

responsible management, sustainable technology, shared prosperity

# master of science (msc) in sustainable Management & Technology

#### **GENERAL OUTLINE**

#### **Objectives**

The Master of Science in Sustainable Management and Technology (MSc SMT) aims at equipping the entrepreneurs and intrapreneurs of the future with the knowledge and skills enabling them to steer the transition toward a more resilient, environmentally responsible and inclusive economy while harnessing the power of technology.

The program's target is building competences along three dimensions: technology & innovation, economics & management, tools & skills for developing sustainable solutions. The SMT Master program is unique and totally innovative in that it focuses on all the three dimensions simultaneously and in a balanced manner.

The SMT Master program is intended for holders of a bachelor degree with little or no professional experience and it is meant to bring together students with either a management/economics background or an engineering background.

While it builds on theory and real-life applications, the program is committed to enhance personal and social skills by encouraging interdisciplinary team work on practical projects and by systematically mixing students of different profiles.

The formal course work and team projects are completed and enriched by lectures and workshops with experts from industry.

#### **GENERAL INFORMATION**

The SMT Master is a joint program offered by UNIL-HEC, IMD and EPFL, on behalf of Enterprise for Society (E4S).

#### Degree awarded

Master of Science in Sustainable Management & Technology delivered jointly by the three academic institutions: UNIL-HEC. IMD and EPFL.

#### **ECTS** credits

120

#### **Duration**

4 semesters

### **Teaching language**

English. Recommended level: C1.

#### Additional information

Enterprise for Society (E4S) www.e4s.center > Our activities > Education Email contact: master@e4s.center

Version: February 2023 Subject to changes. Only the official texts should be considered binding.









#### **EDUCATIONAL CONTENT**

#### Description

The first three semesters (90 ECTS) consist of courses and team projects structured in three blocks, with sustainability being the guiding thread: Technology, Economics & Management, Transferable skills & Team projects. A subsequent block offers the choice with elective courses both in Technology and in Economics & Management. In addition, a group of three courses called Integration Weeks aims at improving students' effectiveness in three directions: personal, group and organizational effectiveness.

The fourth semester consists in a Master Project based on an Internship in Industry (30 ECTS). The Master project will be undertaken with a supervisor affiliated to one of the three institutions (UNIL-HEC, IMD or EPFL).

#### **Career Prospects**

The SMT Master program trains the next generation of entrepreneurs and intrapreneurs to conduct business for the benefit of their organizations, the environment and society in general.

Graduates will be able to lead teams in multiple disciplines and solve complex problems in various types of organizations (corporations, startups, NGOs, governments).

They will also be ready to take non-traditional positions and pursue their ideas as entrepreneurs, by integrating sustainability largely defined in their core activities.

#### **SYLLABUS\***

Courses are taught by professors on the campuses of UNIL, IMD and EPFL, thus bringing together the expertise of the three complementary academic institutions of international excellence.

#### **Technology (26 ECTS)**

- Science of climate change
- Technology, sustainability & public policy
- Statistics & data science
- Data science & machine learning
- Technology, sustainability & public policy
- Information security & digital trust
- Sustainable logistics operations
- Energy supply, economics & transition

#### **Economics & Management (23 ECTS)**

- Economics for challenging times
- Sustainable & entrepreneurial finance
- Marketing & sustainability in a digital world
- Platforms & digital business models
- Sustainability accounting
- Strategy & disruption

## Transferable skills & Team projects (18 ECTS)

- Transformative project
- Introduction to ethics & critical thinking
- Complex problem solving in organizations
- Managing effective communication

#### **Integration Weeks (9 ECTS)**

- Improve your personal effectiveness
- Improve your group effectiveness
- Improve your organizational & societal effectiveness

#### **Elective courses (14 ECTS)**

#### **Master Project (30 ECTS)**

• Internship in Industry

#### **GENERAL INFORMATION**

#### **Admission requirements**

Candidates with a management/economics profile should make proof of a strong achievement record in courses related to data science and quantitative methods (e.g. probability and statistics, econometrics, machine learning, etc.), while candidates with an engineering profile should make proof of a strong achievement record in courses related to economic and management reasoning and modelling.

#### **Enrolment and final date**

Candidates should apply on the EPFL online application platform until 15th April or 15th December for the following academic year starting in September. The admission is based on the quality of application: excellent academic record, relevance of the Bachelor's degree and motivation of the candidate (i.e. proven interest in topics related to sustainable management and technology). Successful candidates will be officially registered at EPFL with access to facilities on the UNIL and EPFL campuses. A number of activities will also be organized on the IMD campus

www.e4s.center > Our activities > Education > Admission criteria

#### Start of courses

Mid-September









<sup>\*</sup> Under approvance by the academic service