

Information for MSE students at the ZHAW School of Engineering

1. Regulations

- The ZHAW academic regulations for the Master of Science degree programme in Engineering including the annex and the ZHAW general academic regulations apply¹.
- The above-mentioned documents are legally binding even if a contradictory statement is contained in this information. This information aims to be as simple, clear and concise as possible, and does not claim to be complete or correctly formulated in a legal sense.

2. Conditions for admission

- Bachelor graduates from a technical university may be admitted to the MSE degree programme provided they are among the top 35% of their year group (ECTS grade A or B). If no grade can be demonstrated, the director of studies may accept the applicant on the basis of their diplomas and proven experience. (A very good degree - equivalent to grade A or B in Switzerland - is required.)
- Graduates who meet the admission requirements will be invited to an interview at the institute / centre to which they apply. The purpose of this interview is to assess the applicant's academic aptitude and personal suitability for the activities in the selected profile at the institute / centre.
- All MSE students are assigned to a profile at one specific institute / centre for the duration of the degree programme; it is only possible to change the profile or the institute / centre in exceptional cases.
- Applications may be rejected on the grounds of a lack of workplaces. (Applicants have no claim to a workplace at a particular institute / centre.)

3. Degree programme (valid for new students from autumn semester 2020)

- 90 ECTS credits are required to complete the Master's in Engineering. The course is divided into three parts:
 - a) 30 credits obtained in 10 elective modules of 3 credits each. These modules must be selected as follows:
 - 5 TSM modules (15 credits) from the technical scientific specialisation. At least two modules must be selected from the list of recommended TSM modules of your profile. The TSM modules form the module group "TSM".
 - 3 FTP modules (9 credits) from the fundamental theoretical principles. At least one module must be selected from the list of recommended FTP modules of your profile. The FTP modules form the module group "FTP".
 - 2 CM modules (6 credits) from the context modules. The CM modules form the module group "CM".Each module group (TSM, FTP, and CM) has to be passed with a sufficient average. Failure to pass a module group leads to the exclusion from the study programme.
 - b) 24 credits must be obtained in practical R&D work conducted at the institute / centre. Usually, 12 credits each are obtained in two specialisation projects (called "Vertiefungsarbeiten" in German or VT for short). Other combinations are possible, depending on the project situation. The lower limit of a specialisation project is 6 credits, the upper limit is 18 credits, with intermediate steps of 3 credits. Only part-time students may do more than two specialisation projects. A specialisation project begins and ends within the same semester and can stretch out into the tuition free time.

An additional 6 credits must be obtained in "supplementary courses" (called "Ergänzende Veranstaltungen" or EVA for short). These courses are designed to deepen your theoretical understanding in the selected field.
 - c) The Master's thesis (MT) is worth 30 credits. Students must complete the elective modules, specialisation projects and supplementary courses before beginning work on their Master's thesis. If students are required to repeat modules, they may only repeat one theory module at the same time as working on their Master's thesis.

¹ See <https://www.zhaw.ch/de/studium/waehrend-des-studiums/studienordnungen/geltende-studienordnungen/>

4. Administration

- Students are assigned a study advisor at the beginning of their degree course. The advisor is responsible for advising the student on academic and administrative matters at the institute / centre.
- The advisor may require students to take certain elective modules from the main programme. Students must then pass these modules in order to remain at the institute / centre.
- At least once every semester, the advisor discusses the study objectives for the coming semester with the student. The results of this discussion are recorded in an individual student agreement.
- This agreement sets out:
 - a) the programme of modules to be taken by the student. In general students have a free choice of modules, although they must consider the recommended modules.
 - b) the scope, objectives and assessment criteria for the specialisation projects (VT) and Master's thesis (MT).
 - c) supplementary courses (EVA) to be attended
 - d) special aspects of the degree programme (e.g. previously obtained qualifications and experience). All special arrangements must be submitted to the programme director for approval!
- The individual student agreement, in particular the choice of theory modules, must be entered by the advisor in the MSE tool and approved.
- If reasonable grounds are provided (lack of knowledge in the topic area, module does not take place, etc.), students may withdraw from or change their selected modules **by the end of the second semester week upon request in accordance with the specifications of the administrative office** (whereby changing modules should be an exception!).
- Once a module has been selected and the selection deadline has passed, students **must** subsequently complete the module including examination. If the student fails to turn up to the exam without a valid excuse, they fail the module and **receive the mark 1**.
- A failed module may be repeated **once**, either at the resit examination or when the module is held again one year later. The resit examination is held for students who previously took and failed the end-of-semester examination and for those who were excused from taking this exam. Students who fail to appear to the end-of-semester examination without giving prior reason may not sit the resit examination. The resit examination counts as second attempt.
- If a module was not passed for the second time, it cannot be replaced by another module and the insufficient grade is counted in the average of the module group.
- There is no guarantee that students can repeat a module, if the module is discontinued. In this case, an alternative module may be taken with the agreement of the advisor and the programme director.
- The standard duration of study for full-time students is 3 semesters and for part-time students 6 semesters. If the standard duration of study is exceeded, an application for an extension must be submitted to the programme director in due time.

5. Workload

- Full-time students must complete 30 ECTS credits per semester, part-time students at least 15 ECTS credits per semester. Advisors are responsible to ensure that the MSE students have a reasonable overall workload.
- One ECTS credit represents about 30 hours of work. A module worth three credits therefore represents about 90 hours of work.
- The same workload is expected for the specialisation projects. In other words, a project worth 12 credits involving about two working days a week amounts to around **20 weeks of study**. The same holds for a course worth 18 credits involving 3 working days a week. This calculation also applies to the Master's thesis, i.e. working five days a week for 30 credits it will take about **21 weeks**. Thus, tuition free periods must not be considered as free time!
- The main modules comprise 14 weeks of teaching plus exam preparation time and the exam period. In order for a minimum amount of teaching time to be lost, the MSE programme only recognises the official Swiss public holidays. **Time off is not given** on cantonal or local public holidays (Sechsilüüte, 1. Mai, etc.)! The Friday after Ascension Day is also a working day.
- In the spring semester, one week of holiday is given which includes Good Friday and Easter Monday. This week begins on the Thursday before Easter and lasts until the Wednesday after Easter.

6. Information, contacts and addresses

- If you have questions or problems:
 - Please always discuss any questions and problems you may have with your advisor first.
 - If he or she cannot help you or if you are unable to come to an agreement, please contact the programme director.
 - If you are unable to come to a satisfactory agreement with the programme director, an appeal can be made in accordance with the general academic regulations (RPO).
 - Please contact the administrative office for any questions regarding registration, deregistration, deadlines and the course programme.
- MSE related webpages:
 - MSE ZHAW: www.zhaw.ch/engineering/mse.
 - MSE-Tool ZHAW: <https://tat.zhaw.ch/mse>
 - MSE ZHAW intranet: <https://intra.zhaw.ch/departemente/school-of-engineering/masterstudium/>
 - MSE Switzerland: www.msengineering.ch. Here you will find descriptions of the key theory modules.
 - MSE-Moodle: <https://moodle.msengineering.ch>. Here you will find course materials, timetables, site plans etc.
- Contacts:
 - Programme director ZHAW: Dr Reto Knaack (knaa@zhaw.ch)
 - Academic Director, ZHAW School of Engineering: Prof. Thomas Järmann (jart@zhaw.ch)
 - Administrative office master's degree programme: Lagerstrasse 41, 8004 Zurich, room ZL E0.2, Ms Jennifer Hohl, mse.engineering@zhaw.ch