RSETHZ 333.0300.52

Regulations 2021

for the continuing education programme

Certificate of Advanced Studies ETH in Future Transport Systems: System Aspects (CAS ETH MZ: System Aspects)

at the Department of Mechanical and Process Engineering of 11 November 2020

The Executive Board of ETH Zurich,

based on Art. 4 Para. 1 Letter a of the ETH Zurich Organisation Ordinance of 16 Dec. 2003¹, decrees:

Section 1: General Provisions

Art 1. Subject

¹ These study regulations define the conditions under which the continuing education programme "Certificate of Advanced Studies ETH in Future Transport Systems: System Aspects (MAS ETH MZ: System Aspects)", hereinafter referred to as the continuing education programme, can be acquired at ETH Zurich.

² The continuing education programme is assigned to the Department of Mechanical and Process Engineering (D-MAVT).

Art 2. Title

¹ ETH Zurich awards the title for the successfully completed continuing education programme: Certificate of Advanced Studies ETH in Future Transport Systems: System Aspects (Abbreviated: MAS ETH MZ: System Aspects)

Art 3. Management of the continuing education programme

¹ The management of the continuing education programme (management) shall perform the following tasks in particular:

- a. it represents the continuing education programme internally and externally;
- b. it shall liaise with the D-MAVT;
- c. be responsible for finances, personnel and premises.

 2 The leadership shall be composed of the delegate and the programme coordinator.

 3 The delegate shall be appointed by the D-MAVT. The deputy delegates shall be appointed by their respective department.

⁴ The programme coordinator shall be appointed by the Delegate.

¹ RSETHZ 201.021

⁵ The Extended Management shall consist of the delegate, two alternate delegates and the programme coordinator. Of the deputy delegates, at least one must be from another department outside the D-MAVT.

⁶ The extended management is responsible for the pre-selection of applications, in particular the "sur dossier" applications and the associated admission interviews.

Art 4. Credit System

¹ The course of study is based on a credit system that is aligned with the European Credit Transfer and Accumulation System (ECTS). The guidelines of the Rector on the credit system are decisive for the application of ECTS at ETH Zurich.

²Credit points (ECTS) according to ECTS describe the average student workload required for a course.

³One ECTS corresponds to a workload of 25-30 hours. The workload includes all study-related activities required for the acquisition of ECTS.

⁴CPs are only awarded for satisfactory performance. A performance is considered sufficient if it is assessed with a grade of at least 4 or with the predicate "passed".

⁵ The D-MAVT shall keep the register of acquired ECTS for all participants in the continuing education programme.

Section 2 Target Group, Content, Scope, Structure and Completion of the Continuing Education Programme

Art 5. Target group and content

The continuing education programme is basically aimed at persons with a university Master's degree in engineering, natural sciences or geography and professional experience in the field of mobility and transport or in a related field. Participants learn to contribute to integrated, sustainable mobility solutions in their respective work context, taking into account the entire mobility system. The content of the continuing education programme is divided into units, each of which deals with one aspect of the mobility system in depth with a focus on Switzerland and a reference to other European or international countries: system aspects, technology potentials, new business models and transport engineering.

Art 6. Scope, duration and limitation of study time

- ¹ For the successful completion of the continuing education programme, the modules offered must be passed with a total of 12 ECTS and the CAS thesis with 3 ECTS. Attendance of at least 80% of the contact time is compulsory for the modules.
- ² The continuing education programme usually lasts one semester.
- ³ The maximum permissible duration of study is 1 year. If there are important reasons, the delegate can extend the permissible duration of study by a maximum of one additional year upon request.

Art 7. CAS thesis and performance review

¹ The CAS thesis is taken as individual or group work. The exact form is specified in the course catalogue².

² www.vvz.ethz.ch

- ² The CAS work is supervised and assessed by the supervising lecturer and, if necessary, by other specialists. The director decides on the acceptance of the CAS work based on the assessment of the responsible lecturer.
- ³ If an element of the performance review is assessed as "failed", the person responsible for the module, lecturer or instructor shall determine the conditions still to be fulfilled, including deadlines for acceptance, together with the director.

Art 8. Course units, performance assessment

- ¹ Each semester, the management shall specify the course units for the degree programme in the course catalogue³. The information in the course catalogue is binding.
- ² 2 The modalities of the performance assessments for the individual course units shall be specified in the course catalogue⁴.
- ³ 3 A failed performance assessment may only be repeated once.
- ⁴ 4 A passed performance assessment cannot be repeated.

Art 9. Recognition of previous academic achievements

- ¹ ECTS that have already been credited for another degree at ETH Zurich or at another university cannot be credited again in the continuing education programme.
- ² Re-attendance of a course unit already attended as part of a previous degree at ETH Zurich, including taking the performance assessment, is only possible in justified exceptional cases and with the permission of the delegate.

Art 10. Diploma and Diploma Supplement

Upon fulfilment of the requirements set out in Art. 6, an ETH Diploma according to Art. 2 and a Diploma Supplement according to the guidelines of the Swiss Rectors' Conference (swissuniversities) shall be issued.

Art 11. Creditability as a module in the MAS ETH in Future Transport Systems The successfully completed continuing education programme can be credited as a "CAS unit" in the continuing education programme "Master of Advanced Studies ETH in Future Transport Systems"⁵.

Section 3 Admission and Enrolment

Art 12. Admission requirements, admission procedure

¹ Admission to the continuing education programme is open to anyone who:

- a. holds a Master's degree from ETH Zurich or a degree from another university recognised as equivalent; and
- b. has at least two years of professional experience relevant to the continuing education programme.

³ www.vvz.ethz.ch

⁴ www.vvz.ethz.ch

⁵ RSETHZ 333.0300.52

² Applicants who do not fulfil the requirements according to para. 1 may be admitted by way of exception in accordance with Art. 13 para. 2 of the ETH Zurich Continuing Education Ordinance⁶.

³ Admission is based on the applicant's personal dossier. The admission procedure may be supplemented by an admission interview with the extended management of the continuing education programme.

⁴ The management shall check whether the admission requirements of the individual applicants are fulfilled. The rector shall decide on admission to the continuing education programme.

⁵ There is no entitlement to admission to the continuing education programme.

Art 13. Enrolment, registration, number of participants

- ¹ Participants in the continuing education programme shall be enrolled by the School for Continuing Education.
- ² Participants in the continuing education programme shall enrol with the School for Continuing Education.
- ³ The School for Continuing Education shall determine the formalities of registration, enrolment and enrolment.
- ⁴ The number of participants in the continuing education programme may be limited by the Rector of ETH Zurich at the request of the delegate.

Art 14. Tuition fees and costs

- ¹ In accordance with Art. 6, para. 1 and 3 of the ETH Domain Fee Ordinance⁷, students must pay both tuition fees and a cost contribution.
- ² The amount of the cost contribution shall be determined by the ETH Executive Board at the request of the head of the continuing education programme.

Art 15. Exclusion from the training programme

Anyone who:

- a. can no longer achieve the required number of ECTS according to Art. 7 due to:
 - 1. failure to pass performance assessments, or
 - 2. exceeding the maximum permissible duration of studies; or
- b. failure to pay the tuition fee and/or the cost contribution.

Section 4 Final provisions

Art 16. Administration of justice

Decisions issued on the basis of these regulations may be contested in accordance with the Federal Act on Administrative Procedure⁸.

Art 17. Special cases

⁶ SR 414.134.1

⁷ SR 414.131.7

⁸ SR 172.021

The delegate shall regulate all cases that are not or not sufficiently covered by these regulations or by other relevant ordinances and directives.

Art 18. Entry into force

These Regulations shall enter into force on 1 January 2021.

On behalf of the Executive Board of ETH Zurich

The president: Joël Mesot

The General Secretary: Katharina Poiger Ruloff

RSETHZ 333.0300.52

Regulations 2021

for the continuing education programme

Certificate of Advanced Studies ETH in Future Transport Systems: New Business Models (CAS ETH MZ: New Business Models)

at the Department of Mechanical and Process Engineering of 11 November 2020

The Executive Board of ETH Zurich,

based on Art. 4 Para. 1 Letter a of the ETH Zurich Organisation Ordinance of 16 Dec. 2003¹, decrees:

Section 1: General Provisions

Art 1. Subject

¹ These study regulations define the conditions under which the continuing education programme "Certificate of Advanced Studies ETH in Future Transport Systems: New Business Models (MAS ETH MZ: New Business Models)", hereinafter referred to as the continuing education programme, can be acquired at ETH Zurich.

 2 The continuing education programme is assigned to the Department of Mechanical and Process Engineering (D-MAVT).

Art 2. Title

¹ ETH Zurich awards the title for the successfully completed continuing education programme:

Certificate of Advanced Studies ETH in Future Transport Systems: New Business Models

(Abbreviated: MAS ETH MZ: New Business Models)

Art 3. Management of the continuing education programme

¹ The management of the continuing education programme (management) shall perform the following tasks in particular:

- a. it represents the continuing education programme internally and externally;
- b. it shall liaise with the D-MAVT;
- c. be responsible for finances, personnel and premises.

 2 The leadership shall be composed of the delegate and the programme coordinator.

 3 The delegate shall be appointed by the D-MAVT. The deputy delegates shall be appointed by their respective department.

⁴ The programme coordinator shall be appointed by the Delegate.

¹ RSETHZ 201.021

⁵ The Extended Management shall consist of the delegate, two alternate delegates and the programme coordinator. Of the deputy delegates, at least one must be from another department outside the D-MAVT.

⁶ The extended management is responsible for the pre-selection of applications, in particular the "sur dossier" applications and the associated admission interviews.

Art 4. Credit System

¹ The course of study is based on a credit system that is aligned with the European Credit Transfer and Accumulation System (ECTS). The guidelines of the Rector on the credit system are decisive for the application of ECTS at ETH Zurich.

²Credit points (ECTS) according to ECTS describe the average student workload required for a course.

³One ECTS corresponds to a workload of 25-30 hours. The workload includes all study-related activities required for the acquisition of ECTS.

⁴CPs are only awarded for satisfactory performance. A performance is considered sufficient if it is assessed with a grade of at least 4 or with the predicate "passed".

⁵ The D-MAVT shall keep the register of acquired ECTS for all participants in the continuing education programme.

Section 2 Target Group, Content, Scope, Structure and Completion of the Continuing Education Programme

Art 5. Target group and content

The continuing education programme is basically aimed at persons with a university Master's degree in engineering, natural sciences or geography and professional experience in the field of mobility and transport or in a related field. Participants learn to contribute to integrated, sustainable mobility solutions in their respective work context, taking into account the entire mobility system. The content of the continuing education programme is divided into units, each of which deals with one aspect of the mobility system in depth with a focus on Switzerland and a reference to other European or international countries: system aspects, technology potentials, new business models and transport engineering.

Art 6. Scope, duration and limitation of study time

- ¹ For the successful completion of the continuing education programme, the modules offered must be passed with a total of 12 ECTS and the CAS thesis with 3 ECTS. Attendance of at least 80% of the contact time is compulsory for the modules.
- ² The continuing education programme usually lasts one semester.
- ³ The maximum permissible duration of study is 1 year. If there are important reasons, the delegate can extend the permissible duration of study by a maximum of one additional year upon request.

Art 7. CAS thesis and performance review

¹ The CAS thesis is taken as individual or group work. The exact form is specified in the course catalogue².

² www.vvz.ethz.ch

- ² The CAS work is supervised and assessed by the supervising lecturer and, if necessary, by other specialists. The director decides on the acceptance of the CAS work based on the assessment of the responsible lecturer.
- ³ If an element of the performance review is assessed as "failed", the person responsible for the module, lecturer or instructor shall determine the conditions still to be fulfilled, including deadlines for acceptance, together with the director.

Art 8. Course units, performance assessment

- ¹ Each semester, the management shall specify the course units for the degree programme in the course catalogue³. The information in the course catalogue is binding.
- ² 2 The modalities of the performance assessments for the individual course units shall be specified in the course catalogue⁴.
- ³ 3 A failed performance assessment may only be repeated once.
- ⁴ 4 A passed performance assessment cannot be repeated.

Art 9. Recognition of previous academic achievements

- ¹ ECTS that have already been credited for another degree at ETH Zurich or at another university cannot be credited again in the continuing education programme.
- ² Re-attendance of a course unit already attended as part of a previous degree at ETH Zurich, including taking the performance assessment, is only possible in justified exceptional cases and with the permission of the delegate.

Art 10. Diploma and Diploma Supplement

Upon fulfilment of the requirements set out in Art. 6, an ETH Diploma according to Art. 2 and a Diploma Supplement according to the guidelines of the Swiss Rectors' Conference (swissuniversities) shall be issued.

Art 11. Creditability as a module in the MAS ETH in Future Transport Systems The successfully completed continuing education programme can be credited as a "CAS unit" in the continuing education programme "Master of Advanced Studies ETH in Future Transport Systems"⁵.

Section 3 Admission and Enrolment

Art 12. Admission requirements, admission procedure

¹ Admission to the continuing education programme is open to anyone who:

- a. holds a Master's degree from ETH Zurich or a degree from another university recognised as equivalent; and
- b. has at least two years of professional experience relevant to the continuing education programme.

³ www.vvz.ethz.ch

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⁵ RSETHZ 333.0300.52

² Applicants who do not fulfil the requirements according to para. 1 may be admitted by way of exception in accordance with Art. 13 para. 2 of the ETH Zurich Continuing Education Ordinance⁶.

³ Admission is based on the applicant's personal dossier. The admission procedure may be supplemented by an admission interview with the extended management of the continuing education programme.

⁴ The management shall check whether the admission requirements of the individual applicants are fulfilled. The rector shall decide on admission to the continuing education programme.

⁵ There is no entitlement to admission to the continuing education programme.

Art 13. Enrolment, registration, number of participants

- ¹ Participants in the continuing education programme shall be enrolled by the School for Continuing Education.
- ² Participants in the continuing education programme shall enrol with the School for Continuing Education.
- ³ The School for Continuing Education shall determine the formalities of registration, enrolment and enrolment.
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Art 14. Tuition fees and costs

- ¹ In accordance with Art. 6, para. 1 and 3 of the ETH Domain Fee Ordinance⁷, students must pay both tuition fees and a cost contribution.
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On behalf of the Executive Board of ETH Zurich

The president: Joël Mesot

The General Secretary: Katharina Poiger Ruloff

RSETHZ 333.0300.52

Regulations 2021

for the continuing education programme

Certificate of Advanced Studies ETH in Future Transport Systems: Technology Potentials (CAS ETH MZ: Technology Potentials)

at the Department of Mechanical and Process Engineering of 11 November 2020

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based on Art. 4 Para. 1 Letter a of the ETH Zurich Organisation Ordinance of 16 Dec. 2003¹, decrees:

Section 1: General Provisions

Art 1. Subject

¹ These study regulations define the conditions under which the continuing education programme "Certificate of Advanced Studies ETH in Future Transport Systems: Technology Potentials (MAS ETH MZ: Technology Potentials)", hereinafter referred to as the continuing education programme, can be acquired at ETH Zurich.

 2 The continuing education programme is assigned to the Department of Mechanical and Process Engineering (D-MAVT).

Art 2. Title

¹ ETH Zurich awards the title for the successfully completed continuing education programme:

Certificate of Advanced Studies ETH in Future Transport Systems: Technology Potentials

(Abbreviated: MAS ETH MZ: Technology Potentials)

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On behalf of the Executive Board of ETH Zurich

The president: Joël Mesot

The General Secretary: Katharina Poiger Ruloff