

# **Academic Regulations governing the Master of Science in Engineering (MSE) degree program at the Lucerne School of Engineering and Architecture and at the Lucerne School of Computer Science and Information Technology**

of 1 September 2023

*(These Regulations are translated from and hence based on the "Studienreglement für den Studiengang Master of Science in Engineering [MSE] an der Hochschule Luzern – Technik & Architektur sowie an der Hochschule Luzern - Informatik". The German version shall be authoritative.)*

*The Dean of the Lucerne School of Engineering and Architecture and  
the Dean of the Lucerne School of Computer Science and Information Technology,*

pursuant to article 1 paragraph 2 and article 6 paragraph 1 (a) of the academic ordinance governing degree programs at the Lucerne University of Applied Sciences and Arts (FH Zentralschweiz) of June 13, 2014<sup>1</sup>

*hereby enacts the following:*

## **I. General**

### **Art. 1 Scope**

<sup>1</sup> These academic regulations contain the provisions required to implement the academic ordinance governing degree programs offered by the Lucerne University of Applied Sciences and Arts (FH Zentralschweiz) for the Master of Science degree in Engineering (MSE) at the Lucerne School of Engineering and Architecture and the Lucerne School of Computer Science and Information Technology.

<sup>2</sup> They in particular govern

- a. the bodies acting within the framework of the degree program,
- b. the structure and organization of the program,
- c. the requirements for admission to the degree program pursuant to art. 22 of the academic ordinance governing degree programs offered by the Lucerne University of Applied Sciences and Arts (FH Zentralschweiz),

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<sup>1</sup> SRL No. 521

- d. the recognition of prior learning, and
- e. the conditions for obtaining the master's degree.

**Art. 2** *Admission to the master's degree program*

The following entry requirements must be met in order to be admitted to the master's degree program:

- a. A bachelor's degree or equivalent university qualification with very good grades at the minimum, and
- b. Passing the aptitude test (interview with the head of degree program and the advisor).

**Art. 3** *Recognition of prior learning/experience*

<sup>1</sup> Previous study will be assessed individually and, if necessary, credited with a number of ECTS credits of a certain module type (technical-scientific specialization [TSM], further theoretical principles [FTP], context modules [CM] or subject-specific specialization [specialization modules 1 and 2 and supplementary courses]). Up to 45 ECTS credits can be so credited. Recognition must be requested from the head of the MSE program for the attention of the Head of Bachelor's and Master's Programs.

<sup>2</sup> Employment-related experience can be recognized only if the applicant has actively participated in projects that are in the same field and the requirements for which are comparable to those for academic work. The recognition can relate to the technical specialization only.

## **II. Governing bodies**

**Art. 4** *Dean*

<sup>1</sup> The Deans of the Lucerne School of Engineering and Architecture and of the Lucerne School of Computer Science and Information Technology carry the responsibility for the master's degree programs conferred upon them by superordinate legislation. In particular, they

- a. approve the curriculum and any changes,
- b. appoint the advisors at the request of the head of the degree program after they have been chosen by the senior management of the School.

<sup>2</sup> They represent the Lucerne University of Applied Sciences and Arts on the steering committee of the coordinated program. The steering committee in particular

- a. carries overall responsibility for the design, quality and operation of the coordinated MSE program,
- b. determines the definition and development of the MSE concept,
- c. determines the organizational structure,
- d. determines the admission of cooperation partners,
- e. determines the profiles to be offered,
- f. approves the "profiles at Universities of Applied Sciences" applied for by said universities,

- g. approves the representation on the steering committee proposed by a university of applied sciences,
- h. elects the chairperson of the steering committee,
- i. elects/appoints and assumes operational management of the coordinated MSE program,
- j. determines the appointment (if necessary) of a project manager for a strategic development and its management,
- k. elects the profile committees, and
- l. approves the module program at the central campuses requested by the master's committee.

**Art. 5** *Head of Bachelor's and Master's Programs*

The Head of Bachelor's and Master's programs

- a. decides at the request of the degree program head on the admission of students and the recognition of prior learning and on the recognition of language diplomas,
- b. appoints the external examiners at the request of the head of the master's program,
- c. decides on student requests for extensions as per article 21 paragraph 4 and on requests to exceed the limit of 120 enrolled ECTS credits as per article 21 paragraph 5.

**Art. 6** *Head of the Master's Program*

<sup>1</sup> The Head of the Master's Program is responsible for the quality, planning and delivery of the master's degree program and associated modules. He or she is in particular responsible for

- a. the quality assurance of the master's program,
- b. informing the students,
- c. organizing the master's thesis (MT), the specialization modules 1 and 2 (VM1 and VM2) and the supplementary courses (EVAs),
- d. validating the results of all the modules,
- e. approving applications for admission to the degree program in collaboration with the advisor,
- f. proposing external examiners to the head of bachelor's and master's programs, and
- g. proposing advisors for the attention of the senior management of the School.

<sup>2</sup> He or she represents the Lucerne University of Applied Sciences and Arts on the Master's Committee of the coordinated program. In particular the Master's Committee

- a. assumes responsibility for the content of the joint sub-program,
- b. ensures the quality of the core modules,
- c. issues requests to the steering committee regarding the core modules to be offered per campus,
- d. determines the lecturers in the core module groups,
- e. assumes responsibility for interfacing between the coordinated program and the MSE program of the Lucerne University of Applied Sciences and Arts,
- f. applies to the steering committee for operational processes.

**Art. 7** *Profile representative*

<sup>1</sup> The representative of a profile is responsible for the respective MSE profile.

<sup>2</sup> He or she represents the Lucerne University of Applied Sciences and Arts on the relevant profile committee of the coordinated program. The profile committee is in particular responsible for

- a. developing and revising the respective profile description, and
- b. developing and requesting TSM, FTP and CM modules.

**Art. 8** *Advisor*

<sup>1</sup> The advisor

- a. is overall responsible for the quality of the teaching provided to his or her master's students,
- b. advises and assesses master's degree candidates interested in his or her particular field,
- c. advises his or her master's students on all aspects of the master's program (including the topic's core modules, tasks and role in the projects of the specialization modules and in the master's thesis, supplementary courses, place of work, attendance time or availability, etc.) and sets out the decisions in a tailored study agreement,
- d. is responsible for the concept and delivery of the master's thesis, the specialization modules and the supplementary courses in his or her area of specialization,
- e. regularly discusses the current state-of-play with his or her master's students, monitors their learning progress and initiates the required measures, and
- f. is responsible for organizing the necessary infrastructure for his or her master's students during the specialization modules and master's thesis.

<sup>2</sup> The following requirements apply to advisors of the Lucerne School of Engineering and Architecture and the Lucerne School of Computer Science and Information Technology:

- a. The advisor is a full-time lecturer at the Lucerne School of Engineering and Architecture or the Lucerne School of Computer Science and Information Technology.
- b. He or she has typically progressed beyond master's level, e.g., doctorate.
- c. Based on his or her previous activities within and outside the Lucerne School of Engineering and Architecture or the Lucerne School of Computer Science and Information Technology, he or she possesses the project management skills to support MSE students in the delivery of their project assignments (VM1 and VM2, MT).
- d. Based on his or her previous activities within and outside the Lucerne School of Engineering and Architecture or the Lucerne School of Computer Science and Information Technology, he or she has the scientific competence to advise master's students and to supervise and assess their scientific work. Applicants must provide evidence of their scientific competencies by means of self-declaration.
- e. The head of the master's program checks the declared competencies for the attention of the School's senior management before forwarding the applications.

**Art. 9** *Module coordinators*

<sup>1</sup> The module coordinators are responsible for the quality of the module in coordination with the module group.

<sup>2</sup> The module coordinators prepare in coordination with the module group the module descriptions and design and evaluate the assessed assignments together with the participating lecturers.

**Art. 10** *Lecturers*

<sup>1</sup> The lecturers teach and examine in accordance with the didactic quality standards of the Lucerne University of Applied Sciences and Arts and the coordinated program. Alongside the delivery of contact studies, a substantial portion of the teaching duties of lecturers consists of providing coaching to students.

<sup>2</sup> The lecturers participate actively in the module groups of the core modules in accordance with the coordinated MSE concept.

<sup>3</sup> They are in charge of the module assessments.

**Art. 11** *External examiners*

<sup>1</sup> The involvement of external examiners is mandatory for the assessed assignment process in the following modules:

- a. Specialization modules 1 and 2 and
- b. master's thesis.

<sup>2</sup> The external examiners are responsible for monitoring the orderly gathering of evidence of academic achievement and are consulted during the grading process.

### **III. Master's degree program**

#### **A. Structure and organization of study programs**

**Art. 12** *Principle*

The master's degree program offered by the Lucerne School of Engineering and Architecture and the Lucerne School of Computer Science and Information Technology is modular in structure. It is concluded with a master's degree.

**Art. 13** *Modules*

<sup>1</sup> The degree program is composed of modules. Each module is assigned a certain number of ECTS credits.

<sup>2</sup> Modules are assigned to one of the following categories:

- a. Technical-scientific specialization (TSM),

- b. Further theoretical principles (FTP),
- c. Context modules (CM),
- d. Professional specialization consisting of specialization modules 1 and 2 (VM1 & VM2), supplementary courses (EVAs) and the master's thesis (MT).

**Art. 14** *Module description*

<sup>1</sup> Every module has a module description that in particular contains the name of the module, a description of the module, the ECTS credits allocated, the skills that are required and the skills that will be taught, and the course contents, teaching methods and form of assessed assignment.

<sup>2</sup> The module description indicates any certificates (evidence of academic attainment that students have to provide in the course of the module) that are required to confirm eligibility to sit the end-of-module exam. Module descriptions can also stipulate mandatory entry requirements.

**Art. 15** *Compulsory modules*

The compulsory modules are:

- a. The master's thesis (30 ECTS credits),
- b. Specialization module 1 and specialization module 2 (in total minimum 21 / maximum 30 ECTS credits).

**Art. 16** *Assessed assignment*

<sup>1</sup> The assessed assignment provides evidence of the skills gained during the master's degree program. It consists of:

- a. a possible attestation of learning achievements during the contact studies, and
- b. the end-of-module exam.

<sup>2</sup> In order to obtain the ECTS credits for a module as shown in the module description, the final module examination must be passed with at least a "sufficient" grade (grade E).

<sup>3</sup> The end-of-module exam must generally be taken directly after the period of contact study for the relevant module.

<sup>4</sup> Students who fail to sit the end-of-module exam without compelling reason receive an ECTS grade F.

<sup>5</sup> Students who fail to complete an assessed assignment for compelling reasons must notify the Bachelor's and Master's secretariat in writing before the start of the exam.

<sup>6</sup> In the event that such a situation arises during the assessed assignment, the candidate must notify the head of program and the module coordinator immediately of his or her withdrawal from the assignment in writing.

<sup>7</sup> The assertion of reasons applicable to an assessed assignment already completed is excluded in the event the candidate was aware of them before or during the assessed assignment.

<sup>8</sup> If medical grounds are quoted, a medical certificate must be submitted with the Bachelor's and Master's Secretariat. Where doubt exists, the Lucerne School of Engineering and Architecture may engage an independent medical examiner.

<sup>9</sup> Students are entitled to inspect the assessment documents.

#### **Art. 17** *Retaking of modules*

<sup>1</sup> Modules awarded a grade F are deemed to have been failed. A failed module can be retaken once. One additional examination session for students who must resit the examination is held per semester.

<sup>2</sup> Modules that have been passed may not be retaken.

<sup>3</sup> Students who fail a compulsory module twice are barred from continuing the degree program.

<sup>4</sup> Students who have to resit an exam are deemed to have retaken the module pursuant to para. 1.

#### **Art. 18** *Student support*

<sup>1</sup> Every master's student is assigned an advisor.

<sup>2</sup> Together, the advisor and the student draw up an individual student agreement which is reviewed at regular intervals.

<sup>3</sup> The Lucerne School of Engineering and Architecture and the Lucerne School of Computer Science and Information Technology may impose a restriction on the choice of modules.

<sup>4</sup> The individual student agreement determines, inter alia, the modules that must be attended.

<sup>5</sup> If the advisor and the student cannot agree on the details of the individual student agreement, the head of the master's program takes the final decision.

<sup>6</sup> A change of advisor is possible in exceptional circumstances. Reasons can include the sudden unavailability of the advisor or a risk to the success of the studies. The change, stating the reason, must be applied for in writing to the head of the master's program and must bear the signatures of the student as well as the old and new advisors.

#### **Art. 19** *Registration for a module, withdrawal from a module and module delivery*

<sup>1</sup> Students wishing to take a module must register before the registration deadline during the previous semester. Although applications are considered whenever possible, there is no entitlement to a place in a specific module.

<sup>2</sup> Students can register for a module only with the consent of the advisor.

<sup>3</sup> Registration for a module does not grant entitlement to the delivery of the module.

<sup>4</sup> Students affected by the non-delivery of a module are informed accordingly. Registrations for other modules can be made subsequently.

<sup>5</sup> Withdrawal from a module can be notified to the Bachelor's and Master's Secretariat by the beginning of the semester. Follow-up registration for another module during this period will be approved only if this does not adversely affect the orderly conduct of the study program.

<sup>6</sup> After this deadline, withdrawals will be accepted only if there is compelling reason. Compelling reasons include events for which the student cannot be held responsible, such as the inability to study for a long period due to sickness, accident, a death in the family or similar. Sickness must be confirmed by a medical certificate. The withdrawal must be made in writing to the Bachelor's and Master's Secretariat.

#### **Art. 20** *Language requirements*

Students whose native language is not the predominant language of instruction must provide proof of proficiency in the language of instruction, typically in the form of a language certificate commensurate with the skills level required for the program. The Head of Bachelor's and Master's Programs decides on the recognition of language certificates.

#### **Art. 21** *Forms of study and duration of studies*

<sup>1</sup> The maximum period of study is seven semesters. Exceeding the maximum period of study could lead to exclusion from the degree program.

<sup>2</sup> A maximum of 120 registered ECTS credits can be earned during the period of study. Registered ECTS credits are only awarded to students who have registered to attend a module.

<sup>3</sup> Study breaks do not count towards the period of study, but these may not exceed four semesters in total. An extension of the period of study longer than one semester on leave due to the study break must be accepted.

<sup>4</sup> Students may, in consultation with the advisor, apply to extend the duration of their studies.

<sup>5</sup> The advisor may ask the head of the MSE that the student be allowed to exceed the limit of 120 registered ECTS credits where a master's thesis is repeated.

<sup>6</sup> A change of profile is possible only on conclusion of a semester.

#### **Art. 22** *Studying abroad*

The maximum number of ECTS credits that can be earned through modules attended during studies at foreign (partner) universities is 45. These can include only core and professional specialization modules.



## **B. Conditions for obtaining the master's degree**

### **Art. 23** *Awarding of master's degree*

The "Master of Science Hochschule Luzern in Engineering with specialization in [profile designation]" is awarded when the student has

- a. earned a total of 90 ECTS credits,
- b. passed all the compulsory modules,
- c. earned a total of at least 30 ECTS credits for modules in the technical-scientific specialization (TSM), further theoretical principles (FTP) and context module (CM) categories,
- d. earned at least 12 ECTS credits for modules in the technical-scientific specialization (TSM) category,
- e. earned at least 9 ECTS credits for modules in the further theoretical principles category,
- f. earned at least 6 ECTS credits for modules in the context module (CM) category, and
- g. earned 30 ECTS credits for modules in the professional specialization category (specialization modules 1 and 2 in supplementary courses).

### **Art. 24** *Transcript of records and diploma supplement*

<sup>1</sup> At the end of the degree program a transcript of records is issued that specifically provides the following information for each module attended by the student:

- a. Module name,
- b. credits earned, and
- c. the ECTS grade awarded.

<sup>2</sup> The transcript of records is accompanied by the diploma supplement, which contains a standardized description of the master's degree.

<sup>3</sup> The transcript of records is issued at the end of every semester.

## **IV. Final provisions**

### **Art. 25** *Withdrawal from degree program*

<sup>1</sup> Students must inform the Bachelor's and Master's Secretariat if they wish to terminate the degree program early.

<sup>2</sup> Withdrawal from the degree program must be notified in writing before the end of the semester. The deadlines set for this procedure must be adhered to. Late notifications of withdrawal may mean being liable for the following semester's fees.

### **Art. 26** *Termination of studies*

The degree program is terminated with the awarding of the master's degree, withdrawal from the degree program, or exclusion from the program.

**Art. 27** *Right of appeal*

<sup>1</sup> Rulings based on these academic regulations are forwarded to recipients in written form and accompanied by instructions on the right to appeal.

<sup>2</sup> According to the provisions contained in the academic ordinance governing degree programs offered by the Lucerne University of Applied Sciences and Arts, (FH Zentralschweiz) of 13 June 2014, substantiated appeals against decisions taken in accordance with these academic regulations can be lodged in writing with the head of bachelor's and master's programs. Appeals must be lodged within 20 days.

**Art. 28** *Repeal of previous rules and orders*

The academic regulations governing the Master of Science in Engineering (MSE) degree program at the Lucerne School of Engineering and Architecture and the Lucerne School of Computer Science and Information Technology of 1 September 2020 is hereby repealed.

**Art. 29** *Entry into force*

Subject to the approval of the Governing Council of the Lucerne University of Applied Sciences and Arts<sup>2</sup> these academic regulations shall enter into force on 1 September 2023. It applies to all Master of Science in Engineering students at the Lucerne School of Engineering and Architecture and the Lucerne School of Computer Science and Information Technology.

Horw, 1 September 2023

Rotkreuz, 1 September 2023

**Lucerne School of Engineering and  
Architecture**

**Lucerne School of Computer Science and  
Information Technology**

Prof Dr Viktor Sigrist  
Dean

Prof Dr René Hüsler  
Dean

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<sup>2</sup> Approved by the Governing Council of the Lucerne University of Applied Sciences and Arts on 31 August 2023.