Master of Science in Engineering (MSE)

1 Guideline for Lecturer

The document serves as a reference for questions that regularly arise. It is revised on an ongoing basis; if necessary, request the latest version from MSE LehrAdmin. If you can't find the information you are looking for, please contact us now at mse@bfh.ch Thanks!

MSE Office	LehrAdmin MSE Bern University of Applied Sciences School of Engineering and Computer Science Office Master of Science in Engineering Quellgasse 21 CH-2501 Biel/Bienne E: mse@bfh.ch / T: +41 31 848 68 54
Diary	Outlook365 See Outlook calendar TI – MSE Termine

2 Dates & Deadlines

Study Start	Start of degree course Week 38 (autumn semester) and Week 8 (spring semester)
Core Modules	Registrations centrale modules Region D • These deadlines are communicated to students by email and in the TI mse calendar and MSE Moodle
Module Registration	Students are responsible to report only missing registration until third week of semester. • IS-A enrolment must be completed at the end of week 10 or week 40
MTh	for projects and master thesis: • The student submits the project work or the Master's Thesis to Advisor week 3 or week 31 (until Friday) • The advisors send the note/grade to the office week 7 or week 33
ILV	We need the information for completed work for the ILV bookings by 25 June.
ZEN	for Leave of absence (SPR Art. 32a) & exarticulation • 31. July (deadline End of March) or • 31. January (deadline of September)
Book	Deadlines see Outlook365 TI – MSE Termine

3 MSE Organization at BFH

The eight Universities of Applied Sciences in Switzerland are offering the practically oriented MSE master's programme. In this course of study, students can benefit from a diverse range of courses structured in 16 profiles, which offer great scope for personal choice and have a network of specialists and students all across Switzerland. BFH offers 11 profiles; Business engineering (BE), Civil Engineering (CE), Computer Science (CS), Data Science (DS), Electrical Engineering (ELE), Energy & Environment (EnEn), Information & Cyber Security (ICS), Mechatronics & Automation (MA), Mechanical Engineering (ME), Medical Engineering (Med), Photonics & Laser Engineering (Pho).

Regulation	The regulations are stored on myBFH. Lecturers should find all MSE documents on BFH-Moodle or MSE-Moodle.
MSE Roles	Lecturers can have different roles within the MSE. The various roles are described in the "Organisationsreglement (0R) regulations.
External Staff	If external lecturers work in the MSE, this must be approved in advance by the Head of program. They are requested to submit a CV in accordance with the study regulations.
Experte	As a rule, experts are only intended for the MTH. A (see SPR and Factsheet MSE Thesis Experten).
WiMA's	The collaboration of WiMA's is generally possible within the framework of the new SPR. This must be discussed and approved in advance with the head of programme.
Mandatory Modules	The compulsory modules are three of the modules that are recommended by the chosen specialization (see SPR Art 17)
ISV Study Agreement	This is an agreement between students, advisors, profile supervisors and the head of programme (ISV: "Individuelle Studienvereinbarung"). In future, all students will have to sign an ISV at the start of their degree programme. • The advisors provide us with the ISV as a Word document at the start of the programme. The mse office then sends the document via e-Sign to all persons involved for signature. • Information and documents can be found on BFH moodle • It will be signed by Advisor, Student and Head of Master programme
MTh	To start the MTh all credits form core modules must be completed. We ask the advisors to let the mse office know the date or the calendar week when the defense of the MTh will take place.
Leave of Absence	In each semester, one module must be attended and proof of competence must be provided. If this is not possible, an application for leave of absence must be submitted.
Other Agreements	If there is an ISV between students, supervisors etc., we do not require any further agreements such as a dissertation agreement.
Proposal	Projects & MTh: We aspect the proposal within the deadline. When registering the project, the MSE office needs to know which internal and external persons are involved for accounting purposes at the beginning of the project or work.
ILV	Lecturers will plan their ILV lessons in tabs. The ILV hours are credited when the grade is received in IS-A.

4 Curriculum and modules

The curriculum and profiles are described in the study guide. There are differences between the AHB profile and the Ti profiles.

Study Guide	See BFH moodle or BFH-MSE Website: Full or part-time study is visualized on pages 34-37
Working hours	90 ECTS credits, which corresponds to a total of 2700 working hours.
Basic training (see 5 MSE-CH)	Please note: This are core modules and partly compulsory modules that are recommended by the chosen specialization and stated at the ISV. **TSM Technical scientific modules** • At least four TSM modules (AHB & TI 12 ECTS credits) Of these, 2 modules are compulsory modules and are stated in the ISV **FTP Fundamental theoretical principles modules** • At least three modules (AHB & TI 9 ECTS credits) • Of these, 1 module is a compulsory module and is stated in the ISV **CM Context modules CM** • At least two modules (AHB & TI 6 ECTS credits)
Projects	AHB and TI project work is currently handled differently in relation to ECTS points (see Study Guide). AHB: 18 ECTS credits / TI: 24 ECTS credits • AHB: the number of ECTS can be chosen depending on the project work. • TI: Total 2 project work: The first "PA" with 9 ECTS / The second with 15 ECTS
MTH	To start the MTh all credits form core modules must be completed. The master's thesis is credited with 30 ECTS credits
EVA's	Complementary modules (EVA's) provide the opportunity to acquire in-depth knowledge that cannot be covered in the basic training modules due to the high degree of specialization. At least AHB: 12 ECTS credits / TI: 6 ECTS credits must be completed
Languages	Modules are offered in German, English and French. The lessons are held in the language of the respective region and/or in English

5 MSE-CH

Core Modules are the basic training with 30 ECTS credits. The framework timetable is usually valid for 4 years, which makes it easier to plan the studies. The choice of modules is made individually and based on the students specialization (profile) and individual need in consultation with the advisor. Each theory module comprises 3 ECTS credits. Together with the Advisor, the Student determines which two (2) technical scientific (TSM) modules and which one (1) fundamental theoretical principles (FTP) modul should be considered core electives (compulsory). These 3 modules must figure on the list of recommendations of the respective profile.

MSE	Moodle: General Information Web: https://www.msengineering.ch/ FAQ / PDF
Module & Examination Registration	Students register for the modules at Master Office at her/his home-UAS. Students are only officially registered and accepted for the exams when the registration has been confirmed i.e. the central modules that are confirmed students find in IS-A after a certain period of time corresponding to the registration phases. Module enrolment also leads to examination enrolment. If a student decides to withdraw from a module, he or she must send an e-mail to the MSE office with the excel sheet within the deadline.
MSE Moodle	MSE Moodle Registration to receive the course materials: • Students must register with Moodle (see Moodle factsheet). • Moodle course enrolment is not equal to an official registration for the module. If students do not (or cannot) attend the module, it makes sense to deregister also here on MSE Moodle

Priority of Module Registration	Each profile recommends attending certain modules. Places are allocated according to priority. The priorities are listed in the timetable (legend)
Simultaneous modules	It is not possible to register for two modules at the same time. This is partly because two exams cannot be taken at the same time.
Passive streaming	Reg-D: Passive streaming is mandatory for all TSM and FTP modules except Flipped Classroom (FC) FC modules are located in the timetable Reg-F & Rg-I: Not mandatory, the lectures can decide whether they want to stream or not
Exams	Module enrolment results in enrolment in the examination: Exams are usually on-site (further information see MSE Moodle).
No Show	If students do not take an examination, she or he will not be able to take a Resits, but she or he will have to re-register for the module in the next available semester, i.e. the exam for that module will have to be taken a second attempt, unless she or her have a medical certificate at the time of the first exam, then it will be the first attempt.
Resits	Resits are repeat examinations. Who can take these: • Only students who didn`t pass at their first attempt in the regular exam session have the opportunity to register for the Resits exam, which will take place in the calendar week 25. • If a student registers for the Resits exam, this counts as the second attempt and therefore it will be the last possibility to pass the module.
Exam Second attempt	In addition to repeating the exam on the second attempt, it is recommended that he or she takes the module again in its entirety, as the content may change from semester to semester.
Need to know	We always needs to know if students don't take the exam or Resits, so we expect to be notified by email

6 Reg D

Most of the central modules are organised by the DE region.

Timetable	[PDF Timetable (ohne Filterfunktion)](#) / [Timetable mit Filterfunktion.](#)You find details about the teaching venues in the timetable and general information regarding ['locations'](#) on Moodle.
Infrastructure	Printing is not possible at the Zurich site. WLAN is available via "eduroam" in all MSE venues, instructions ['here'](#)
Registration	Students only send module registrations & deregistration's in Excel.
CM modules	All CM modules will be 100% online. Access links to the online lessons will be published in the respective Moodle course of the module.
FTP / TSM	All FTP and TSM modules will be conducted 100% on-site with in-person attendance of the entire class. Passive streaming will be available. (see Flipped Classroom). To obtain the optimal learning outcome and the best preparation for the exams, it is strongly recommended to join the class on-site and use passive streaming only as a fallback solution.
MSE Moodle	Every module has a ['course section'](#) in the MSE Moodle which contains all relevant information (teaching materials, resources, streaming information). A registrations on moodle isn't not an official module registration!

	• Students access to their module courses by self-registration. The Fact Sheet explains how it works.
Redesign	Only one of these modules can be chosen; FTP AppStatA or FTP PredModA (timetable 59* and 95*) TSM_AnSeqDa remains an offer Region F TSM_DeLearn Becomes FTP module
Flipped Classroom	NEW 24_25: Flipped Classroom modules starting in AY24-25, they can choose whether to stream or not. More info per module held in Reg-D see timetable.

7 Reg F & I

Difference to Region D	Registration will not be carried out via Excel.
timetable	The timetable for AY 24-25 is ready by the end of May.
Registration	Students register for a module by sending an e-mail to mse@bfh.ch. The MSE Office forwards the registrations and books the modules after receipt of the registration confirmation.
Online	The CM modules are online, the other modules must be attended on site.

8 Supplementary events / EVA's / Summer school / CAS

The modules are offered by BFH or partner universities and are conducted as courses, seminars and/or conferences. There are courses from 1 to 3 ECTS credits, in general

Weekday	The courses are usually held on Fridays, AHB also on Tuesdays
ROOM TI	The TI-EVAs usually take place at the BFH in room Q603, Quellgasse 21, Biel/Bienne. Please let us know of any other requests for room reservations in good time.
BFH-Moodle	MSE Office opens a page for each EVA on BFH Moodle. Lecturers are asked to take care of this in good time and to contact the MSE Office if necessary.
EVA's BFH	For the future, we are aiming for 3 types of EVAs: semester grids, quarterly grids or block weeks. It is important that the dates and the attendance and self-study are calibrated and plannable for students. The BFH supplementary courses are advertised on Webstudienangebot
Registration	Students sends an e-mail for the registration in IS-A within the deadline. At BFH, EVA's is run for a minimum of 3 BFH participants.
Invitation	The lecturers inform the MSE Office in the cc with the invitation email to the students and also report the completion of the course to the administration and by when the grades will be recorded.
ILV	Depending on the number of participants, the ILV is remunerated according to the the instruction 1001(TI)
IS-A	BFH lecturers have access to the registrations for their EVA modules via IS-A. The lecturers will see the internal and external students who are registered in IS-A. Lecturers are requested to invite participants by email approximately 14 days before the course starts, cc'ing the MSE office
Students from other UAS	• Students can enroll via this link. Anmeldelink für externe Studierende • The lecturer enters the grade in IS-A • External students can download their ToR in IS-A and email the information to their UAS.
Grade	Enter the grades in IS-A immediately after completing the course, at the latest by the ILV date (2024: end of June)

CAS **(only AHB,** **CE-Profile)**	Students and advisors check whether there is an equivalent EVA announcement on MSE Moodle • if not, clarify with the advisor whether the desired CAS attendance is OK. • If so: The advisor determines the CAS examination and informs the student, the MSE office and the head of the degree programme • CAS registration is done by students directly at the continuing education programme • If admitted, the student informs the MSE office in cc Advisor. • As soon as the CAS has been completed, the student informs proactively the MSE office in cc Advisor. • The secretariat for continuing education also informs us about the successful CAS attendance and confirms the receipt of 9 ECTS points. • In the MSE, 9 ECTS points are then credited and recorded in the ToR (IS-A). Students do not receive a WB certificate or a WB confirmation as the ECTS credits are recognized as MSE study credits.

9 Project work and master's thesis (specialization)

The project work and the Master's thesis are registered by e-mail so that they can be entered in IS-A on time. We expect a proposal for all projects. Advisors can find the templates on [BFH-Moodle](#).

Begin MTh	In order to start the MTH, the compulsory modules according to the ISV and the core module in the three module groups (CM, FTP and TSM with 30 ECTS credits in total) must be successfully completed.
Registration	We can only accept these registrations for the upcoming semester. • Students sends an e-mail for the registration in IS-A within the deadline. • MSE Office needs also the proposal by mail within the deadline
Proposal	The proposal is the module description and the project assignment, usually written by the person in the role of advisor. The proposal will be sent to the mse office shortly after registration. Particularly at AHB: At the start of the project, it must be agreed who will be working how many hours and this must be recorded accordingly in the AHB proposal.
ILV	The ILVs are booked according to the proposal submitted at the time of registration. If there are any changes, the advisor must inform us by 25 June.
Mode of Study	Part-time students usually complete the MTh in 2 semesters
Experts	MSE office need to know if other persons are involved in project work and MTh (see Finanzen) usually is an expert only called for the MTh (see chapter 3).
Grade	• Students send us the assignment as a PDF by the deadline. • Lecturers send us the assessment form by the deadline. (Templates are available on BFH Moodle).
Project work Grade	The oral presentation is usually used as a write report and an exercise for the presentation of the thesis. This means that lecturers give detailed feedback
MTh **Grade / Evaluation**	At the MTh, the overall assessment is signed by the adviser and expert (documents see moodle) The document is attached to the diploma documents. MTh with Grade A: We need also the form with the reasons for the grade!
Book	Please ensure that the book abstract is submitted on time and that the requirements are met. These are that the profile must be visible, the text is usually written in English and accompanied by images

10 Tools

IS-A	Login: BFH-Login / IS-A is the BFH's student administration software. [Webstudienangebot](#)

Tabs	Planning tool ILV hours
Moodle BFH	MSE documents and information are documented here.
Moodle MSE	Lecturers MSE-CH (centrale modules) store their scripts and teaching materials on this platform. Students check before each teaching day whether new documents have been uploaded.
Excel	Students submit all registrations (central modules) for Region D (Zurich) using Excel only. Students send only the current registrations and cancellations and keep an own Excel for the planning.
e-Sign	Agreements are sent by e-mail for signature using e-Sign (Adobe).
No Microsoft	For students and lecturers that don't use Microsoft products for valuable reasons. Use this IT-S guide and ask IT-S for help if needed. The virtual mailbox name of the calendar is listed below along with a link to a tutorial from IT-S and a youtube how to

11 Special Cases

If students or MSE staff have any questions, please do not hesitate to contact us. We would like to briefly highlight these points.

Illness & Exams	If students are unable to take an exam due to illness, we will need a doctor's note for the period of the exams as soon as possible.
Extension MTH	If the MTh cannot be completed in the agreed duration, we require an application for an extension by e-mail with reasons.
Semester without registration	Students who are unable to attend a module in a term and write a proof of competence must apply for a Leave of Absence within the deadline.
Industrie	Agreements with Partners see chapter on Moodle

12 Financial Matters

Supervisors who are employed by BFH are credited with ILV hours for their work in the MSE. If external lecturers are involved in project work, they must be notified as early as possible. At the start of the project, it must be agreed who will be working how many hours and this must be recorded accordingly in the AHB proposal.

ILV 25 June	ILV period: 1st August till 31 July. But the booking window is closed at the end of June – please report all changes to mse@bfh.ch by 25 June and tell us in which ILV-Period the ILV-hours are to be booked • EVA's: ILV are usually entered in IS-A when the grad is received. If more then one person has worked on the module, please indicate the distribution of the ILV hours. • Projects: ILV are usually entered in IS- when the grad is received according to the proposal • Resits: The ILV hours are credited upon receipt of the grade in IS-A. Lecturers who have students in Resits must inform the MSE Office soon after the Resits of the number of participants and the date of the Resits.
Small Investments for he MTH	The BFH-TI and BFH-AHB degree programmes can be charged for material purchases, which must be made as part of a Master's thesis, up to an amount of CHF 2000 per Master's thesis. An application must be completed in advance and submitted by the head of the degree programme to ensure that expenses can be monitored.
Major Investments	PCOs are notified of major investments via the budget once per year.

| | MSE Expenses | All expenses must always be authorized by the management before the order is placed, otherwise the costs may not be reimbursed. |

MSE Expenses	All expenses must always be authorized by the management before the order is placed, otherwise the costs may not be reimbursed.
MSE Expert	According to the MSE Thesis Expert Factsheet, a fixed fee per MTH can be paid for acting as an expert (see chapter 3)

13 Who does what and when?

	Deadline	Office	Stud	Lecturers	AV	PCO	PD
Study planning ISV	Till Feb or Sept	I	I		A	I	I
ISV • **The advisor sends at LehrAdmin the details or the completed ISV form**	End of March or October	I	I		A	.	.
• **LehrAdmin sends this to all parties for signature**		A	I		I	I	I
Registrations central & others modules	always check IS-A before the next registration phase	I	A		I		
Check ILV in IS-A and report gaps	25. June	I		A	A	A	A
Registration for EVA's, projects & master's thesis by e-mail	End of March and September (End of week 40)	I	A		I		
Grade EVA's	2 weeks after the end of course at latest: End of June	I		A	A	A	
Delivery Proposal of projects an MTh	End of March and September (End of week 40)	I	A		A		
Control of module enrolment in IS-A (also project and master's theses) IS-A	• regularly • End of March • Ende of September (End of week 40)	I	A				
Students inform the MSE office by email if they don't take the exam or Resits.	Within the deadlines - As soon as possible	I	A		I		
Information about the expert in the MTh	As soon as possible	I	I		A	A	
Book Abstract	See deadlines	A	A		A		
MTh: We will receive the filled "Gesamtbewertung" evaluation form in due time	Latest Friday week 7 or week 33	I	I		A		
Styner-Award: MTH with Grade A: We need the form with the reasons for the grade	Latest Friday week 33	I			A	I	I

Legend: A active •/ I involved / Advisor Betreuungsperson / Lecturer Dozent:in / PCO Modulverantworliche:r / PD Programm Director / Stud Students