M.Sc. Embedded Systems Engineering (ESE)

Faculty of Engineering
University of Freiburg
Who am I?

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- Study Advisor for Computer Science and ESE
- Phone: +49 761 203 8169

Phone Consulting hours:
Monday 1:30 – 4 p.m. + Thursday 9:00 – 11:30 a.m.

More information about consulting (and changes to consulting hours)
see here:
https://www.tf.uni-freiburg.de/en/study-programs/counseling

Counterpart in the MSE Department:
- Frank Goldschmidtböing
- Phone: +49 (0) 761 / 203 – 7496

Mail (for both of us):
studienberatung@ese.uni-freiburg.de
I’ll show you…

1. How to organize your studies
2. Some administrative things
3. Some important rules regarding exams
4. Where you can get information and help
Part 1

Syllabus / Study Plan
New exam regulations introduced in WS 2021/22 (PO version 2021)

- New version of exam regulations with new syllabus since winter semester 2021/22
  *(So some of the lecturers are not used to all the new details, yet…)*
- Quite a few differences to previous regulations; be careful when talking to other ESE Master students without knowing, which regulations they follow!
Vocabulary you should know… part 1

Modules = building blocks of the syllabus

- Consist of various elements (different symbols/icons in study planner)
- Credits are given for complete module, no „partial credits“

Courses in the ESE program:

- Lectures – Vorlesung (V)
- Exercises – Übung (Ü)
- Lab courses – Praktikum / Praktische Übung (Pr)
- Seminars – Seminar (S)
- Projects – Projekt (also Pr)
Graded assessments or pass/fail:

Coursework or pass/fail assessments ("Studienleistungen", SL)
- Part of module or final assessment
- May be graded, or only “pass” or “fail”
- Not part of the final grade
- No negative consequences if failed (apart from having to repeat → “time penalty”)

Graded assessments /Exams ("Prüfungsleistungen", PL)
- Always graded
- Always counts into the final grade
- Strict rules/regulations and very limited number of attempts
18 ECTS (3 lectures) from Essential Lectures in Computer Science

18 ECTS (3 lectures) from Advanced Micro-systems Engineering (MSE)

18 ECTS from Elective Courses in Computer Science Specialization Courses (6 ECTS each) and/or up to 2 Seminars (3 ECTS each) or 1 Study project (18 ECTS)

18 ECTS from one of the Concentration Areas in Micro-systems Engineering

18 „flexible“ ECTS: courses chosen from one or more of the 4 areas above and/or from the so-called Customized Course Selection

30 ECTS Master Thesis + Colloquium

For optional specialization in one of the areas (AI, CPS, Circuits and Systems, Materials and Fabrication, Biomedical Engineering, Photonics): at least 30 ECTS from according courses (not projects!) + Master Thesis with related topic
Syllabus: Rules

- 4 mandatory areas with 18 ECTS each
  - 2 Computer Science (Essential Lectures in CS + Elective Courses in CS)
  - 2 MSE (Advanced MSE + Concentration Area in MSE)
- Remaining 18 ECTS have to be distributed among
  - Either one or more of the above mentioned areas
  - And/or the Customized Course Selection (CCS)
    *(Note: This is not the name for these 18 „flexible“ credits!)*

- You are not allowed to take more courses than necessary, to meet these requirements
- In general, you have to plan so you hit the 90 credits exactly
  (no „overshooting“ of credits, unless maybe when taking pass/fail courses from other subjects or language courses in CCS)
<table>
<thead>
<tr>
<th>Module</th>
<th>ECTS</th>
<th>Semester (recommended) when starting in winter semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algorithm Theory ( \text{(course type: advanced lecture)} )</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Cyber-Physical Systems – Discrete Models ( \text{(course type: specialization course)} )</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Databases and Information Systems ( \text{(course type: advanced lecture)} )</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Introduction to Embedded Systems ( \text{(course type: specialization course)} )</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Machine Learning ( \text{(course type: advanced lecture)} )</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Computer Architecture ( \text{(course type: advanced lecture)} )</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Foundations of Artificial Intelligence ( \text{(course type: advanced lecture)} )</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Image Processing and Computer Graphics ( \text{(course type: advanced lecture)} )</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Software Engineering ( \text{(course type: advanced lecture)} )</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td><strong>Module</strong></td>
<td><strong>ECTS</strong></td>
<td><strong>Semester (recommended)</strong></td>
</tr>
<tr>
<td>----------------------------------------</td>
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</tr>
<tr>
<td>Assembly and Packaging Technology</td>
<td>6</td>
<td>1, 2 or 3</td>
</tr>
<tr>
<td>Micro-electronics</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Micro-mechanics</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Micro-optics</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Modelling and System Identification</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>MST Technologies and Processes</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Sensors</td>
<td>6</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Signal Processing</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Probability and Statistics</td>
<td>6</td>
<td>1 or 3</td>
</tr>
</tbody>
</table>

*This can't be taken as part of the 18 mandatory credits, only if you opt to do more ECTS in this area!*
Elective Courses in Computer Science

You have to take courses up to at least 18 ECTS. The maximum (if you do not take more than the bare minimum 18 ECTS anywhere else) would be 36 ECTS.

You can choose from

- Specialization Courses in Computer Science (6 ECTS each)
- *And/or* up to 2 Seminars (3 ECTS each)
- *And/or* 1 Study project (18 ECTS)
  
  *(Please be aware that you cannot surpass the 36 ECTS here or the 90 ECTS overall, so plan carefully if you intend to take the study project!)*
Concentration Areas in MSE

You have to choose **one area** and complete courses up to **at least 18 ECTS**. If you choose to take more than this, the surpassing courses can be from another area or the same. (The maximum would, again, be 36 ECTS, if you do no courses in any other area.)

The 4 Concentration Areas are:

- Circuits and Systems
- Materials and Fabrication
- Biomedical Engineering
- Photonics
Customized Course Selection

What it is:

Instead of completing some or all of the 18 „flexible“ credits by taking courses in one or more of these 4 areas, you can take some courses (max. 18 ECTS) in the so-called Customized Course Selection.

Here, you can choose from

- Pass/fail courses (*Studienleistungen*) from Computer Science or MSE (like lab courses in CS, Scientific Writing or Project Management in MSE)
- **One** language course (esp. German courses from SLI for international students)
  (please note: not from the „Zentrum für Schlüsselqualifikationen“ / BOK area!)
- Selected courses from other departments / faculties, like from the Economics Department
  (*not in planner of studies – application required*)
Customized Course Selection

What it is not:

The Customized Course Selection is NOT the name for the 18 “flexible credits“!
That seems to be a common misunderstanding. But Customized Course Selection is simply the name for these certain pass/fail courses.
So, please don‘t ask the examination office or myself to „move the MSE concentration course XY“ or „the lecture YZ from Elective Courses in Computer Science“ to the CCS. Because that is impossible.
Courses have their defined area(s) and they stay where they are.

*Also: Be aware that the rules regarding the Customized Course Selection are different in the MSE study program, when talking to other students or lecturers!*
Optional specialization

You can choose to do a specialization in your study program (which will be shown on the final documents). There are 6 specializations available:

- Artificial Intelligence (AI) *(courses see according table on website)*
- Cyber-Physical Systems (CPS) *(courses see according table on website)*
- Circuits and Systems (i.e. the MSE Concentration)
- Materials and Fabrication (i.e. the MSE Concentration)
- Biomedical Engineering (i.e. the MSE Concentration)
- Photonics (i.e. the MSE Concentration)

The requirements are:

- You have to take courses with **at least 30 ECTS** from the according specialization category *(Please note: Projects, seminars or lab courses in Comp. Sc. do not count!)*
- You have to do a **Master Thesis** with a related topic
<table>
<thead>
<tr>
<th>Lectures belonging to the specialization area</th>
<th>Lectures belonging to the specialization area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cyber-Physical Systems</strong></td>
<td><strong>Artificial Intelligence</strong></td>
</tr>
<tr>
<td>Advanced Lectures</td>
<td>Advanced Lectures</td>
</tr>
<tr>
<td>• Rechnerarchitektur / Computer Architecture</td>
<td>• Image Processing and Computer Graphics</td>
</tr>
<tr>
<td>• Softwaretechnik / Software Engineering</td>
<td>• Foundations of Artificial Intelligence</td>
</tr>
<tr>
<td>• Advanced Algorithms</td>
<td>• Machine Learning</td>
</tr>
<tr>
<td>• Algorithms for Wireless Communication</td>
<td>• Automated Machine Learning</td>
</tr>
<tr>
<td>• Automated Machine Learning</td>
<td>• Bioinformatics I</td>
</tr>
<tr>
<td>• Blockchain and Cryptocurrencies</td>
<td>• Bioinformatics II</td>
</tr>
<tr>
<td>• Compiler Construction</td>
<td>• Computer Vision</td>
</tr>
<tr>
<td>• Cyber-Physical Systems – Discrete Models</td>
<td>• Einführung in die Multiagentensysteme / Introduction to Multiagent Systems</td>
</tr>
<tr>
<td>• Cyber-Physical Systems – Program Verification</td>
<td>• Embedded Systems Entrepreneurship (2ES)</td>
</tr>
<tr>
<td>• Debugging and Fuzzing</td>
<td>• Foundations of Deep Learning</td>
</tr>
<tr>
<td>• Einführung in Embedded Systems / Introduction to Embedded Systems</td>
<td>• Information Retrieval</td>
</tr>
<tr>
<td>• Embedded Systems Entrepreneurship (2ES)</td>
<td>• Introduction to data driven life sciences</td>
</tr>
<tr>
<td>• Formale Methoden für Java / Formal Methods for Java</td>
<td>• Introduction to Mobile Robotics</td>
</tr>
<tr>
<td>• Funktionale Programmierung / Functional Programming</td>
<td>• Programm Verifikation in Isabelle/HOL</td>
</tr>
<tr>
<td>• Hardware Security and Trust</td>
<td>• Reinforcement Learning</td>
</tr>
<tr>
<td>• Modellbildung und Systemidentifikation / Modelling and System entification</td>
<td>• Robot Mapping</td>
</tr>
<tr>
<td>• Numerical Optimization</td>
<td>• SAT Solving</td>
</tr>
<tr>
<td>• Numerical Optimal Control in Science and Engineering</td>
<td>• Simulation in Computer Graphics</td>
</tr>
<tr>
<td>• Quantitative Verifikation / Quantitative Verification</td>
<td>• Spieltheorie / Game Theory</td>
</tr>
<tr>
<td>• Test und Zuverlässigkeit / Test and Reliability</td>
<td>• Statistical Pattern Recognition</td>
</tr>
<tr>
<td>• Verteilte Systeme / Distributed Systems</td>
<td></td>
</tr>
</tbody>
</table>

Specialization Courses

- Advanced Algorithms
- Algorithms for Wireless Communication
- Automated Machine Learning
- Blockchain and Cryptocurrencies
- Compiler Construction
- Cyber-Physical Systems – Discrete Models
- Cyber-Physical Systems – Program Verification
- Debugging and Fuzzing
- Einführung in Embedded Systems / Introduction to Embedded Systems
- Embedded Systems Entrepreneurship (2ES)
- Formal Methoden für Java / Formal Methods for Java
- Funktionale Programmierung / Functional Programming
- Hardware Security and Trust
- Modellbildung und Systemidentifikation / Modelling and System entification
- Numerical Optimization
- Numerical Optimal Control in Science and Engineering
- Quantitative Verifikation / Quantitative Verification
- Test und Zuverlässigkeit / Test and Reliability
- Verteilte Systeme / Distributed Systems

12.04.2023

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Master thesis

- Master thesis (27 ECTS) graded
- Colloquium (= Presentation / Defense) (3 ECTS) graded
- Admission to thesis:
  at least 72 ECTS credits
  *(plus conditional courses from admission, if applicable)*
- Duration: 6 months

More information:
Part 2

Administrative things
Some practical advice, general facts and recommendations

- Most courses are offered every other semester (i.e. once a year); some can be held more irregularly; should be mentioned in the module handbook (see HISinOne or PDF)

- Overlapping courses...
  With the amount of courses and the flexible curriculum, this just happens.
  Basically: Find a way to deal with it!
  (Meaning: Choose one course for this semester, do the other one in year; or check for lecture recordings, or…)

- Be aware that you might need to adapt your original study plan
Some practical advice, general facts and recommendations

- Usually no dependencies regarding order of courses
  - Nevertheless, check with lecturers for appropriate combinations or recommended order of courses

- Most prerequisites stated in the course catalog are recommendations, they are not mandatory; well, a few of them are…

  Just read what is said in the description!
Conditional admission: What does this mean?

- Conditions have to be fulfilled *in addition* to the normal Master’s curriculum → likely to extend your study time
- You have to complete the required modules by the end of the second semester. *They should be your top priorities!* (Especially in case of course collisions/overlaps)
- You will be *automatically registered for these courses* as well as exams. If you should decide not to take the exam in the intended semester (after the course), you have to contact the examination office to de-register.
- Exams required for conditional admission *can only be repeated once.*
Advice for your next steps

- Study the course catalog / planner of studies *(What courses are offered right now?)*
- Generally, check out a few more courses than you intend to complete in the given semester
- Register (via HISinOne ➔ “Booking of courses”) for the courses you want to take as soon as possible
- Information on dates and deadlines for course booking: https://www.tf.uni-freiburg.de/en/studies-and-teaching/calendar-dates ➔ Booking deadlines for Bachelor and Master courses
- **Read the official exam regulations!** *(= terms and conditions of your study program)*
Registering for/ Booking of courses

- Have a look at your **planner of studies** [https://campus.uni-freiburg.de](https://campus.uni-freiburg.de)
- Follow instructions from short demonstration here
- If you have questions or made a mistake while booking: **Contact** Ms. Moses in the Dean‘s office: moses@tf.uni-freiburg.de or myself
  *(Screenshots are really helpful)*

Be aware: **Different course types have different deadlines!**

If you forgot to book a course:
- Contact the lecturer and ask if there are still seats available and if it generally makes sense to start late
- The examination office **can‘t** help you with this!
HISinOne Demo: Login and Planner of Studies

- Login to https://campus.uni-freiburg.de/

![Login and Planner of Studies](image)
### Use the correct view: Examination regulations

#### Planner of Studies – Different views

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
<th>Semester 4</th>
<th>Semester 5</th>
<th>Semester 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 2022/23</td>
<td>SS 2023</td>
<td>WS 2023/24</td>
<td>SS 2024</td>
<td>WS 2024/25</td>
<td>SS 2025</td>
</tr>
<tr>
<td>Algorithms and Data Structure</td>
<td>Real-Time Operating Systems</td>
<td>MSE Study Project in Cancer</td>
<td>Mastermodel / Master Module</td>
<td>Constraint-Satisfaction-Problems</td>
<td></td>
</tr>
<tr>
<td>-3</td>
<td>-6</td>
<td>-9</td>
<td>-10</td>
<td>-16</td>
<td>-15</td>
</tr>
<tr>
<td>Computer Science Theory - E</td>
<td>Seminar 2</td>
<td>Nano-Photonics - Optical Mater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-6</td>
<td>-3</td>
<td>-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminar Integrated Photonics</td>
<td>Seminar 1</td>
<td>MSE Study Project in Cancer</td>
<td></td>
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<tr>
<td>-3</td>
<td>-3</td>
<td>-9</td>
<td></td>
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</tr>
</tbody>
</table>

*Ingenieurwissenschaft trifft auf Biologie / Engineering meets Biology*
## Structure of examination regulations - All subject related semesters

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>ECTS Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>11LE50PO-MSc-787-2021</td>
<td>Embedded Systems Engineering, M.Sc., PO 2021</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-9000-MSc-787-2021</td>
<td>Master of Science/M.Sc. - 120.0 ECTS</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-9991-MSc-787-2021</td>
<td>ECTS Credit Account Master of Science in Embedded Systems Engineering (PO-Version 2021) - 120.0 ECTS</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-9991-MSc-787-2021-MM</td>
<td>Master Module / Master Module - 30.0 ECTS</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-787-2021-CS</td>
<td>Informatik / Computer Science</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-787-2021-EssentialCS</td>
<td>Essential Lectures in Computer Science</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-787-2021-SelectiveCS</td>
<td>Elective Courses in Computer Science</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-787-2021-MSE</td>
<td>Microsystems Engineering</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-787-2021-AdvancedMSE</td>
<td>Advanced Microsystems Engineering</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-787-2021-ConcentrationsMSE</td>
<td>Microsystems Engineering Concentrations Area</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-787-2021-CCS</td>
<td>Customized Course Selection - 18.0 ECTS</td>
<td></td>
</tr>
</tbody>
</table>

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12.04.2023

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<table>
<thead>
<tr>
<th>Structure of examination regulations - All subject related semesters</th>
<th>Actions</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>11LE50PO-MSc-sc-787-2021 - Embedded Systems Engineering, M.Sc., PO 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-sc-787-2021 - Master of Science/M.Sc. - 120.0 ECTS</td>
<td></td>
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<tr>
<td>11LE50KT-9509-MSc-sc-787-2021 - Preliminary average grade M.Sc. Embedded Systems Engineering (PO-Version 2021)</td>
<td></td>
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<tr>
<td>11LE50KT-9551-MSc-sc-787-2021 - ECTS Credit Account Master of Science in Embedded Systems Engineering (PO-Version 2021) - 120.0 ECTS</td>
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<tr>
<td>11LE50KT-9591-MSc-sc-787-2021-MM - MasterModul / Master Module - 30.0 ECTS</td>
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</tr>
<tr>
<td>11LE50KT-MSc-sc-787-2021-CS - Informatik</td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-sc-787-2021-EssentialCS - Essential Lectures in Computer Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11LE13MO-2910 ESE PO 2021 - Algorithms Theory - 6.0 ECTS</td>
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</tr>
<tr>
<td>11LE13MO-2920 ESE PO 2021 - Computer Architecture - 6.0 ECTS</td>
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<tr>
<td>11LE13MO-2970 ESE PO 2021 - Cyber Physical Systems - Discrete Models - 6.0 ECTS</td>
<td></td>
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<tr>
<td>11LE13U-2970 - Cyber Physical Systems - Discrete Models / Cyber Physical Systems - Discrete Models - Exercises - exercise course (1st 2)</td>
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<tr>
<td>11LE13U-2980 - Cyber Physical Systems - Discrete Models / Cyber Physical Systems - Discrete Models - course work</td>
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<tr>
<td>11LE13U-2990 - Cyber Physical Systems - Discrete Models / Cyber Physical Systems - Discrete Models - Examination - 6.0 ECTS</td>
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<tr>
<td>11LE13MO-2960 ESE PO 2021 - Datenbanken und Informationsysteme - Data Bases and Information Systems - 6.0 ECTS</td>
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<tr>
<td>11LE13MO-2940 ESE PO 2021 - Foundations of Artificial Intelligence - 6.0 ECTS</td>
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<tr>
<td>11LE13MO-2950 ESE PO 2021 - Image Processing and Computer Graphics - 6.0 ECTS</td>
<td></td>
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<tr>
<td>11LE13MO-9390 ESE PO 2021 - Introduction to Embedded Systems - 6.0 ECTS</td>
<td></td>
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<tr>
<td>11LE13MO-1350 ESE PO 2021 - Machine Learning - 6.0 ECTS</td>
<td></td>
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<tr>
<td>11LE13MO-2950 ESE PO 2021 - Software Engineering - 6.0 ECTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11LE50KT-MSc-sc-787-2021-ElectiveCS - Elective Courses in Computer Science</td>
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</tbody>
</table>
HISinOne Demo:
Registration procedure for seminar or project

- Check out how to book seminars and how to register for projects!

  https://www.tf.uni-freiburg.de/en/studies-and-teaching/a-to-z-study-faq/registering-for-projects
HISinOne Demo: Advanced MSE and Concentrations

11LE60KT-MSc-787-2021-MSE - Microsystems Engineering
11LE60KT-MSc-787-2021-AdvancedMSE - Advanced Microsystems Engineering
11LE50MO-7700/986 ESE PO 2021 - Assembly and packaging technology - 6.0 ECTS
11LE50MO-7000/986 ESE PO 2021 - Microelectronics - 6.0 ECTS
11LE50MO-7100/986 ESE PO 2021 - Micromechanics - 6.0 ECTS
11LE50MO-7600/986 ESE PO 2021 - Micro-optics - 6.0 ECTS
11LE50MO-2080 ESE PO 2021 - Modelling and System Identification - 6.0 ECTS
11LE50MO-7250 ESE PO 2021 - MST Technologies and Processes - 6.0 ECTS
11LE50MO-6100 ESE PO 2021 - Probability and statistics - 6.0 ECTS
11LE50MO-7500/986 ESE PO 2021 - Sensors - 6.0 ECTS
11LE50MO-7400 ESE PO 2021 - Signal Processing - 6.0 ECTS
11LE50KT-MSc-787-2021-ConcentrationsMSE - Microsystems Engineering Concentrations Area
11LE50KT-MSc-787-2021-MSE-CaS - Circuits and Systems
11LE50KT-MSc-787-2021-MSE-MeF - Materials and Fabrication
11LE50KT-MSc-787-2021-MSE-BE - Biomedical Engineering
11LE50KT-MSc-787-2021-MSE-P - Photonics
Optional; only courses completing with pass/fail assessments

11LE50KT-MSc-787-2021-CCS - Customized Course Selection - (18.0 ECTS)
11LE50KT-MSc-787-2021-CCS-FWB - Courses offered in other departments of the University
11LE50KT-MSc-787-2021-CCS-FWB SSE - Sustainable Systems Engineering

Ignore this data! It's for a technical implementation in HISinOne, NOT an information that you have to take these ECTS!
HISinOne Demo: Multi-connected Elements

- Green and red arrows? Don‘t panic!
Rules regarding examinations

More details will be offered by the examination office team in a presentation in a few weeks.
You'll receive an invitation via e-mail in time…
Registration for exams / graded assessments (PL)

- It’s a second, independent step from booking the course. It’s not done automatically!
- The procedure is similar to booking the courses. For a how-to, see https://www.tf.uni-freiburg.de/en/studies-and-teaching/a-to-z-study-faq/examinations

**Deadlines** for the registration (and de-registration) for exams are also mentioned on this website.

- Without registering for an exam you are not allowed to take it, so do not forget!
- To make sure you are correctly registered, we recommend saving/printing the pdf of the in HISinOne ➔ My studies ➔ My course enrollments and exam registrations
How to proceed if you failed an exam

- Number of attempts are limited:
  - 2 attempts for every exam / graded assessment (if needed)
  - 2 oral or written exams can be attempted 3 times

- You are registered automatically for the repetition(s) and **cannot sign off**!

- Repetition exam will take place in the **next semester**.

- You can **replace 1 course** (in CS or MSE) you failed the exam / graded assessment with another one (but it has to be done after the **first** failed attempt)
Improvement of a grade

- Repeating an exam that you have passed, to improve your mark, is possible in **one** module you did in your first year of studies here.

- This rule applies only to written or oral exam (not other kinds like homework or presentations).

- You have to take the „repetition“ exam **directly in the following semester**.

- The examination with the better grade will be considered official.
Missing an exam:
Unexcused or authorized withdrawals

- If you do not attend an exam that you registered for, it counts as **failed**, unless you have a **valid excuse**.

- **Valid excuses can be**
  - Due to illness
    → Doctor’s note required, see https://www.tf.uni-freiburg.de/en/studies-and-teaching/a-to-z-study-faq
  - Due to emergencies in family etc.
    (please contact examination office immediately)
Intellectual honesty / plagiarism

- Plagiarism is:
  - Using someone else’s texts, pictures, reports, data, solutions, whatever....
  - ... without citing the source

- Sources include:
  - Books, the internet, colleagues, ...

- To make it clear: Plagiarism is illegal! It is cheating!

The simple „if...then“ loop:

- If you cheat (once) → then you fail the course
- If you cheat repeatedly (twice) → then you are thrown out of the program and your academic career is over

Intellectual honesty is important! Don’t pass off someone else's work as your own!
Finding information and help
Students are responsible to stay informed

- You are independent persons, expected to (mostly) self-organize and self-motivate. There is no service establishment catering to all your needs.
- We provide the necessary information through different sources:
  - Websites
  - Introductory events
  - Official documents (like exam regulations)
  - Information e-mails
    (Make sure to have access to your faculty user account and forward or use that e-mail address!)
- Reading is essential! Please read! The whole text, all the lines in an email, the complete instructions in exercise or exam sheet…
- „I did not know!“ is not an acceptable excuse!
Check out the information on our websites

- For new students: https://www.tf.uni-freiburg.de/en/studies-and-teaching/a-to-z-study-faq/freshers-info
- Dates and deadlines: https://www.tf.uni-freiburg.de/en/studies-and-teaching/calendar-dates
- Website for your study program https://www.tf.uni-freiburg.de/en/study-programs/embedded-systems-engineering/m-sc-embedded-systems-engineering
- Contacts for advisory services etc.: https://www.tf.uni-freiburg.de/en/study-programs/counseling
When writing an e-mail to an advisor or the examination office...

- Please use a sensible subject
- Assume we do not know you, and we are not clairvoyant. So, please sign the email with your full name; your matriculation number can also be helpful, and it would be great if you mention your study program...
- Use full names of professors, supervisors or lecturers (we are not on first name base with everyone at the faculty)
- For a question about a new topic: Write a new mail and address it (correctly) yourself. Don’t “answer” to older information mails from us.
- If it is urgent, indicate this in the subject line! Our responses to mails not classified as urgent can take quite a while and we try to prioritize.