

MSc MTEC Study Guide 2021

Information and advice on how to effectively manage the MSc MTEC studies.



Welcome to the MSc ETH MTEC

Dear MSc MTEC student,

It is a great pleasure to welcome you to the Master of Science programme at the Department of Management, Technology, and Economics (MSc ETH MTEC)!

The MSc ETH MTEC is a four-semester, full-time programme integrating the perspectives of engineering, technology and the social sciences. We aim to enable you to develop innovative and systematic solutions to meet today's most pressing challenges in business and society: shaping innovative business practices, designing agile workflows, and creating sustainable solutions in a world of finite resources.

Our programme takes pride in having strong contacts and frequent interaction with entrepreneurial leaders in business and society. The annual Entrepreneurial Leadership Seminar is a learning opportunity allowing you to work on a real business case involving strategy, innovation and leadership in close collaboration with the top management of an outstanding company. Each semester, D-MTEC Career Talks facilitate direct access to novel employment opportunities and key contacts in selected organisations.

An international student body with a wide range of backgrounds, peer-to-peer learning, a mentoring programme and an industrial internship all form part of the MSc MTEC experience and prepare you to take on leadership positions in technology-driven organisations. You can also start building your network in student associations such as OBIS, ETH Juniors, or the ETH Entrepreneur Club.

This Study Guide provides information and links to help you effectively manage your studies. We hope it will enable you to identify opportunities for making most of your MSc MTEC experience.

We wish you all the best on your MSc MTEC journey!

Professor Stefano Brusoni Director of Studies D-MTEC

Dr Bastian Bergmann Coordinator of Studies

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The MSc MTEC Framework

Programme structure

The Master's programme in Management, Technology, and Economics consists of three semesters of classes, an internship in industry and a six-month Master's thesis.

The MSc MTEC programme relies on examinations, written reports and essays, lectures, project reports and project results to assess performance and determine the assignment of credit points based on the European Credit Transfer System (ECTS), which is widely used across European universities to assess students' performance. One credit point (CP) represents a workload of 25 to 30 hours. You will need to earn the minimum required number of credit points in order to successfully complete your studies.

To complete the programme, you must acquire 120 CP: 84 CP from courses, 6 CP from an industrial internship, and 30 CP from your Master's thesis. The table below illustrates how many CP you have to earn in each of the course categories.

Course category	min.CP required
A Core Courses	51
B Elective Courses offered by D-MTEC	10
C Supplementary Courses	12
Additional courses (from A, B, or C)	11
Total courses	84
Industrial internship	6
Master's thesis	30
MSc ETH MTEC programme total	120

Programme regulations

The programme is governed by the MSc ETH MTEC regulations, which you can find online via the link below. The German version is legally binding, while the English translation serves informational purposes only and has no legal standing. www.mtec.ethz.ch/links-downloads

Tutor system

The MSc MTEC programme is tutor-driven. The tutor system provides individual support as you create a personalised course of study based on your own talents, aims and expectations. The tutor will also be the supervisor of your Master's thesis. By the end of the first semester, you have to choose a tutor. Together with your tutor you will compile a Learning Agreement which documents the Supplementary Courses you will take over the course of your studies.

>> see page 12

If appropriate, one of the tutor's research assistants can support this process. Professors at D-MTEC are listed in the appendix with links to the websites of their research groups. >> see page 20

We strongly recommend attending the annual MTEC Master's Fair to get in touch with different D-MTEC chairs to find your tutor. >> see page 6

Grading system

The grading scale ranges from 1.0 to 6.0 in quarter-grade (0.25) intervals. The minimum passing grade is 4.0 and the maximum grade is 6.0. The numerical grades correspond to the descriptions given in the scheme below.

Grade	Description
6.0 - 5.75	Excellent
5.5 - 5.25	Very good
5.0 - 4.75	Good
4.5 - 4.25	Satisfactory
4	Pass
3.5	Fail
3	Poor
2.5	Very poor
2	Extremely poor
1	Not measurable

Performance assessments

Performance assessments are either graded or evaluated on a pass/ fail basis. Failed performance assessments may be repeated once. There are three types of performance assessments, as described below.

The Professors and lecturers specify the performance criteria, publish them in written form at the beginning of the semester and decide on the allocation of credit points. Binding rules regarding performance assessment are provided in the Course Catalogue: www.vvz.ethz.ch

End-of-semester examinations

At D-MTEC, end-of-semester examinations are carried out during calendar weeks 23 and 24 in June and during calendar weeks 2 and 3 in January. These examinations are the most common type of performance assessments at D-MTEC and are scheduled by the department. A detailed examination schedule is available in September (Autumn Semester) and February/March (Spring Semester) every year: www.mtec.ethz.ch/examination-dates

Semester performances

Graded or ungraded semester performances are mostly integrated performance assessments during the semester or take place outside of the regular semester schedule.

Session examinations

Session examinations are carried out during calendar weeks 4 to 7 (Autumn Semester) and 32 to 35 (Spring Semester). These examinations are planned by the ETH Examinations Office.

The following table shows in which calender weeks (CW) the different types of examinations as well as the registration (only end-of-semester and session examinations) take place.

	Autumn Semester	Spring Semester
Registration	CW 40-41	CW 10-11
Semester performaces	CW 38-51	CW 8-22
End-of-semester examinations	CW 2-3	CW 23-24
Session examinations	CW 4-7	CW 32-35

Events

Welcome Day 20 September 2021

On Welcome Day you will be provided essential information and introduced to the most important contact persons at D-MTEC. Welcome Day also serves to develop a co-creative class spirit for incoming students of both the MSc MTEC and the MAS MTEC programmes. It offers a chance for informal exchange among staff, faculty and student organisations.

www.mtec.ethz.ch/welcomeday

Master's Fair

1 December 2021 | 30 November 2022

The MTEC Master's Fair is an annual event at which you have the opportunity to get to know the different chairs and research groups of the department and their respective research and teaching portfolios. We strongly recommend attending this event in the 1st or 3rd semester to get in touch with the researchers at the different D-MTEC chairs and to identify potential tutors and supervisors for your Master's thesis. These contacts may also help you to identify a possible topic for your thesis. www.mtec.ethz.ch/masters-fair

MTEC Day 24 October 2024 (tbc)

MTEC Day is an annual event that brings together MSc, MAS and doctoral graduates with their families, D-MTEC alumni and faculty, and stakeholders from business and academia to celebrate the conclusion of their studies. www.mtec.ethz.ch/mtecday

Binding rules regarding performance assessments are provided in the Course Catalogue www.vvz.ethz.ch Find out how to register for examinations in the chapter "Managing your studies".

Services for managing your studies

ETH Rectorate

The ETH Rectorate is responsible for the administration of teaching, including registration, enrolment and leaves of absence. You can contact the Rectorate via the Registrar's Office (see box below).

www.registrars-office.ethz.ch

MSc MTEC Student Services

MSc MTEC Student Services is responsible for internships, Learning Agreements, Master's thesis approvals, degree requests and the adjournment of military service. Please contact Student Services for these issues:

msc-mtec@ethz.ch

ETH card

When you begin your studies, you will receive a personal ETH card as an electronic and visual identity card. You need to validate your ETH card every semester at one of ETH Zurich's validation terminals situated at ETH Zentrum and ETH Hönggerberg.

Showing your validated ETH card entitles you to a discount at ETH canteens and cafeterias. The ETH card also enables you to access the WEV building (Weinbergstrasse 56/58, 8092 Zurich) during off-hours. For this purpose you have to create a PIN at: www.adressen.ethz.ch

For more information about the ETH card, please visit: www.ethz.ch/services/en/service/eth-card

Printing

The ETH card allows you to print and copy. Each semester, students are granted CHF 18 in credit, which may be topped up under: www.print.ethz.ch

E-mail account

On being accepted to the programme you will receive an ETH e-mail account: a username ending with "@student.ethz.ch" and an initial password. The username is automatically assigned by the system and cannot be changed during the course of study.

All communication with the programme and ETH will occur via your student e-mail account.

myStudies

myStudies is the central application you will use to administer your studies. On myStudies you can:

- Enrol for a new semester
- Register for courses
- Access electronic learning materials
- Register for/withdraw from examinations (except semester performances)
- View your examination dates
- Register for your Master's thesis
- View your Transcript of Records
- Request the issuance of your degree

www.mystudies.ethz.ch

Moodle platform

Moodle is an open-source learning platform at ETH Zurich. It provides learners, educators and administrators a virtual learning environment for uploading course material, managing assignments, and designing teaching and learning scenarios. You can access a course's Moodle page via myStudies or log in directly: moodle-app2.let.ethz.ch

ETH EduApp

The ETH EduApp is designed to help you through everyday university life, and to foster interaction during courses. It displays your personal timetable with all of your registered courses, together with maps to the respective locations. Access the app or download it on your smartphone or tablet at: eduapp-app1.ethz.ch

Registrar's Office

ETH Zurich Rämistrasse 101 HG F19 8092 Zurich

Opening hours: Mon – Fri, 11.00 – 13.00 +41 44 632 30 30 (Mon – Fri, 9.00 – 12.00) registrar@ethz.ch

www.registrars-office.ethz.ch

Mobility

D-MTEC strongly supports the international mobility of its Master's students. As a member of IDEA League, UNITECH and the IARU International Alliance of Research Universities, ETH provides unique international exchange opportunities.

If you want to participate in an international exchange programme you must hold a Bachelor's degree from ETH Zurich. You may earn up to 30 CP by participating in international exchange programmes. The curriculum to be followed during the semester abroad must consist of courses comparable to D-MTEC courses. A prerequisite for acceptance into an international exchange programme is a grade point average of 4.5 during Bachelor's studies.

If a course is meant to count as a Core Course, you have to submit a written "confirmation of equivalence" from the corresponding D-MTEC professor via email to the D-MTEC Mobility Advisor. Elective Courses can be approved by the Mobility Advisor. If a course is meant to count as a Supplementary Course, it must be listed in the Learning Agreement. A maximum of 30 CP acquired at another university can be applied toward the ETH diploma. The translation of grades and credits into ETH's grading and credit system is the responsibility of D-MTEC.

If you do not have a Bachelor's degree from ETH Zurich, you might want to consider conducting your Master's thesis abroad during a self-organised stay or engaging in IARU Global Summer Programmes.

Further information: www.outgoing.ethz.ch

You are encouraged to attend the Student Exchange Office Infomarkt to find out about the many exchange programmes ETH Zurich runs in Switzerland and abroad. www.infomarkt.ethz.ch

Working while studying

During the semester, you may accept a paid part-time job of no more than 15 hours per week. Full-time employment is permitted during the lecture-free period. However, in both cases your employer will have to apply for your work permit at the cantonal Office for Economy and Labour if you come from a non-EU country (including the UK). This is only possible once you have received your residence permit. During their first 6 months in Switzerland, Master's students from non-EU countries (including the UK) can only obtain a work permit for a job at their ETH department.

Student Exchange Office

ETH Zurich Rämistrasse 101 HG F23.1 8092 Zurich

Opening hours: Mon & Thu, 11.00-13.00 +41 44 632 61 61 exchange@ethz.ch

www.exchange.ethz.ch

Programme Elements

The MSc MTEC programme consists of courses, voluntary special initiatives and programmes, and modules in which you apply your knowledge (internship and Master's thesis). The scheme below depicts when each of the programme elements apply.

1st semester		2nd semester		3rd semester		4th semester
Core Courses in	6 Skill Areas					
		Elective Courses	in the field of spe	ecialisation of your	tutor	
		Supplementary (Courses according	y to your Learning ,	Agreement	
Special initiatives Buddies Programme, Entrepreneurial Leadership Seminar, Career Talks, MTEC Mentoring Programme, etc.						
	Academic Writing	g Course			Internship	Master's Thesis

Courses

Core Courses

Core Courses are courses in the six Skill Areas outlined in the box on the right. You must complete all but one Core Course in each Skill Area. Details can be found in the MSc MTEC Study Plan in the Appendix: >> see page 21

Core Courses comprise at least 51 CP. Students holding an ETH Bachelor's degree may be able to reduce this number to 42 CP if they successfully completed certain D-MTEC courses during their Bachelor's studies (Regulations Art. 22.2 a-d).

Elective Courses

You can choose from a wide range of Elective Courses in the D-MTEC Course Catalogue. This allows you to specialise in a field of interest. You must take certain Elective Courses as a prerequisite for writing a Master's thesis at specific D-MTEC Chairs. Elective Courses must comprise at least 10 CP.

Supplementary Courses

You can deepen the knowledge you acquired in the area(s) of engineering and/or natural sciences during your Bachelor's studies in Supplementary Courses from other ETH departments. Supplementary Courses must comprise at least 12 CP and are chosen in consultation with the tutor and documented in your Learning Agreement.

>> see page 12

Six Skill Areas

The Core Courses are organised into six Skill Areas. These courses provide a strong foundation in management and economics:

General and Human Resource Management (min. 6 CP)

Responsibilities, functions, and organisation of companies; strategic management; business excellence; leadership; job and design; work and health; development; human-technology interaction; negotia-tion.

Strategy, Markets and Technology (min. 12 CP)

Entrepreneurship; innovative product, service and process design; concepts and methods of strategic management; corporate sustainability; technology transfer; process management; innovation marketing; management of innovation projects; cooperative innovation and co-creation.

Information and Operations Management (min. 6 CP)

Design, control and further development of value-adding systems and processes in companies and company networks; supply chain management; logistics management; planning and control of business performance; management and processing of information; design and implementation of information systems.

Quantitative and Qualitative Methods

for Solving Complex Problems (min. 9 CP)

Methods for dealing with complex situations; complex systems and dynamics; operations research methods; empirical research methods; basics of project management.

Micro and Macroeconomics (min. 12 CP)

Energy economics; resource economics; innovation economics and technical change; dynamic economic theory; sustainable development; global economic interdependencies; applied macroeconomics; business cycle research; basics of policy analysis.

Financial Management (min. 6 CP)

Managerial economics aspects of business activities; balance and profit calculation; investment appraisal; cost calculation; profitability and liquidity; financial and entrepreneurial risks.

Academic Writing Course

Each semester, D-MTEC offers the compulsory Academic Writing course. The aim of this course is to develop the academic writing skills needed to complete an MSc thesis successfully. The course provides theoretical input, practical writing exercises and detailed individual feedback, and is organised into a single group lecture and four workshops in smaller tutorial groups.

The course gives an overview of the range of demands on academic essay and Master's thesis writers and outlines the expectations you must meet. Our goal is to provide a basis for informed decisions when selecting a thesis topic and supervisor. Guidance is given on planning the writing process effectively, and individual feedback is provided to enhance writing ability.

The course develops a range of practical and transferable writing skills. You can use these skills to improve the overall quality of your Master's thesis and complete your thesis more rapidly and efficiently. The writing skills developed here will be useful well beyond the MSc MTEC programme, whether you go on to complete a doctoral programme or produce reports and other documents in industry.

This course is compulsory for all MSc students, and its successful completion is a precondition for permission to start the Master's thesis. We recommend taking the course during the first year of your MSc studies.

Internship

The internship is an excellent opportunity to touch base with the job market and gain exposure to specific professional environments. The internship should be carefully chosen and evaluated, and seen as an integral part of the course of study. Ideally, it will provide you with the opportunity to spend some time in a work environment consistent with your academic specialisation. The minimum period for the internship is 10 weeks of full-time employment.

The compulsory internship can be carried out in Switzerland or abroad, in a corporate setting or a public institution, according to your orientation and career objectives. Additional voluntary internships are possible.

You will largely act on your own initiative when choosing a company for the internship. Prior to placement, you must submit an internship plan outlining your assignments, schedule and company supervisors on the MTEC Internship Platform (ETH login required).

Upon submission of a brief internship report and a letter of reference, the internship will earn you 6 CP. If not successfully completed, it can be repeated once.

You can access the MTEC Internship Platform here:

www.mtec.ethz.ch/internship

For additional details, please refer to the MSc MTEC Internship Guidelines (login required):

www.mtec.ethz.ch/downloads-intranet

Master's thesis

The Master's thesis is supervised by your tutor and usually deals with a subject within the six Skill Areas. The thesis is often carried out in collaboration with a company. In exceptional cases a professor from another department or university may co-supervise your Master's thesis. Your tutor is always your main supervisor, however. The Master's thesis is written over the course of six months (full-time). The Academic Writing Course and the internship must have been completed before you register for the Master's thesis.

The process is as follows: Before starting the Master's thesis, you will identify an appropriate topic in collaboration with you tutor. You have to register the Master's thesis via myStudies (projects/ papers/theses), submitting the topic, a short abstract and a schedule. When you submit the Master's thesis itself, you must include a signed Declaration of Originality. The Master's thesis is graded by the tutor and earns you 30 CP. A Master's thesis that does not earn a passing grade can be repeated once. A new topic has to be chosen for the second attempt.

For additional details please refer to the Master's thesis guidelines (login required): www.mtec.ethz.ch/downloads-intranet

We recommend attending the annual MTEC Master's Fair to get in touch with different D-MTEC chairs to find the tutor and supervisor for your Master's thesis. >> see page 6

Special programmes and initiatives

D-MTEC offers you the chance to take part in special programmes in a variety of fields during your studies. Some of these programmes may be of particular interest for developing specific skills, while others foster community building.

MTEC Entrepreneurial Leadership Seminar

The annual Entrepreneurial Leadership Seminar (ELS) provides you with an exceptionally rewarding learning opportunity. Each Autumn Semester, D-MTEC organises a hands-on, real-time case study of strategy, innovation and leadership in close collaboration with the top management of an outstanding Swiss company (2018: Stadler; 2019: Swisscom; 2020: Hirslanden Private Hospital Group; 2021: GF). You will work in teams to tackle a specific assignment that flows from the current strategic agenda of the company's top management. You will gain substantial insights into the structure, dynamics and challenges of a major industrial sector by immersing yourself in the business model, culture and strategic landscape of the company you work with. Aspects of the programme include site visits; discussing ideas with top executives; interviews with members of the management team, internal and external experts, and clients; and a final presentation in front of the management board. You can apply to join the programme in your third semester.

www.mtec.ethz.ch/els

Career Talks

Each semester, D-MTEC hosts a series of lunchtime career talks that reflect on individual career development and perspectives. These are informational sessions rather than recruitment fairs; they provide insight into different types of careers in specific industry sectors and offer the opportunity for deeper, informal exchange. The Career Talks are open exclusively to D-MTEC students (MSc, MAS, doctoral candidates). Guest companies in previous talks have included Migros Genossenschaftsbund, SwissRe, Google, Georg Fischer and a number of start-ups. www.mtec.ethz.ch/career-talks

MTEC Mentoring Programme MSc

Have you ever wished that you had access to an industry leader, experienced professional or successful entrepreneur to help you navigate through your studies and career choice, or for support in defining and attaining your goals? Most entrepreneurial-minded leaders in academics, industry and society owe a significant portion of their personal and professional standing to the guidance of strong mentors. D-MTEC is committed to developing innovative and entrepreneurial-minded future leaders and mentors by connecting multiple generations of students, teachers and doers. To reach this goal, we match ambitious MSc MTEC students with highly successful D-MTEC alumni or affiliates who can support them and help them reflect on their personal and professional development.

www.mtec.ethz.ch/mentoring-msc

MTEC Risk Studies Certificate

If you want to specialise in risk management, you can apply for the "MSc Studies with a Focus on Risk Management and Policy" certificate. It is awarded to MSc MTEC students who have been supervised and tutored by a D-MTEC professor who is also a member of the ETH Risk Center, and have earned a total of 60 CP from risk-related educational components, including the Master's thesis, an internship, and courses approved by the tutor. In addition, each Spring Semester, the ETH Risk Center offers a Risk Case Challenge Seminar in cooperation with D-MTEC and a corporate partner.

www.riskcenter.ethz.ch/education/risk-studies-certificate

Buddies Programme

The Buddies Programme supports you in the onboarding process when you join the MSc MTEC programme. Get in touch with fellow students in your cohort and connect with 2nd- and 3rd-year students to help familiarise yourself with the programme and with life at ETH Zurich. We match buddies and incoming MSc MTEC students in groups of four to six. Participation is voluntary but highly recommended.

www.mtec.ethz.ch/msc-buddies

Managing Your Studies

Selecting your courses

Good planning is key to successful studies. It is essential that you consider the programme requirements in your course planning. When choosing your courses, avoid overlapping them, as some may have compulsory attendance. You can check the lecture times and dates in the Course Catalogue.

Course Catalogue

The Course Catalogue contains detailed information and schedules for all courses offered at ETH Zurich. It is published in calendar week 20 for the upcoming Autumn Semester and calendar week 46 for the upcoming Spring Semester. You can search within a specific semester for courses by programme, title, lecturer, and number, to name but a few options. www.vvz.ethz.ch

www.vvz.etnz.cn

Study Plan

The Study Plan provides an overview of the curriculum. It is specific to each class and lists all course categories and the corresponding requirements that you will need to fulfil. Please be aware that changes and revisions might be made to the Study Plan. Once the semester has started, the information published in the Course Catalogue is binding. www.mtec.ethz.ch/msc-studyplan

Learning Agreement

The Learning Agreement lists the Supplementary Courses you will take during your studies. You have to create it together with your tutor during the first semester of your studies and submit it via myStudies by 31 January. MSc Student Services is responsible for approving the Learning Agreement. www.mystudies.ethz.ch

Semester enrolment

You must enrol online in myStudies for every semester. You will be informed by e-mail of the date when electronic enrolment opens. After your first enrolment you will receive your confirmation of matriculation and your ETH card by post.

Semester enrolment is possible starting in calendar week 28 (Autumn Semester) and calendar week 50 (Spring Semester). Please enrol as early as possible.

Course registration

Course registration is only possible after semester enrolment. Select your courses according to the programme requirements and your own interests, and register via myStudies. Please give the course-registration process careful thought, set reasonable priorities and avoid overlapping courses.

For didactical reasons some courses have limited capacity, and registration is on a first-come, first-served basis. If a course is fully booked, you will be placed on a waiting list.

Some courses have a primary target group, which is indicated in the Course Catalogue. Students who belong to this target group have priority. Students who do not belong to this group might not be able to attend the course, or may initially be placed on a waiting list.

Registration restrictions

Students can register for a maximum of 15 courses per semester. Exceptions can be made upon request but require approval from Student Services. Requests will only be approved if they are clearly justified (e.g., missing CP in a required category).

MSc MTEC Student Services

Petra Monsch +41 44 632 88 56 msc-mtec@ethz.ch

ETH Zurich Weinbergstrasse 56/58 8092 Zurich

Registering for examinations

End-of-semester and session examinations

In registering for a course, you are not automatically registering for that course's examination. You must register for end-of-semester examinations and session examinations – independently of course registration – in the 3rd and 4th weeks of each semester.

The dates of registered session examinations and end-of-semester examinations are listed in your personal examination schedule in myStudies.

Withdrawal from end-of-semester examinations is possible from the 3rd week of the semester until midnight on Sunday of calendar week 49 (for the Autumn Semester) and until midnight on Sunday of calendar week 20 (for the Spring Semester). Withdrawal from session examinations is possible from the 3rd week of the semester until midnight on the Sunday one week before the start of the examination session.

Once the withdrawal deadline has expired, it is only possible to withdraw in the case of "force majeure" (e.g., illness, accident). In this case, please contact the Examinations Office as soon as possible by phone (see box on the right). If you have registered for an examination via myStudies and you fail to show up for the examination without timely notice of withdrawal to the Examination Office, the examination will be considered failed and appear as a "no show" on your transcript.

If it is possible to repeat an end-of-semester examination or a session examination without repeating the respective course, a repetition date will be offered in the first two weeks of the immediately following semester.

Semester performances

Registration for ungraded or graded semester performances is not required. You are automatically registered for performance assessments when you register for your courses on myStudies.

The Course Catalogue contains detailed information regarding performance assessments and the repetition of examinations.

Academic standards

In all written works, we trust you to come up with your own original ideas while at the same time reflecting the work that has already been done by others. By signing a Declaration of Originality you attest that (among other things) you have authored the work in question by yourself, read the Citation Etiquette information sheet on plagiarism, and adhered to the rules of citation standard in your discipline.

A signed Declaration of Originality is a component of every Master's thesis, semester paper, and other qualifying paper written during the course of studies (including electronic versions). Lecturers may also ask for a Declaration of Originality to accompany other written papers they have assigned.

If a work was co-authored by a group, the Declaration of Originality must be signed by all members of the group. Collectively, they vouch for the entire content of the written work.

The Declaration of Originality and the Citation Etiquette are available for download online (login required): www.mtec.ethz.ch/downloads-intranet

Examinations Office

ETH Zurich Rämistrasse 101 HG F18 8092 Zurich

Opening hours: Mon-Fri, 11.00-13.00 or by appointment +41 44 632 20 68 exam@ethz.ch

www.ethz.ch/performance-assessments

Study extension

The programme deadline by which you have to complete your studies is displayed in myStudies under "Final Deadlines".

It is your responsibility to comply with these deadlines and to plan your course of studies accordingly. Take timely measures if unexpected circumstances (including health problems and absences for military service) arise which might slow you down and prevent you from meeting deadlines.

The Rector may extend programme deadlines if cogent grounds are provided at the proper time. Details and deadlines for submitting an extension request can be found online:

www.ethz.ch/students/en/studies/administrative/ study-terms/duration-of-studies

Degree request

You may submit your degree request as soon as you have earned the minimum number of credit points and have met all requirements (Regulations, Art. 22-24 and Art. 39). Before submitting the request, please make sure to correctly categorise your courses and confirm that the supplementary courses correspond with your approved Learning Agreement.

You may select which of Switzerland's national languages you would like your degree certificate issued in. An English translation will also be issued. You must submit the degree request on paper to MSc MTEC Student Services or as a signed scan via email to: msc-mtec@ethz.ch

Once you have submitted your degree request, please verify that we have your correct address: www.adressen.ethz.ch

Requirements for the degree request

- 1. You must have earned at least the minimum number of credit points required in each of the six Skill Areas of the Core Courses, and a total of 51 CP in all Core Courses combined
- 2. You must have earned a minimum of 10 CP in D-MTEC Elective Courses
- 3. You must have earned a minimum of 12 CP in the Supplementary Courses approved in your learning agreement
- 4. You must have earned 6 CP in your internship
- 5. You must have passed the Academic Writing Course
- 6. You must have earned 30 CP for your Master's thesis
- 7. You must have earned a minimum of 120 CP overall

Final documents

Upon completion of your studies you will receive the documents listed below:

- Final academic record (in German, with an English translation), including an addendum
- Degree certificate (diploma)
- Diploma Supplement, which includes information about ETH Zurich, the degree programme and the courses you have taken
- Ranking

A maximum of 130 CP can be earned during your studies and awarded on your academic record. If you have earned more than 120 CP, you may decide which courses will be listed on the addendum. These courses will not be considered in calculating your grade point average (GPA). The certificate and the academic record are originals and are issued only once.

You may request a transcript of your academic record or your degree certificate as well as other certifications at the Registrar's Office for a small fee. The transcripts have the same legal validity as the original documents.

www.ethz.ch/en/studies/study-certifications/ fees-copies-etc

Resources and Services

Academic Sports Association Zurich

The ASVZ offers a diverse sports programme with plenty of opportunities to discover new activities. Some courses require registration in advance. You can participate in team sports such as football and badminton, or choose from a wide range of classes, from yoga to jazz dance. Use the ASVZ app to stay up-to-date with schedule changes, news and sports-related entertainment. www.asvz.ch

Campus

ETH Zurich's two main locations are situated in the centre of Zurich and on Hönggerberg. Both offer a full range of services pertaining to teaching, research, and knowledge transfer, as well as leisure services. All MSc MTEC courses take place in the centre of Zurich (HG, LEE, WEV buildings).

www.ethz.ch/campus

Career Center

The ETH Career Center provides services that support ETH graduates during the transition from their studies to the Swiss labour market.

ethcareer.ch

Computer labs

Approximately 200 computer workstations are at the disposal of ETH students in the ETH main building (HG). These computer stations have full internet access and run standard software. The use of these work stations is free of charge. The following link lists the available computer rooms:

www.ethz.ch/services/en/it-services/katalog/ managed-client/computer-rooms

Equal Opportunities

"Equal" supports women's and men's career development within the academic environment, promotes the integration of gender-specific content in research and teaching, and helps you to balance your studies, work and family.

www.ethz.ch/services/en/employment-and-work/ working-environment/equal-opportunities

Gastronomy

ETH Zurich has more than 15 student canteens and cafeterias (Mensa) in various buildings. They offer affordable daily meals, sandwiches and salad buffets. The opening hours, menu plans and prices can be found online under: www.gastro.ethz.ch

IT Services

ETH IT Services provides you with a free basic IT package which includes an e-mail address, access to computers, an ETH-wide directory, and the opportunity to publish a personal homepage. You also have access to some free software and several other services. More information about IT Services and some how-to quides can be found under:

www.ethz.ch/students/en/service/it-services

Language Centre

The joint language centre of the University of Zurich and ETH Zurich offers intensive German courses, as well as courses in many other languages. These courses are free for Master's students. Online pre-registration is required and must be completed within a certain time period prior to the start of the course. www.sprachenzentrum.ethz.ch

Libraries

The ETH Library's Knowledge Portal gives you access to up-todate academic resources and media that are essential for your studies. You can receive support on how to access publications, not only from libraries based at ETH Zurich, but also from a variety of other collections, libraries and archives. The Info Center and circulation desk are located on Floor H of the main building. www.library.ethz.ch

Personal support services

ETH Zurich's various support services can provide you with coaching, advice, and qualified and confidential help in case of difficulties, conflicts and personal crises. www.ethz.ch/students/en/advice

Dealing with inappropriate behaviour

ETH Zurich encourages its staff and students not to tolerate inappropriate behaviour and to take firm action against it. This also requires paying attention and not looking the other way – and, if necessary, speaking out against unacceptable behaviour. www.respekt.ethz.ch/en/kontakt-und-fachstellen

Counselling services

Professional counselling can help you work through difficult phases in life, troubles in your studies and conflicts arising during the course of doctoral study. ETH Zurich offers counselling services, including support during acute crises, to all students and doctoral candidates. The sessions are confidential and free of charge. www.pbs.ethz.ch

Pioneer Fellowships

ETH offers Pioneer Fellowships for MSc and doctoral students as individuals or as part of groups intending to independently develop a highly innovative product or service to be used commercially and for the benefit of society.

www.ethz.ch/pioneerfellowship

Projekt Neptun

Projekt Neptun offers students and higher-education employees selected devices such as laptops and tablets for discount prices. At the beginning of each semester, Neptun selects a range of laptop models suitable for students. These can be ordered for a limited time.

www.projektneptun.ch

Student Project House

The Student Project House (SPH) is a space at ETH dedicated to collaborative project work, interdisciplinary exchange, courses and workshops. At SPH, you can learn how to identify a need, design solutions and test your hypotheses with real prototypes. We are convinced that combining the knowledge gained in your studies with the freedom to explore and collaborate will lead you to great innovations.

www.sph.ethz.ch

Students with disabilities

Disabled students or those suffering from a chronic medical condition may face special challenges during their studies. Please note that disability assistance may be different from that available in your home country. We strongly recommend that you check the website below and that you contact us early on – preferably before the start of your studies. You will then receive contact information for the disability advisory service and also receive information on how to make special examination arrangements. Please note that deadlines still need to be respected.

www.ethz.ch/students/en/advice/disability-advisory-service

Student working spaces

The MTEC Department offers student working spaces in the WEV building at Weinbergstrasse 56/58. The rooms available are E20 (student and team workspace) and E27 (quiet study room). In order to access the WEV building outside of working hours, please set up a PIN as described on page 7 under "ETH Card". www.adressen.ethz.ch

Networks

Student networks

OBIS

OBIS (Organization of Business and Industrial Engineering Students) is the official student association of MSc MTEC students. For more information, read the statement on the right or visit the OBIS website: www.obis.ethz.ch

feMTEC

feMTEC is a women's association at D-MTEC. Its mission is to promote gender equality and build a strong community that offers valuable support to colleagues at D-MTEC. It is open to all students and staff in the D-MTEC domain. www.mtec.ethz.ch/femtec

VSETH

VSETH (Verband der Studierenden an der ETH) is the umbrella organisation of all students at ETH. It consists of student commissions and associations – including OBIS – and supports associated student organisations. VSETH represents the students' concerns on ETH boards. It drafts action papers and writes statements to influence ETH regulations.

www.vseth.ethz.ch

Here is a selection of student organisations with thematic proximity to the MSc MTEC programme. This list is not comprehensive. For additional student organisations, please have a look at vseth.ethz.ch/language/en/organisations

ETH Entrepreneur Club www.entrepreneur-club.org

ETH Analytics Club www.analytics-club.org

ETH Juniors www.ethjuniors.ch

ARIS aris-space.ch

Student Sustainability Commission ssc.ethz.ch

ETH Model United Nations www.ethmun.org

Welcome to OBIS

Our goal is to enrich your experience as a D-MTEC student by helping you develop your social life alongside your academic and professional career. OBIS provides a framework that supports you in your efforts to accomplish your personal goals and fosters our collective growth within the D-MTEC community.

Students' interests are represented by OBIS through our active participation in academic decision-making. We elect delegates and send them to the teaching commission and department conferences. Moreover, we support actions undertaken by VSETH on matters of academic politics and keep students informed about recent issues discussed in VSETH and other delegate meetings.

OBIS also aims to promote a common identity for D-MTEC students by encouraging contact between fellow students. In that spirit, we organise social events throughout the semester such as ski trips, BBQs and start-/ end-of-semester events.

Furthermore, we regularly organise business apéros, company visits and workshops with corporate partners in Zurich to ensure contact with local and global firms interested in students in our field, and to give you the opportunity to expand your professional network.

At the beginning of every semester we recruit new students to join the board and contribute to the D-MTEC community. Keep an eye out for the official application in our newsletter!

Learn more and get in touch at **www.obis.ethz.ch**

The OBIS Board

Networking after your studies

ETH Alumni Engineering & Management (EAEM)

ETH Alumni is the official alumni association for ETH graduates. Within it, ETH Alumni Engineering & Management (EAEM) offers MSc MTEC graduates as well as doctoral and postdoctoral graduates a networking platform through which they can maintain relationships with each other. Furthermore, it organises numerous events at which its members can network and discuss professional challenges. For more information visit the EAEM web page at

www.alumni.ethz.ch/en/mitgliederorganisationen/management-und-sozialwissenschaften/engineering-und-management

Life-long learning at D-MTEC

In the spirit of life-long partnership, the D-MTEC Coordinator for Short Courses, Alumni Relations and Mentoring, maintains close contact with the department's alumni community. In collaboration with faculty and staff, she oversees the development and promotion of educational opportunities for alumni, such as networking events and non-degree Continuing Education Short Courses. Find out more about the alumni network at D-MTEC here:

www.mtec.ethz.ch/alumni

Social Media

Stay informed about D-MTEC research, news and events and the MSc MTEC programme.

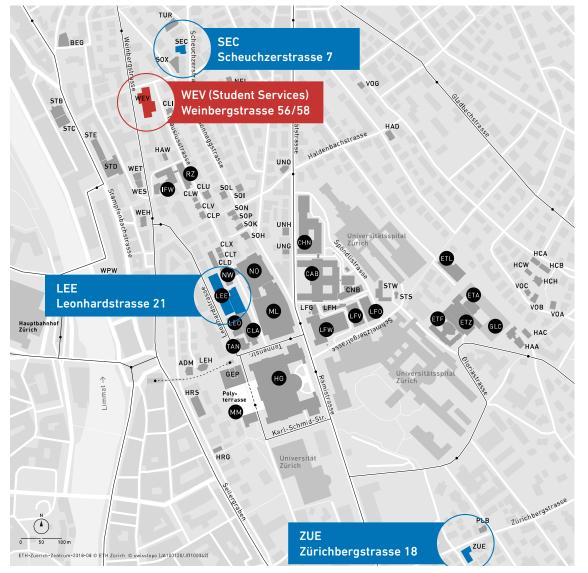
Follow us on LinkedIn: www.linkedin.com/company/mtec-ethzurich

Follow us on Twitter: www.twitter.com/d_mtec

Join the LinkedIn group of D-MTEC researchers, students and alumni: www.linkedin.com/groups/4107869

Appendix

How to find us



Locations of D-MTEC in Zurich

Main address

Department of Management, Technology, and Economics WEV Building Weinbergstrasse 56/58 8092 Zurich Switzerland

Travel directions

From Zurich airport and main train station

- Take a train to Zurich HB (Main Station)
- Walk to the tram stop "Bahnhofstrasse/HB" and take a line
 7 tram with final destination "Stettbach" to the "Sonnegg-strasse" stop.
- Walk downhill on Weinbergstrasse for approximately 2 minutes. The WEV building is on your left.

Please note: From Zurich airport to the city, you will need a ticket valid for 3 zones.

Professors at D-MTEC



Michael Ambühl* Professor of Negotiation and **Conflict Management**

www.necom.ethz.ch



Stefano Brusoni Professor of Technology and Innovation Management

www.timgroup.ethz.ch

Massimo Filippini



Professor of Energy and Public Economics www.eepe.ethz.ch



Hans Gersbach Professor of Macroeconomics: Innovation and Policy



Marko Köthenbürger Professor of Public Economics

www.pec.ethz.ch

Petra Schmid

Behavior

www.mip.ethz.ch

www.ob.ethz.ch

Professor of Organizational



Jan-Egbert Sturm Professor of Applied Macroeconomics

www.kof.ethz.ch



Stephan Wagner Professor of Logistics Management

www.scm.ethz.ch



Antoine Bommier Professor of Integrative Risk Management and Economics

www.irme.ethz.ch



Bart Clarysse Professor of Entrepreneurship

www.entrepreneurship.ethz.ch



Robert Finger* Professor of Agricultural **Economics and Policy**

www.aecp.ethz.ch

Gudela Grote Professor of Work and Organizational Psychology

www.wop.ethz.ch

Torbjørn Netland Professor of Production and **Operations Management**

www.pom.ethz.ch

Frank Schweitzer Professor of Systems Design

www.sg.ethz.ch



Georg von Krogh Professor of Strategic Management and Innovation

www.smi.ethz.ch



Lucas Bretschger Professor of Economics / **Resource Economics**





Peter Egger Professor of Applied Economics: Innovation and Internationalisation

www.cae.ethz.ch



Elgar Fleisch Professor of Information Management





Volker Hoffmann Professor of Sustainability and Technology

www.sustec.ethz.ch



Ursula Renold Professor of Education Systems

www.ces.ethz.ch



Didier Sornette* Professor of Entrepreneurial Risks

www.er.ethz.ch



Florian von Wangenheim Professor of Technology Marketing

www.techmarketing.ethz.ch

* cannot be chosen as a tutor or supervise Master's theses.

MSc MTEC Study Plan

Skill Areas ar	nd Core Courses	Н	СР	S	Lecturer
Conorol Mor	nagement and Human Resource Management (min. 6 CP)				
. General Mar 363-0341-00	Introduction to Management	2	3	HS	Zagorac, Z./O'Neil, J.
363-0302-00	Human Resource Management: Leading Teams	2	3	FS	Grote, G.
363-1080-00	Power and Leadership	2	3	FS	Schmid, P.
Strategy Ma	irkets and Technology (min. 12 CP)				
363-0392-00	Strategic Management	2	3	HS/FS	Shrestha, Y. R.
363-0387-00	Corporate Sustainability	2	3	HS	Hoffmann, V./Meuer, J./Blum, N. U./Bening Bach, C.
363-0389-00	Technology and Innovation Management	2	3	HS	Brusoni, S./Zeijen, A.
363-0403-00	Introduction to Marketing	2	3	HS	Brüggemann, N./von Wangenheim, F.
363-1077-00	Entrepreneurship	2	3	FS	Clarysse, B.
. Information	Management and Operations Management (min. 6 CP)				
363-0421-00	Mastering Digital Business Models	2	3	HS	Fleisch, E.
363-0445-00	Production and Operations Management	2	3	HS	Netland, T.
363-0453-00	Strategic Supply Chain Management	2	3	HS	Wagner, S.
. Quantitative	and Qualitative Methods for Solving Complex Problems	(min. 9 CP)			
363-1004-00	Operations Research	2	3	HS	Bütikofer van Oordt, S.
363-0541-00	Systems Dynamics and Complexity	3	3	HS	Schweitzer, F.
363-0305-00	Empirical Methods in Management	2	3	HS	Tillmanns, S.
363-0570-00	Principles of Econometrics	2	3	FS	Sturm, J./Beerli, A.
. Micro and M	acroeconomics (min. 12 CP)				
363-0565-00	Principles of Macroeconomics	2	3	HS	Sturm, J.
363-0503-00	Principles of Microeconomics	2	3	HS	Filippini, M.
363-0537-00	Resource and Environmental Economics	2	3	HS	Bretschger, L.
363-0575-00	Economic Growth, Cycles and Policy	2	3	FS	Gersbach, J.
363-0515-00	Decisions and Markets	2	3	FS	Bommier, A.
. Financial Ma	anagement (min. 6 CP)				
	Accounting for Managers	2	3	HS	Chardonnens, J.
363-0711-00					
363-0711-00 363-0561-00	Financial Market Risks	2	3	HS	Sornette, D.

Within the MSc ETH MTEC programme students have to earn 120 credit points (CP):

Core Courses: A minimum number of CP must be acquired in each Skill Area. Total of all Skill Areas: min. 51 CP (min. 42 CP, Regulations Art. 39) Electives: From courses listed as electives in the D-MTEC Course Catalogue: min. 10 CP

Supplementary Courses: In the field of the Bachelor's degree and in agreement with the tutor: min. 12 CP

Internship: 6 CP

Master's Thesis: 30 CP

The Academic Writing Course (363-1063-00) must be completed before registering for the Master's thesis.

Study plan based on Regulations 2006, Art. 22. Changes are possible. The Course Catalogue on the web is binding (www.vvz.ethz.ch).

Valid for students starting in HS 2021.

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www.mtec.ethz.ch



Scan this QR code to retrieve digital versions of the Study Guide as well as other documents relevant to your MSc MTEC studies online.

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 $\textcircled{\sc ext}$ ETH Zurich, September 2021. Changes are possible. Legally binding are the MSc MTEC Regulations and the ETH Course Catalogue.