

Welcome to our Department of Mechanical Engineering

Your Guides for today

Department of Mechanical Engineering



Meike Herbert, M.Sc.

Study advisor and International Coordinator at the Department of Mechanical Engineering since February 2023

- Study program Electromobility (ACES)
- Responsible for Learning agreements, contact person for exchange programmes

Your guides for the Campus Tour

- **Malaika Muschler**, student assistant
- **Brisilda Veizi**, student assistant

Faculty Day for International Students

Today's program



| 5 October 2023 | Program |
|---------------------|--|
| 11:30 am – 01:05 pm | General information about the faculty |
| 01:15 pm – 02:15 pm | Welcome and Information by the Department of Mechanical Engineering |
| 02:30 pm – 03:30 pm | Campus Tour (Meeting on the Red place) |
| 03:30 pm – 05:00 pm | Get together with drinks and pretzels (Meeting on the Red place) |



Image: FAU/Erich Malter

Departments of the Faculty of Engineering

Mechanical
Engineering (MB)

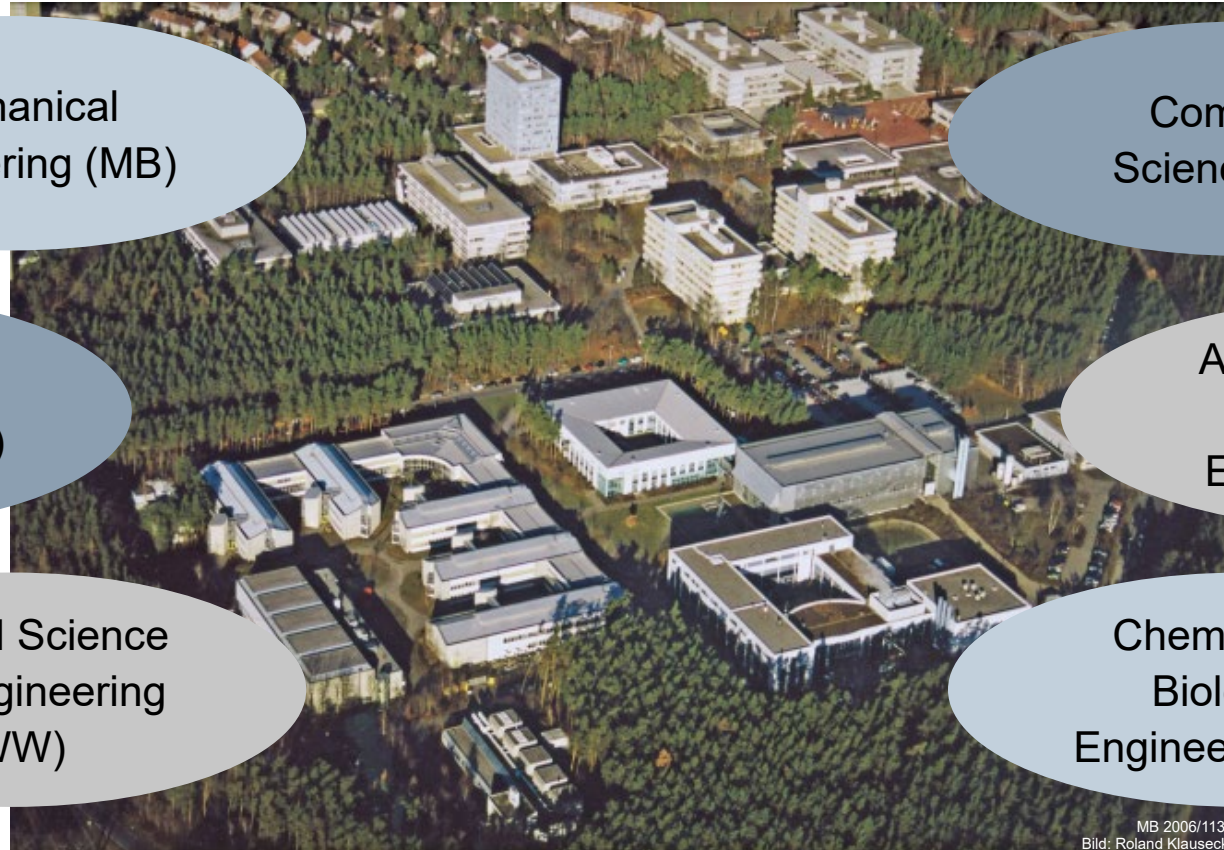
Computer
Science (INF)

Electrical
Engineering (EEI)

Artificial Intelligence
in Biomedical
Engineering (AIBE)

Material Science
and Engineering
(WW)

Chemical and
Biological
Engineering (CBI)



MB 2006/11323
Bild: Roland Klausecker

Our study programs



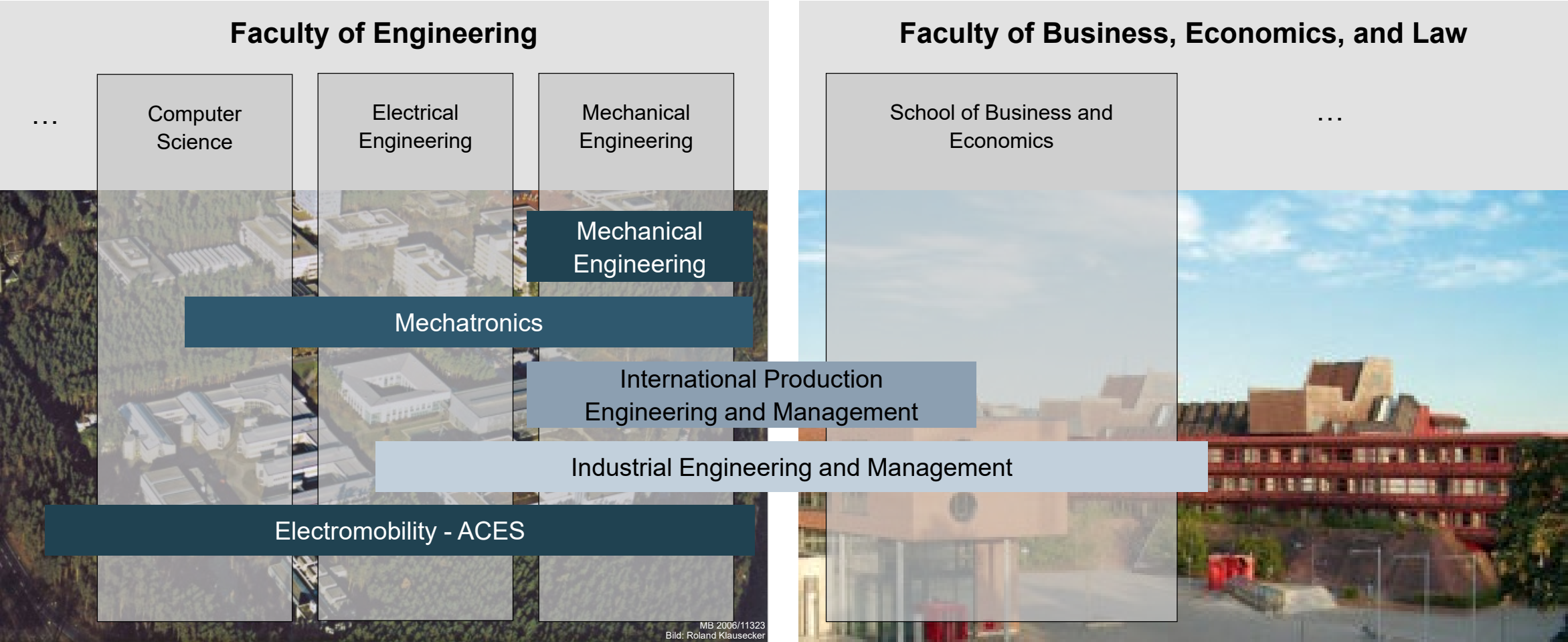


Image: FAU

Study programs (offered in German language)

Mechanical Eng., Industrial Eng. and Management, Mechatronics

Mechanical Engineering („Maschinenbau“)

- Teaching of fundamental knowledge in mechanical engineering
- Majors in e.g. computer-aided product development and production engineering

Industrial Engineering and Management („Wirtschaftsingenieurwesen“)

- Interdisciplinary combination of engineering with business and economics
- Majors in mechanical engineering or electrical engineering

Mechatronics („Mechatronik“)

- Interdisciplinary study program
- Combination of mechanical and electrical engineering with information technology



International Production Eng. and Management


Study program partly offered in English language



International Production Engineering and Management


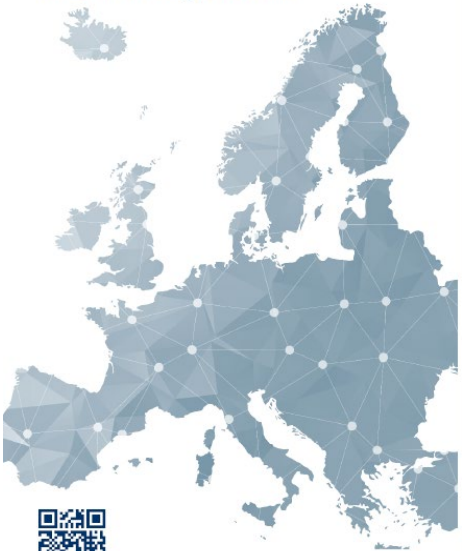
- Interdisciplinary study program combining engineering with business and economics
- Basic modules e.g. Mathematics, Mechanics mainly in German language
- Compulsory modules in engineering and economics e.g. Production technology, Quality management in English language
- Further lectures with international context e.g. International supply chain management, global operations strategy in English language

→ Modules in English are open to incoming exchange students at FAU



Friedrich-Alexander-Universität
Erlangen-Nürnberg

Bachelor | Master
**International
Production Engineering
and Management**



ip.studium.fau.de

STUDIENGANG
International Production Engineering and Management

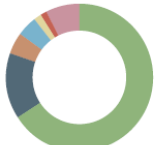
STUDIENDAUER
Bachelor: 6 Semester (Bachelor of Science),
Studienbeginn im Sommer- und Wintersemester möglich
Master: 4 Semester (Master of Science) als Studienrichtung
im Maschinenbau, Teilzeitstudium möglich

ZUGANGSVORAUSSETZUNGEN FÜR BACHELOR
Keine

MÖGLICHE BERUFSFELDER
Produktion und Fertigungsplanung international aufgestellter
Industrieunternehmen

INDIVIDUELLE STUDIENGESTALTUNG
Der Studiengang soll deutschsprachige Studierende für das
Berufsfeld der Produktionstechnik im internationalen Umfeld
qualifizieren. In einem empfohlenen, integrierten Auslandssemes-
ter an einer unserer über 50 Partneruniversitäten oder während
eines Auslandspraktikums können Sie internationale Erfahrungen
sammeln und Ihre Fremdsprachenkenntnissen ausbauen.

STUDIENFACHANTEILE IM BACHELORSTUDIUM



| Fach | Anteil |
|---|--------|
| Maschinenbau (D/E) | 33% |
| Wirtschaftswissenschaften (D/E) | 22% |
| Fremdsprachen und soft skills (D/E) | 11% |
| Informatik (D) | 11% |
| Elektrotechnik, Elektronik, Informationstechnik (D) | 11% |
| Werkstoffwissenschaften (D) | 11% |
| Mathematik (D) | 2% |

INT. PRODUCTION ENGINEERING AND MANAGEMENT
Der deutsche Maschinen- und Anlagenbau steht als Schlüssel-
industrie und Motor der Wirtschaft für Innovationskraft und
technologische Leistungsfähigkeit des Standortes Deutschland.
Die Branche ist führender Anbieter von Maschinen weltweit.

> Legen Sie den Grundstein für Ihre berufliche Karriere: Auf
Grund des hohen Exportanteils sind alle größeren Unterneh-
men im Bereich der Produktionstechnik international aufge-
stellt und suchen dringend genauso international ausgerich-
tete Fach- und Führungskräfte, die neben ihrem technischen
Fachwissen auch Kompetenzen in Betriebswirtschaft und
Fremdsprachen mitbringen.

> Auch die deutsche Fahrzeugindustrie hat international eine sehr
hohe Bedeutung und stellt einen attraktiven Arbeitgeber dar.

Electromobility - ACES

Bachelor's in German and Master's program in German + English

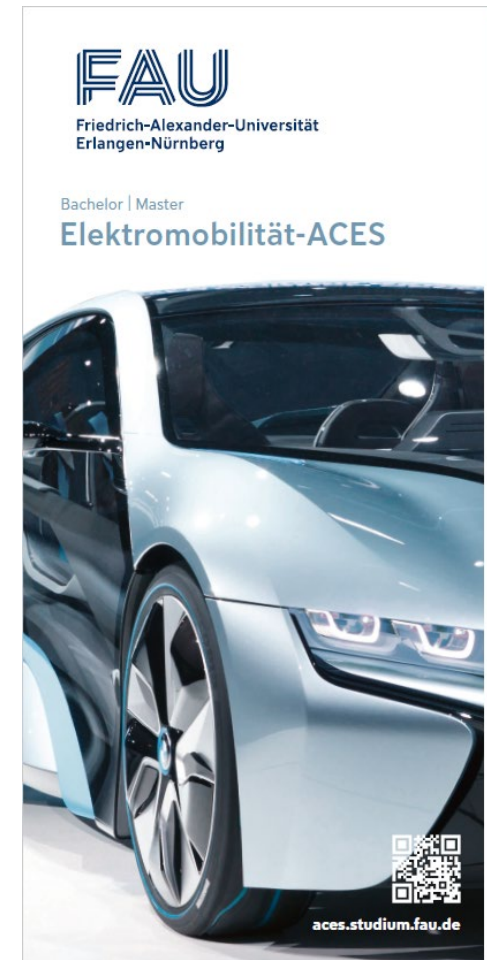


Electromobility-ACES Majors

- Artificial Intelligence and Autonomous Driving (AI)
- Connectivity
- E-Powertrain
- Sustainable mobility and Production technology

→ Students may choose 2 out of 4 majors

- Many modules are available in English for ACES Master students
- Study Start in Winter Semester 2022/24
- More Information on ACES:
<https://www.aces.study.fau.eu/>



STUDIENGANG
Elektromobilität-ACES

STUDIENDAUER
Bachelor: 6 Semester (Bachelor of Science)
Master: 4 Semester (Master of Science) deutsch oder englisch

ZUGANGSVORAUSSETZUNGEN FÜR BACHELOR
keine

MÖGLICHE BERUFSFELDER
Vom e-Scooter über Elektroautos bis hin zum Zukunftsfeld elektrisches Fliegen - Elektromobilität boomt und Spezialistinnen und Spezialisten für diesen Bereich sind äußerst gefragt.

INDIVIDUELLE STUDIENGESTALTUNG?
Im Bachelorstudium erfolgt eine freie Schwerpunktwahl in den vier Bereichen ACES (s.u.) nach erfolgreichem Absolvieren der Pflichtmodule. Im Masterstudium ist dies ab Studienbeginn möglich.

STUDIENFACHANTEILE IM BACHELORSTUDIUM

■ Maschinenbau
■ Elektrotechnik, Elektronik, Informationstechnik
■ Informatik
■ Materialwissenschaft und Werkstofftechnik
■ Mathematik
■ AIBE
■ Sonstiges

DER ELEKTROMOBILITÄT GEHÖRT DIE ZUKUNFT!

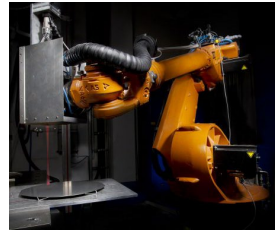
- > Bereits ab ca. 2025 wird die Herstellung eines Elektroautos mit vergleichbaren Leistungsdaten günstiger sein als die eines Verbrennerautos.
- > Von Elektrotechnik über Maschinenbau, Informatik und Künstliche Intelligenz, Werkstoffwissenschaften bis zu Chemie- und Bioingenieurwesen: Das Studium ist sehr vielfältig angelegt und Sie können aus allen diesen Bereichen passende Fächer wählen.
- > Die wählbaren Vertiefungen im Studium gehen weit über die reine Elektromobilität hinaus und spiegeln die Kompetenzen der Technischen Fakultät der Universität und die Handlungsfelder für die Zukunft der Mobilität wider:
 - AI & Autonomous Driving
 - Connectivity
 - E-Powertrain
 - Sustainable Mobility and Production Technology

Foto: chadwick.com/Photo/Reinold

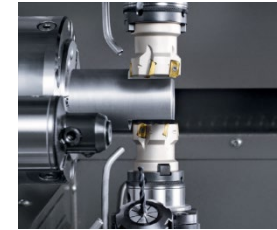
Institutes at the Department of Mechanical Engineering



Applied Mechanics



Manufacturing Technology



Resource and Energy Efficient Production Machines



Continuum mechanics / Biomechanics



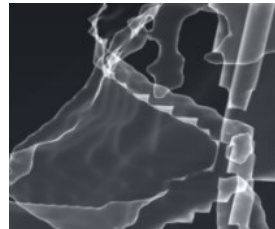
Polymer Technology



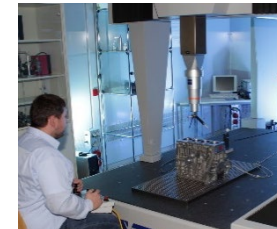
Factory Automation and Production Systems



Applied Dynamics



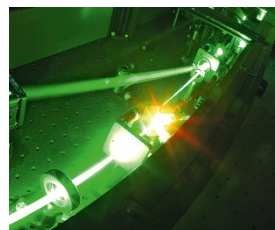
Casting Technology



Manufacturing Metrology



Engineering Design



Photonic Technologies

Our „Incomings“ Website

Information for incoming exchange students at Dep. of Mechanical Eng.



<https://www.department.mb.tf.fau.de/incomings/>

[↑ FAU](#) [Lageplan](#) [Finden](#)

Friedrich-Alexander-Universität / Technische Fakultät / Department Maschinenbau

Friedrich-Alexander-Universität
Department Maschinenbau

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Startseite /

Incomings

Faculty Day for International Students on 05 October 2023.

For further information and registration, see [Introductory events of the Faculty of Engineering \(TF\)](#).

Here are some information from the DAAD service you might like to read:

[DAAD service for entering Germany](#)

[Why choose Mechanical Engineering at FAU?](#) ▾

[Requirements and application deadlines](#) ▾

Our „Incomings“ Website

Information for incoming exchange students at Dep. of Mechanical Eng.



<https://www.department.mb.tf.fau.de/incomings/>

| | Link to lecture | Link to module | Lecturer | ECTS in winter semester 3) | ECTS in summer semester 3) | Level 2) |
|---|-------------------------|------------------------|----------------------------|----------------------------|----------------------------|--|
| Engineering (Bachelor and Master level) | | | | | | |
| Production Technology 1 with Exercises (with training in technical english) | Lecture | Module | Merklein e.a. | – | 5 | basic (B) |
| Production Technology 2 with Exercises (with training in technical english) | Lecture | Module | M. Schmidt e.a. | 5 | – | basic (B) |
| Advanced Seminar on International and Sustainable Production | Lecture | Module | div. | 2,5 | 2,5 | basic (B) |
| German language courses | | | University language center | 5 – 15 | 5 – 15 | basic, intermediate oder advanced (B, M) |
| Laser Technology | Lecture | Module | Schmidt, Cvecek | 5 | – | advanced (B, M) |
| Engineering of Solid State Lasers | Lecture | Module | Cvecek | – | 2,5 | advanced (B, M) |
| Integrated Production Systems (E-Learning course at vhb) | Lecture | Module | Franke | 5 | 5 | advanced (B, M) |
| International Supply Chain Management (E-Learning course at vhb) | Lecture | Module | Franke | 5 | 5 | advanced (B, M) |
| Introduction to the Finite Element Method | Lecture | Module | Mergheim | – | 5 | advanced (B, M) |
| Nonlinear Finite Elements | Lecture | Module | Mergheim | 5 | – | advanced (B, M) |
| Computational Dynamics | Lecture | Module | O. Schmitt | 5 | – | advanced (B, M) |

German language courses:

Please register at the FAU language centre
<https://sz.fau.eu/>

Further courses from other Departments at the Faculty of Engineering are possible, but we have to check it.

⋮

⋮

⋮

Courses open for exchange students

Useful links to other departments and study programs



Faculty of Engineering: International Degree programmes and lectures

<https://www.tf.fau.eu/studying/international/information-for-international-applicants/>

Department of Chemical and Biological Engineering

<https://www.cbi.tf.fau.de/files/2022/06/Courses-in-English-for-exchange-students-CBI-2022-1.pdf>

Department of Electrical Engineering

<https://www.eei.tf.fau.de/studium/international/coming-to-fau-eei/incomings/>

Department of Computer Science


<https://www.informatik.studium.fau.de/studierende/erasmus-incoming-students/#CS-courses-FAU-incoming>

Medical Engineering

<https://www.medical-engineering.study.fau.eu/prospective-students/incoming-exchange-students-2/#sprungmarke2>

Information about courses on „Campo“

www.campo.fau.de



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[Module descriptions](#)
[Show course of studies schedule](#)
[Show lecturers timetable](#)

[Close \[ESC\]](#)

A

B

Search for courses

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Basic data

Semester-independent title

Short text

Semester-dependent title

Semester

Course type

Teaching language

Course catalog for Winter semester 2023/24

Semester

Course catalogue

FAU course catalogue

- Faculty of Humanities, Social Sciences and Theology
- Faculty of Business, Economics and Law
- Faculty of Medicine
- Faculty of Sciences
- Faculty of Engineering
- Electives, soft skills and language courses
- FAU Scientia guest student program

Information about courses on „Campo“

Production Technology 2 (PT 2 eng.) | Veranstaltung



Choose semester

Semester Wintersemester 2023/24

Semester planning

Basic data Parallel groups / dates Course catalog Modules and degree programs Documents

Production Technology 2 (PT 2 eng.)

Export data as iCalendar (ics) Individual dates Open details

Semester hours per week 0.0 Maximum attendee 500

Teaching Language english

Responsible

- Prof. Dr.-Ing. Dietmar Drummer
- Prof. Dr.-Ing. Jörg Franke
- Prof. Dr. Nico Hanenkamp

| Changes | Frequency | Weekday | From - To | Cancellation date | Start date - End date | Exp. Att. | Comment | Lecturer(s) | Room |
|---------|-----------|---------|--------------------|---|----------------------------|-----------|---------|--|-------------------------------|
| | Weekly | Mon | 12:15 PM - 1:45 PM | <ul style="list-style-type: none">12/25/202301/01/2024 | Oct 16, 2023 - Feb 5, 2024 | 72 | | <ul style="list-style-type: none">Prof. Dr.-Ing. Dietmar DrummerProf. Dr.-Ing. Jörg FrankeProf. Dr. Nico Hanenkamp | 11501.00.156 (H16 Hörsaal 16) |

Find out about teaching language, time and place of the course (e.g. lecture, exercise, seminar).

Registration for Courses on „StudOn“

Semester planning

Basic data

Parallel groups / dates

Course catalog

Modules and degree programs

Documents

| | |
|---------------------|--|
| Title | Production Technology 2 (PT 2 eng.) |
| Short text | (PT2eng.) |
| Organizational unit | <ul style="list-style-type: none">TechFak Elektromobilität-ACES Master of Science (Verantwortlicher)Lehrstuhl für Ressourcen- und Energieeffiziente Produktionsmaschinen (Verantwortlicher)TechFak International Production Engineering and Management Austauschstudium Bachelor (Verantwortlicher)TechFak International Production Engineering and Management Bachelor of Science (Verantwortlicher) |

| | |
|-------------------------------|---|
| Course type | Lecture |
| Module frequency | Only in winter semester |
| ECTS credits | 2.5 |
| Semester hours per week | 0.0 |
| Link to StudOn course (login) | Parallelgruppe 1: Production Technology 2 (PT 2 eng.) |



—STUDON—

OFFENE ONLINE-SPRECHSTUNDEN ZU STUDON: Ab dem 05.10.2023 finden wieder StudOn-Sprechstunden ohne Anmeldung statt. Alle Termine und Links finden Sie unter "Magazin > Schulungstermine".

NEUER BLOGBEITRAG: "Wie logge ich mich als exmatrikulierter/-r Studierende/-r oder ehemalige/-r Beschäftigte/-r in StudOn ein?" unter "Support > StudOn-News"

Magazin > 5. Technische Fakultät > 5.4 MB > REP > Lehrangebot: WS 23/24 > Production Technology 2 (PT 2 eng.)

Magazin

Support

FAU Portale

Production Technology 2 (PT 2 eng.)

Vorlesung (PT2eng.), Englisch

Verfügbarkeit

Zugriff Unbegrenzt - wenn online geschaltet

Aufnahmeverfahren Zur Zeit ist keine Aufnahme möglich.

Lehrveranstaltung

Titel Production Technology 2 (PT 2 eng.) (PT2eng.)

Veranstaltungstyp Vorlesung

Beteiligte Einrichtungen • Lehrstuhl für Ressourcen- und Energieeffiziente Produktionsmaschinen (1514002100)

Voraussetzungen → Nicht erfüllt

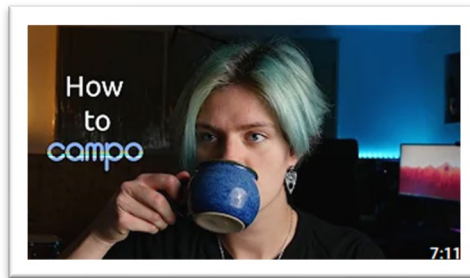
Parallelgruppe (Wintersemester 2023/24)

Titel Production Technology 2 (PT 2 eng.) (PT2eng.)

Sprache Englisch

Join the corresponding group in StudOn to get access to lecture notes, study material etc.

Please note: For some courses a password is required which you will receive in the first lecture!



For more and detailed help on how to create your timetable in campo watch our YouTube video:
#meineFAU - Der Uni Vlog. Stundenplan erstellen - Campo für Anfänger*innen

→ English subtitles available



And join us on Instagram for regular inspiration and help at **@uni_fau**

<https://www.department.mb.tf.fau.de/studium/studien-service-center/>

E-Mail: studium@mb.uni-erlangen.de



Meike Herbert, M.Sc.
International Coordinator
Meike.herbert@fau.de



Dipl.-Phys. **Patrick Schmitt**
Study advisor
patrick.schmitt@fau.de



Alexander Nasarow, M.Sc.
Study advisor
alexander.nasarow@fau.de

Please note:

- We do our best to answer all requests carefully. Please understand that it can take a few days until you receive an answer.
- We kindly ask you to send **only one** request and refrain from sending “reminders”.
- If it is really urgent, please indicate it in the subject line of your E-Mail: “Urgent:”
- We appreciate your understanding 😊

Questions regarding your studies at the Dep. of Mechanical Engineering?

We offer consultation hours online via zoom or in presence (with registration)!

<https://www.department.mb.tf.fau.de/studium/studien-service-center/>

- **Course selection:** it is often possible to choose courses from other Departments
- **Registration period for examinations:**
20th November – 10th December → please make sure to register for the exams
- **Point of contact**
 - Study-service-Centre Mechanical Engineering: Learning Agreements; questions regarding your study programs or any academic aspects of your studies
 - Team Mobility at FAU (mobility@fau.de): Organizational aspects regarding your exchange program
 - “Regionales Rechenzentrum Erlangen (RRZE)”: idM, assignment of SSO passwords, FAUMailbox/ personell messages,... for useful tips see also: https://www.rrze.fau.de/files/2020/09/erstsemesterinfo_englisch.pdf

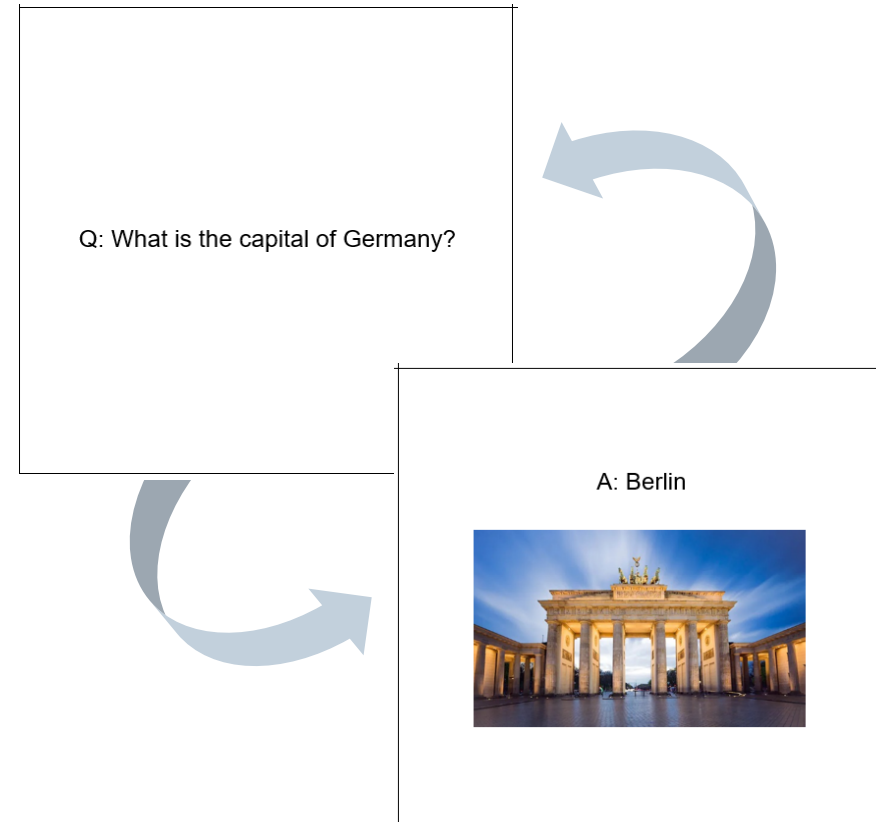


Questions?

Let's get to know each other...

- Each of you will receive a card containing either a question or an answer
- Now it is your turn to find the person who has the matching card!
- The first pairs returning the matching cards together can get a small gift 😊 (as long as stock lasts...)
- If you can't find your match until the end of this session, you can continue after the campus tour

Please return the cards when you are finished!



**Thank you
for your attention!**

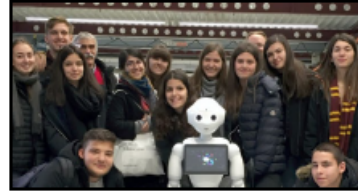
Attachment

Game: Get to know each other

Questions and answers about Germany, Erlangen, FAU, student life, culture ...

Q: What are the study programs offered by the Department of Mechanical Engineering at FAU?

A: Mechanical Engineering,
Mechatronics, International Production
Engineering and Management,
Industrial Engineering and
Management and Electromobility-
ACES



Q: How many students study at FAU?

A: ~ 40.000 students



Q: How many inhabitants does
Erlangen have?

A: ~ 100.000 inhabitants



Q: What is the most important folk festival
in Erlangen?

A: "Erlanger Bergkirchweih"



Q: How many people live in Germany?

A: ~ 84 million



Q: What is the capital of Germany?

A: Berlin



Q: Who is the chancellor of Germany?

A: Olaf Scholz



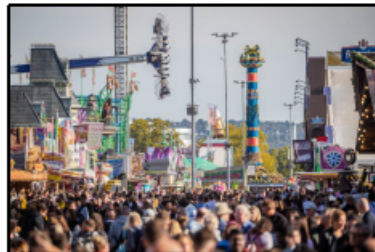
Q: What colours are on the flag of Germany?

A: Black – Red – Gold



Q: What is the name of the largest beer festival in the world, which takes place annually in Munich?

A: Oktoberfest



Q: How much beer is in a German "Maß" glass?

A: 1 litre



Q: What's the idea with Germany's colored trash cans?

A: blue for paper, brown for organic, yellow for plastic waste. Everything else goes in the grey can.



Q: How many states are there in Germany?

A: 16 states



Q: What are the 9 neighbouring countries of Germany?

A: Denmark to the north; the Netherlands, Belgium, Luxembourg and France to the west; Switzerland and Austria to the south; and the Czech Republic and Poland to the east.



Q: Which is the most successful football club in the Bundesliga, the top-tier football tournament in Germany?

A: Bayern Munich (football club)



Q: What is the maximum speed limit when people drive on the "Autobahn" or German highway?

A: No speed limit on German highways



Q: Which famous castle in the state of Bavaria, Germany, is the inspiration for the iconic Disney castle?

A: Neuschwanstein Castle



Q: What is the name of the highest mountain in Germany?

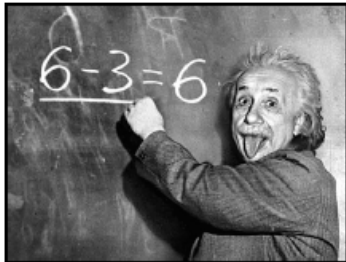


A: Zugspitze









Q: What are the famous German car companies?




A: BMW, Volkswagen, Mercedes



| | |
|--|--|
| <p>Q: Which German scientist is known for his theory of relativity?</p> | <p>A: Albert Einstein</p>  |
| <p>Q: What is considered as traditional food in Germany?</p> | <p>A: Bratwurst (Grilled sausages), Schnitzel (Breaded cutlet), Brezeln (Pretzel), Potato Salad, Fried Potatoes, Bauernbrot (Farmers Bread), Stollen (Fruit Cake), ...</p>  |
| <p>Q: How do you say "Thank you" in German?</p> | <p>A: Danke / Dankeschön</p>  |

| | |
|--|---|
| <p>Q: How do you say "Goodbye" in German?</p> | <p>A: Auf Wiedersehen!</p>  |
| <p>Q: What options are available for sports and fitness in Erlangen for students?</p> | <p>A: You can join sports, such as the University Sports Institute (Hochschulsport), to participate in sports like soccer, volleyball, or swimming. The registration period starts on 09.10.2023 but you have to be quick! Consider setting a password beforehand!</p>  |
| <p>Q: How many lecture halls are there in the technical faculty?</p> | <p>A: There are 17 lecture halls in the technical faculty</p>  |

| | |
|---|--|
| <p>Q: Why do 4.000 students in Erlangen participate in the running dinner called "Laufgelage"?</p> | <p>A: The running dinner "Laufgelage" allows you to cook with a friend for other students and invites you to meet 12 new people. The next one will take place on the 09.11.2023!</p>  |
| <p>Q: What rivers flow through Erlangen?</p> | <p>A: The rivers Schwabach and Regnitz</p>  |
| <p>Q: What cultural activities can students enjoy in Erlangen?</p> | <p>A: Students in Erlangen can visit places like the Erlangen Castle, the Huguenot Museum, Schlossgarten Park, and the Botanical Garden.</p>  |

| | |
|--|--|
| <p>Q: Are there outdoor activities for students in Erlangen?</p> | <p>A: Erlangen offers numerous outdoor activities for students. The nearby Franconian Switzerland region is perfect for rock climbing and outdoor enthusiasts.</p>  |
| <p>Q: Where can students socialize and meet fellow students in Erlangen?</p> | <p>A: Popular spots include student bars like "E-Werk" and "Pleitegeier," as well as cafes like "Süß und Würzig." The University of Erlangen-Nuremberg often hosts events and parties, providing great opportunities to connect with fellow students.</p>  |
| <p>Q: What are some popular places for students to study and work on academic projects in Erlangen?</p> | <p>A: The university's libraries, including the Universitätsbibliothek Erlangen-Nürnberg (UB) and the Technische Fakultät (Technical Faculty) library, provide quiet and well-equipped spaces for studying.</p>  |