certificate/Transcript of Records.

# Master's Program Medical Engineering: Structure



\*exception: HMDA, see HMDA catalog!

- Total of **120 ECTS** credits should be evenly spread over 4-6 semesters. You must acquire **20-30 ECTS credits per semester** in order to stay within the **6 semester time limit**.
- Few compulsory modules (**see footnotes in your module catalog!**)
- Mostly free choice within the list for each module group
- Not all lectures are offered in winter and summer (see catalog), time slots may differ from semester to semester; there may be time overlaps (refer to video lectures: [www.fau.tv](http://www.fau.tv))
- Recommended time for going abroad: 3<sup>rd</sup> or 4<sup>th</sup> semester (start planning now, see study program website)

# Semester Structure

- *Regular* duration of studies: 4 semesters/two years (can be extended to 5 or 6 semesters simply by re-registering + paying the semester fee), further extensions to a 7th, 8th semester etc. possible in *justified* cases; **prerequisite: you study actively and pass enough exams.**
- Leave from studies (due to severe illness, childcare etc.) counts as 0 in the semester count; you cannot register exams. → Apply with respective certificates at the Student Records Office!
- Semester: lecture period (14 or 15 weeks) + lecture-free period ('holidays' ≈ 12 weeks)
- Two exam periods: first 2 weeks and last 4 weeks **of the lecture-free period (holidays)**
- Every exam takes place **once** per semester in one of the two exam periods (not both).

# How to select your courses

---

- Take and pass the **mandatory courses** as soon as possible!
- Choose the rest of your courses wisely!
  - Choose according to your talents/interests. → Your course profile will eventually lead you to your master's thesis topic.
  - Find a good mix of „safe bets“ and branching out. Small, „special interest“ courses offer the best chance to secure a master's thesis.
  - Identify your knowledge gaps and take corresponding courses to fill them. → Your desired supervising lab for your master's thesis will only accept you if you possess solid knowledge in its research field.
  - Do not just take courses because your friends take them or somebody told you the exam will be easy. → An incoherent course profile („course salad“) will result in a big struggle to find a master's thesis.
  - Do not choose courses based on a perceived job market demand. → If you take courses in AI because everybody talks about AI but you don't care about AI, you will receive bad grades in AI and no AI company will hire you.

# Exams

- **You have to register for the exams you want to take.** Exam registration is independent from course participation. I.e. you can attend a lecture, but not take the exam. You can choose not to attend a lecture, but study on your own and take the exam (not recommended!).
- You have **4 chances** in total for every exam (1 chance per semester). You can decide in which semester you want to take your exam attempts, but don't wait too long (examiner might leave FAU, only 6 semesters are guaranteed for the master's)!
- **Failed 4th exam attempt = end of Med. Eng. studies & loss of residence permit (for non-EU students with a residence permit for studies) → Apply for alternative study programs at the beginning of every semester in which you have a 4th attempt!**
- Cheating in exams is graded with 5.0 (failed) and reported to our examinations office (sanctions!).

# Withdrawal from registered exams

---

- Until 3rd working day (Mon-Fri; public holidays don't count) before the exam day without giving any reasons (self-deregistration via Campo portal)
- Last-minute withdrawal is possible in case of illness/severe reasons (send medical/other certificate immediately to Mrs. Jahreis of the Examinations Office)
- If you feel sick during an exam, you must tell the supervisors, leave the exam and see one of the authorized FAU doctors (see Medical Engineering website „Current students“); if the doctor confirms your illness, the exam attempt doesn't count.
- **If you don't attend an exam that you are registered for without submitting a medical/other certificate, it counts as a failed attempt!**

# Studying for exams

---

- Memorizing and reproducing course content is not enough. You are expected to understand the underlying concepts and apply them to new contexts (calculate, code etc.).
- Study with old exams from FSI (student association). But be aware: The exam will include questions/tasks you have never seen before. You are expected to solve them independently.
- Start studying early on (i.e. when lectures start). You won't be able to prepare exams a few days ahead of the exam date.
- Find a system to study in parallel for several exams (exam dates will lie close to each other, you cannot study for one exam at a time).
- Attending the exercises and submitting exercise sheets regularly is your best exam preparation.
- Ask questions in class and during the exercises. It is highly appreciated by your lecturers and helps you understand the content.
- Form study groups with fellow students (it helps to compare and assess where you currently stand).

# How to find a study group

- Feel free to approach fellow students in/before/after class. This is what studying together is meant to be!
- Register on our online platform „Study Buddy“ and contact students who are taking the same courses/preparing for the same exam as you!



# Exam results

---

- 1,0 = best grade; 4,0 = worst passing grade; 5,0 = failed
- **Grades are feedback on your skills!**
- If you fail an exam once, it means that you prepared for it the wrong way. → Adapt your preparation strategy!
- If you fail several exams in your first semester → Ask yourself if it is your preparation strategy or if the program is not the right fit for you.
- If you continue to fail several exams and/or receive unsatisfactory grades (3,0 – 4,0) → prepare an exit strategy (other study program, other university/university of applied sciences, prepare to enter the job market etc.)
- Don't wait too long to opt for alternatives! You will only lose time and money. You will not find a supervisor for the master's thesis with an unsatisfactory grade average. You will not find a job in Germany/Europe based on a master's degree with an unsatisfactory final grade.
- There is a fitting educational program for everyone. If it is not ours, search actively for yours!

# Semester Dates

---

## Summer semester 26 (Apr 1 – Sep 30 2026):

Lecture Period:	<b>Apr 13 - Jul 17 2026</b>
Exam Registration:	<b>May 18 - Jun 7 2026 (Reminder via email!)</b>
Re-registration for winter 26/27:	<b>1st week of July 2026 (Reminder via email!)</b>
Semester break (no lectures):	<b>Jul 18 - Oct 11 2026</b>
Exam periods:	<b>Jul 20 - Aug 1 &amp; Sep 14 - Oct 9 2026</b>

Sources: [www.fau.eu/education/study-organisation/semester-dates/](http://www.fau.eu/education/study-organisation/semester-dates/)

[www.fau.eu/education/advice-and-services/examination-offices/examinations-office-faculty-of-engineering/](http://www.fau.eu/education/advice-and-services/examination-offices/examinations-office-faculty-of-engineering/)

# Types of Courses

---

- **V/L:** Vorlesung/lecture – generally no registration, attendance not mandatory (but highly recommended!). → **Just attend the first lecture.**
- **Ü/E:** Übung/Tutorium; exercise class/tutorial – accompanies lectures, usually starts in the 2<sup>nd</sup> week, further details in the 1<sup>st</sup> lecture. Usually not mandatory, but completing the exercises may give you bonus points for the exam. Attending exercises = best exam preparation! → **Just attend the 1<sup>st</sup> lecture to find out about the exercise modalities.**
- **P:** Praktikum/practical course (lab course) – attendance mandatory, early registration (see Campo) – **not relevant for 1<sup>st</sup> semester**
- **S:** Seminar – attendance mandatory, early registration (see Campo)- **not relevant for 1<sup>st</sup> semester**

- **Prüfungsleistung (PL)/Graded course achievement (gCA)**

- schriftlich/written
- mündlich/oral
- Seminar (presentation and paper)

Most of the exams at FAU are on-site exams, very few online exams!

- **Studienleistung (SL)/Ungraded course achievement (uCA):  
pass/fail system**

- e.g. exercise classes or practical courses
- Hochschulpraktikum/Academic Laboratory (M6.1)
- Forschungspraktikum/Research Laboratory (M6.2)

Gruppe	Modulnummer	Module Modulbezeichnung (Veranstaltungsname)	Abkürzung	V+Ü+S+P	Gesamt				Studien- und Prüfungsleistungen	Department	Modulverantwortlicher / Dozent	WS/SS
					WS	SS	WS	SS				

**‘Grundcurriculum’/  
common catalog  
(for all  
specializations  
taught in German)**

M 1 Medizinische Vertiefungsmodule																																															
				V+Ü+S+P	10	5	5	0	0	PL																																					
Wahlkatalog	M 1.1 <sup>1</sup>	Grundlagen der Anatomie & Physiologie für Nichtmediziner	AnaPhys_MI	4+0+0+0	5	2,5	2,5	0	0	60 s	VORKLIN	Prof. Dr. Clemens Forster	WS/SS																																		
		Clinical Applications of Optical Technologies and Associated Fundamentals of Anatomy	OMED/CA	4+0+0+0	5		5			45 s	KLIN	Prof. Dr. med. Michael Eichhorn	SS																																		
	M 1.2	Medizinische Vertiefung 1			5	5	0	0	0	60 s	KLIN	N.N.	WS																																		
	M 1.3	Medizinische Vertiefung 2			5	0	5	0	0	60 s	KLIN	N.N.	SS																																		
	<b>Liste der Lehrveranstaltungen für M1.2 bzw. M1.3</b>																																														
		Interdisziplinäre Medizin			0+0+2+0	2	2	0	0	0	45 s		Prof. Dr. med. Harald Mang	WS																																	
		IT-Unterstützung im Prozess der diagnostischen Bildgebung			1+0+0+0	1	1	0	0	0	45 s		Dr. Thomas Kauer	WS																																	
		Grundlagen der biologischen Strahlenwirkung I			2+0+0+0	2,5	2,5	0	0	0	45 s		PD Dr. med. Luitpold Distel	SS																																	
		Grundlagen der biologischen Strahlenwirkung II			2+0+0+0	2,5	2,5	0	0	0	45 s		PD Dr. med. Luitpold Distel	WS																																	
		Grundlagen der Kardiologie			4+0+0+0	4	4	0	0	0	90 s		Prof. Dr. med. Harald Mang	WS																																	
	Medizinische Biotechnologie			3+0+0+0	3	0	5	0	0	90 s		Prof. Dr. med. habil. Dr. Gert-Lothar Frisch	WS																																		
<table border="1"> <thead> <tr> <th colspan="12">M 1 Medizinische Vertiefungsmodule</th> </tr> <tr> <th></th> <th></th> <th></th> <th></th> <th>V+Ü+S+P</th> <th>10</th> <th>5</th> <th>5</th> <th>0</th> <th>0</th> <th>PL</th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10</td> <td>5</td> <td>5</td> <td>0</td> <td>0</td> <td>PL</td> <td>siehe Wahlpflichtkatalog für alle Studiennrichtungen</td> </tr> </tbody> </table>												M 1 Medizinische Vertiefungsmodule																V+Ü+S+P	10	5	5	0	0	PL							10	5	5	0	0	PL	siehe Wahlpflichtkatalog für alle Studiennrichtungen
M 1 Medizinische Vertiefungsmodule																																															
				V+Ü+S+P	10	5	5	0	0	PL																																					
					10	5	5	0	0	PL	siehe Wahlpflichtkatalog für alle Studiennrichtungen																																				

**An updated version is published at the beginning of every semester!**

M 2 Ingenieurwissenschaftliche Kernmodule													
				V+Ü+S+P	20	10	10	0	0	PL			
Wahlkatalog	M 2.1	Ereignisgesteuerte Systeme	EGS	2+2+0+0	5	5				90 s	INF	Dr.-Ing. Michael Gieß	WS
	M 2.2	Grundlagen der Systemprogrammierung (Systemprogrammierung 1)	GSP (SP 1)	2+2+0+0	5	0	5	0	0	90 s	INF	Prof. Dr.-Ing. Wolfgang Schröder-Preikschat	SS
	M 2.3	Digitale Übertragung / Digital Communications	DÜ / DICo	3+1+0+0	5	5				90 s	EEL	Prof. Dr.-Ing. habil. Johannes Huber, Prof. Dr.-Ing. Robert Schober	WS: engl. SS: dt.
	M 2.4	Signale und Systeme II	SISY II	2,5+1,5+0+0	5	0	5	0	0	90 s	EEL	Prof. Dr.-Ing. André Kaup	SS
	M 2.5	Computergraphik / Computer Graphics	CG	3+1+0+0	5	5				30 m	INF	Prof. Dr.-Ing. Marc Stamminger, Prof. Dr. Günther Greiner	WS
	M 2.6	Digitale Signalverarbeitung / Digital Signal Processing	DSV	3+1+0+0	5	5				90 s	EEL	Prof. Dr.-Ing. Walter Kellermann	WS
	<b>Aufbaumodule / Advanced Modules (A)</b>												
	M 2.7 <sup>1</sup>	Pattern Recognition	PR	3+0+0+0	5	5				30 m	INF	Prof. Dr.-Ing. Joachim Hornegger	WS
	M 2.8 <sup>1</sup>	Pattern Analysis	PA	3+0+0+0	5	5				30 m	INF	Prof. Dr.-Ing. Elmar Noth	SS
	M 2.9	Statistische Signalverarbeitung / Statistical Signal Processing	STASIP	3+1+0+0	5	5				90 s	EEL	Prof. Dr.-Ing. Walter Kellermann	SS

**Catalog for each specialization**

# Where can I find the catalogs?

## Website of the Medical Engineering program:

<http://www.medizintechnik.studium.fau.de/>

→ Studierende → Masterstudium → Überblick und Modulkataloge  
FPO 2023

<http://www.medical-engineering.study.fau.eu/>

→ Current students → General Study Information Master's Program  
→ General Study Information & Course Syllabus (FPO 2023)

- Your FPO version remains valid for you throughout your whole studies! In Campo, you can find your courses under „PO-Version 2022“.
- Module catalogs are updated every semester on the Medical Eng. website! Always use the current catalog & read the footnotes!

# What else can I find on the study program website?

<http://www.medizintechnik.studium.fau.de/>

<http://www.medical-engineering.study.fau.eu/>

- Study Guide = a booklet that explains everything you need to know about your studies (German and English version)
- Today's presentation slides (section "Current Students"/"Studierende")
- Detailed information on all modules in your study program, studying abroad, accreditation of coursework etc.
- Links to examination regulations (for the Medical Engineering program= FPO, for the Faculty of Engineering: ABMPO)
- Important forms
- **FAQ section → 99% chance that your questions are already answered there!**
- News & events
- Job & thesis offers related to Medical Engineering

**The *written word* is the most trustworthy source of information!**

# M9: Master's Thesis

---

- independent execution of scientific tasks in Medical Engineering
  - **Prepare yourself early on:** e.g. through lectures “Nailing your thesis”, „Scientific Writing“ etc. (see Medical Engineering website).
- Prerequisites: 75 ECTS credits, completion of all mandatory modules (see footnotes in catalogs)
- to be completed within 6 months
- Look for your topic **in due time** (beginning of your penultimate semester)!
  - **Select your modules in preparation of your thesis topic, attend the courses physically & leave a good impression on the lecturers!**
- Look for thesis topics on the labs' websites, ask for personalized/non-advertised topics at the labs (professors, PhD students).
- Specific details, formalities, thesis form → Medical Engineering website

# What's next?

---

## 1. Compile your class schedule

→ CIP pool, Campo (Instructions on the Medical Engineering website, section “Current students”/”Studierende”)

## 2. Join the first lecture meetings (starting next Monday)

Lecture materials are shared via the e-learning platform StudOn

If you encounter problems with the StudOn course → attend the first lecture meeting and ask your lecturer!

## 3. Register for exams → Campo (May/June, reminder via email)

## 4. Re-register for the next semester (1<sup>st</sup> week of July)

→ Campo, bank transfer (reminder and details via email)

## 5. Study continuously from the beginning & pass exams!

# Good to know...



# Important information for international/non-EU students

- **No enrollment = no residence permit!** Failed 4th (=last) exam attempt → deregistration from study program by the end of the semester → loss of your residence permit = return to home country!
- **GOLDEN RULE:** When you register for a 4th attempt for any exam, you **MUST** apply for (and receive admission to) another English-taught master's program for the following semester so that you have a backup plan. **Take this matter VERY SERIOUSLY!** Do not only apply for programs at FAU but for programs at other German universities, too!
- **Student jobs** (at the university and at companies) and rooms in **student dorms** depend on your student status. **No enrollment = loss of student job and student dorm!**
- You must report changes of your study program to the Immigrations Office. You will usually only get permission to change your study program **once!** If you are de-registered from your study program, you also have to report this immediately! Students with a residence permit for studies generally **cannot change to part-time studies.**

# “Safety measures“ international/non-EU students

- Get your bachelor’s degree recognized at ZAB (Central Office for Recognition of Foreign Degrees): [www.kmk.org/zab/](http://www.kmk.org/zab/) This will allow you to look for work based on your bachelor’s degree if needed (you must apply for a work permit instead of your residence permit for studies). **With a residence permit for studies, you are only allowed to work 140 full days or 280 half days per year.**
- If you don’t get a spot in the German courses of our Language Center right away, study on your own with the free German courses offered at the Virtual University of Bavaria ([www.vhb.org](http://www.vhb.org)) & speak German at university! Try to reach **at least B1 level, ideally B2!**
- Seek the advice of our officer of the German Employment Agency early on (consultation sessions at our faculty: [michael.huemmer@arbeitsagentur.de](mailto:michael.huemmer@arbeitsagentur.de))
- Network with companies in the region (attend events by Medical Valley Center, Zollhoff Tech Incubator, Fraunhofer Institute, job fairs etc. → Read emails by your study advisor, FAU newsletters).
- **Be active: Always have a backup plan, so that you have the best possible time in Germany!**

# Special cultural tips for international students

## Expect the unexpected!

- Reflect on what is typical for university life in your home country (style of lectures, exams, exam preparation, interactions with professors/staff, communication style etc.) and operate with the working model that those aspects are going to be different in Germany.
- You'll have plenty of time to observe, ask and research in which ways they are different, but you should never assume that things are as you are used to.  
**Assuming that things are like in your home country is the number 1 reason why international students drop out of our program!**

## Take as many courses about German culture as you can!

- If you don't learn to manage the cultural differences you will struggle in every single aspect of life.
- Courses are offered by the FAU Career Service, FAU International Office and the Study-Service-Center of the Faculty of Engineering. German courses will also teach you about fundamental aspects of culture.
- **Highly recommended for your 1st semester:** online course ([www.vhb.org](http://www.vhb.org)) „Fundamentals of Intercultural Communication“ (module group M7)

## Know people's complete names, their title and their lab affiliation!

- Not knowing people's full name is perceived as unprofessional and impolite.
- Understand the personnel structure in academia:
  - A person working at a lab with the title M.Sc. = PhD candidate → „Dear Mr. Smith/Dear Mike Smith...“; „Dear Mike...“ (ONLY if Mike has offered you to interact on first-name basis)...
  - A person working at a lab with the title Dr. = postdoctoral researcher (Postdoc) → „Dear Dr. Smith...“; „~~Dr. Mike~~“: doesn't work in the German context!
  - A person working at a lab with the title Prof. = Professor, i.e. highest academic degree in Germany → „Dear Prof. Smith...“; Do not call everybody „professor“!
  - When in doubt, always start with the most formal salutation, wait for the recipient's reaction and follow their style. It is always the person higher up in the hierarchy that has to offer a more informal communication style.

## Do not show up at people's offices without scheduling an appointment!

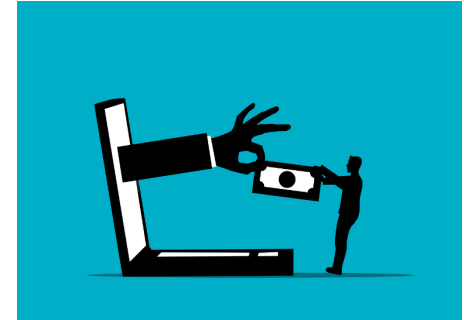


<https://www.youtube.com/watch?v=BU1xwokWDVA>

- Make an appointment with a general medical practitioner („Hausarzt“) and get all the recommended vaccines (**among others: tick-borne encephalitis, TBE**)! All recommended vaccines are covered by your health insurance (i.e they are free of cost).
- Talk to your doctor about vitamin D supplementation (not enough sun from October to March for your body to produce vitamin D; vitamin D deficiency can cause fatigue, lack of concentration, symptoms of depression etc.)



- **Beware of scams!** No university staff member will ever ask you to buy things for them (e.g. google play cards) or send them money. If this happens to you, the respective email account has been hacked. Please report to our Computer Center!
- Don't share your **personal data and passwords!**
- **Beware of scams** when looking for **housing** and **jobs!** If something seems too good to be true, have the offer checked by our International Office ([welcome-students@fau.de](mailto:welcome-students@fau.de)). Common job scam: Sending parcels with (stolen) goods or transferring money (money laundering)!
- **Intellectual property** (e.g. own text vs. citing in scientific publications), **authorship** of lecture recordings/materials, **personal rights & privacy** (regarding photos etc.) are taken extremely seriously! Never use/share without asking/citing correctly! The use of **ghost writing services/ChatGPT in assignments is sanctioned!**



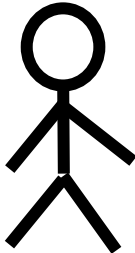
# Success or problems in your studies don't just "happen" to you...

**failed 4th exam attempt  
= deregistration from  
the study program =  
loss of residence  
permit!**

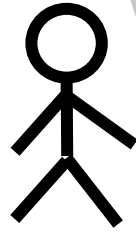


# Most of the problems you will encounter are caused by a series of small bad decisions:

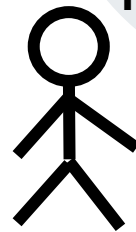
---



**I won't read the study guide.  
I'll have my friends explain to  
me what they think they  
understood about the  
program.**

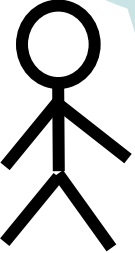


**I don't need to  
socialize with other  
students.**

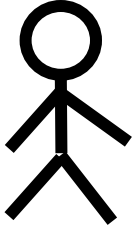


**Should I look this up  
on the Medical  
Engineering website?  
Nah..I'll rather go with  
my gut feeling!**

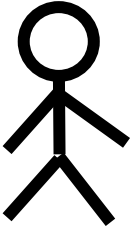
# Success is built through a series of small good decisions:



Let's attend a university event and talk to people! We might meet researchers and find a job at their lab or a master's thesis...



I'll sign up for a sports course/student group. This will keep me motivated for my studies.



I feel really bad about this situation. I better talk to a study advisor/psychologist about it.

# Many small steps set you up for success:

1. Read the Medical Engineering program website & study guide. Don't rely on hearsay!
2. Read emails from your study advisor and the FAU administration thoroughly.
3. Read the footnotes in your module catalogs.
4. Get to know our professors and their labs early! You will need this knowledge for finding a master's thesis!
5. Ask your lecturers/tutors questions in class – they enjoy discussing them & it is a great way to show your interest (e.g. for a future master's thesis)!
6. If there is a problem (e.g. last exam attempt) talk about it with your tutor/lecturer/study advisor/psychologic counselor as early as possible.
7. Engage in campus life (sports, student organizations, trips, fairs etc.).
8. Take language classes and soft skills workshops. This is the last time in your life that things are for free!
9. Organize study groups, whatsapp groups, coffee meetups etc. Find your peer group and build a network! Don't underestimate the benefits of social life!
10. Be polite: Send short, concise emails with a *personal* salutation, thank you and your full name + student number. **Don't use ChatGPT for emails!** Wait 7 days to follow up if you haven't received a reply.

11.

---

**Thank you for your attention!**  
**Questions?**

**Have a great start of the  
semester!**

**Stay active, curious and connected!**

