REGULATIONS FOR THE CONTROL OF THE
STUDIES OF THE SECTION
OF PHYSICS
FOR THE MASTER IN NUCLEAR
ENGINEERING
for the 2021-2022 academic year
May 26, 2021

The management of the Swiss Federal Institute of
Technology Lausanne

Having regard to the ordinance on education leading to
the bachelor's and master's degrees of the EPFL of June
14, 2004,
Having regard to the ordinance on the control of studies
leading to the bachelor's and master's degrees at EPFL of
June 30, 2015,
having regard to the study plan of the physics section for
the master in nuclear engineering

stop:

Art. 1 - Scope of application

The present regulation sets the rules for the application
of the control of the master studies of the section of
physics for the master in Nuclear Engineering that refer
to the academic year 2021-2022.

Art. 2 - Training stages

The master's degree in nuclear engineering consists of
two successive stages of training:
- the three-semester master's program, which requires 90
  credits to complete the master's project.
- the 25-week master's project, the successful
  completion of which implies the acquisition of 30
  credits. It is placed under the responsibility of a
  professor or a MER affiliated to the physics section.

Art. 3 - Examination sessions

1 Sessional courses are examined during the winter
  or summer sessions. They are mentioned in the study
  plan with the mention H or E.

2 Semester courses are taken in the fall or spring
  semester. They are listed in the syllabus as sem A or sem
  P.

3 An annual branch, i.e., one that is titled on a single
  line in the study plan, is examined as a whole during the
  summer session (E).

4 For the sessional branches, the written or oral form
  of the examination indicated for the session may be
  supplemented by written or oral tests of knowledge
during the semester, as indicated by the instructor.

Art. 4 - Organization

1 The general organization of the Master in Nuclear
  Engineering is governed by the basic regulations
  established jointly with ETH-Zürich. The courses related
to this Master are taught by both institutions:
  - 1st semester: EPFL 30 credits
  - 2nd semester: ETH-Zurich 30 credits
  - 3rd semester: PSI, Villigen 30 credits
  The 25-week master project is usually done at the
  Paul Scherrer Institute (PSI), EPFL or ETH-Zürich 30
  credits.

2 The student is subject to the regulations of the
  institution where he/she is studying for the semester.

3 The required admission profile, in addition to
  public law requirements related to nationality, takes into
  account the following first two years of university
  training in science and engineering:
  - Minimum credits required in "Mathematics
    • 18 ECTS credits or equivalent in hours/week,
    for example: Analysis I + II + III
  - Minimum credits required in "Natural Sciences
    • 12 ECTS credits or equivalent in hours/week,
    e.g.: 2 semesters of general physics
  - Minimum credits required in "Engineering Science
    • 12 ECTS credits or equivalent in hours/week,
    e.g. 6 ECTS credits each in two of the
    following subjects: mechanics, electrical
    engineering, thermodynamics, chemical
    engineering, materials science, control
    systems.

4 At the beginning of the program, each student
  chooses one of the accredited members of the Master's
  program as his/her academic tutor and advisor for the
  duration of the program.
  This tutor will help the student in the choice of elective
  courses, i.e. in the definition of an individualized study
  program. The choice of courses must be validated by the
  tutor. The tutor monitors the student's progress and
  suggests adjustments if necessary.

Art. 5 - Master cycle examinations

1 Group 1 "Compulsory core courses" is passed when
  the credits 64 of the study plan are obtained
  independently by individual success in each branch.

2 Group 2 "Elective core courses" is passed when the
  credits 26 of the study plan are obtained independently
  by individual success in each branch.
3 The engineering internship lasts 12 to 25 weeks. The internship is worth 8 credits. A section internship supervisor evaluates the internship with a "successful" or "unsuccessful" assessment. In case of failure, the internship may be repeated once. The organization of the internship and the criteria for its validation are the subject of an internal directive of the Core Group.

4 Students are advised to take at least 12 credits in the "Elective core courses" during the semester at EPFL and 12 during the semester at ETH-Zurich.

5 The student can choose up to 8 credits as free elective courses from the master elective courses of the EPFL and ETH-Zurich course catalogs, with the approval of his/her tutor.

6 The student must acquire a minimum of 80 course credits (including the 8 credits of the semester project and the 8 credits of the engineering internship) to be able to start the master project.

On behalf of the EPFL management

The President, M. Vetterli
Academic Vice President, J. S. Hesthaven

Lausanne, May 26, 2021