

# master of science (мsc) in <mark>finance</mark>

# GENERAL OUTLINE

#### Objectives

Understanding the recent dramatic evolution of the world of finance is fundamental for a career related to Finance. As such, HEC Lausanne, a leader in European Finance training, is proud to organize the orientation Financial Entrepreneurship and Data Science, where students will get training on entrepreneurship - that is, how to create their own company, as well as training on the challenges that large data-sets represent.

In this innovative orientation, students will get, in addition to a traditional finance curriculum, knowledge of what hides behind buzz words, such as robo-advertising, peer-to-peer lending, predictive markets, and cryptocurrencies. The aim of this new orientation is to provide you with the necessary knowledge and language enabling you to discuss with an engineer who will then implement your requests. The Master of Science in Finance also offers two additional orientations to help the students gaining excellent quantitative knowledge and better understanding the working of firms and financial institutions:

Corporate Finance focuses on Investments, Distribution & Risk Management in order to conduct thorough financial analysis of various companies.

Asset and Risk Management requires highly quantitative skills in order to make the best possible investment decisions considering the financial risk.

In this program, students will understand how to manage portfolios by using quantitative methods and to assess the investments risks. In addition to providing strong theoretical bases, professors aim to teach the participants to apply their newly gained « know-how ». The MSc in Finance has been recognized by the CFA Institute as a CFA Program Partner. Other partners are CAIA and FRM.



Version: February 2024 Subject to changes. Only the official texts should be considered binding





How can we read tomorrow's markets correctly?

# **GENERAL INFORMATION**

#### Organizer

HEC Lausanne, Departement of Finance: www.unil.ch/df

#### **Degree awarded**

Maîtrise universitaire ès Sciences en finance Master of Science (MSc) in Finance Three mandatory orientations :

- Corporate Finance
- Asset and Risk Management
- Financial Entrepreneurship and Data Science

ECTS credits

120

**Duration** 4 semesters

#### **Teaching language**

English. Level necessary for your studies: C1

#### Academic advisor

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Additional information www.unil.ch/hec/masters

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# EDUCATIONAL CONTENT\*

#### Description

The Master of Science in Finance (MScF) is a two-year program constructed around four semesters. Accomplishment of the program is rewarded with 120 ETCS.\*

In the first semester the aim is to homogenize the knowledge of students since many students come from abroad. This is also the time to ascertain students possess the required skills to deal later on with the more technical courses. Those skills are in mathematics, statistics, programming, accounting, and key finance topics such as corporate finance and asset pricing. Students entering the MScF are expected to have already a very good knowledge of those skills and are encouraged to verify they have the required skills on this webpage:

www.unil.ch/hec > Masters > Finance > Admissions.

In the following semesters, students have to attend modules containing either compulsory fundamental courses, orientation specific courses, or elective courses. Eventually, they are required to write a thesis.

In the fundamental courses, students have to acquire advanced knowledge of derivatives pricing and the working of fixed income markets. We also put emphasis on ethics and sustainability.

In the Asset and Risk Management track, we aim to provide the knowledge that could lead for instance to a career in wealth management or as a risk manager. The courses introduce alternative markets and the working of financial institutions. The thrust of the program is however on quantitative methodology. How do you build a state of the art portfolio? What is the risk of such a portfolio?

In the Corporate Finance track, participants learn those aspects required for instance for a career in investment banking or work in a consultancy company. The provided courses are related to the valuation of firms and to understand the concepts behind mergers and acquisition. The body of knowledge is aligned with the one of the CFA, generally on a more quantitative level however.

In the Financial Entrepreneurship and Data Science track we aim to provide the knowledge which is required for someone who wants to create a company or who aims to work at the frontier of finance and new technologies such as cryptocurrencies and artificial intelligence. In this track, lots of programming is required. This track also contains courses providing management skills.

Those courses will be complemented by elective courses to be chosen in a pool of available courses. In each orientation, there is one class where students will get the opportunity to hone their soft skills.

The fourth semester is dedicated to the writing of a Master thesis, which may be done during an internship with a local or international financial institution. It is also possible to write an academic thesis, in many cases the first step towards a PhD.

#### Mobility

During their third semester, based on their previous performance, students may study in a university recognised by UNIL, under an exchange program. They may get a maximum of 30 credits in another institution. The prior authorisation of the Master's committee is required for the recognition of credits earned abroad.

#### **Career prospects**

University studies develop many transversal skills: oral and written communication, critical, analytical and summarising faculties, abilities in research, etc.

This panoply of skills, combined with specialist knowledge acquired in the course of studies, is an excellent preparation for a wide range of employment opportunities in all sorts of industries. This Master prepares for high-level financial careers in companies requiring profound knowledge of corporate finance and risk management techniques:

- Banks (central, retail, private, and investment), insurance companies
- Wealth manager or advisor in family offices
- Consulting companies
- Corporate finance
- Pension funds
- Trading
- Government bodies, regulators, international institutions
- Venture capital, M&A, structuring, funding
- Research, doctoral studies, academic career
- \* the official study plan prevails.

# **GENERAL INFORMATION**

#### **Admission requirements**

A Bachelor's degree from a Swiss university in Economics, Management, Finance or Information Systems.

Another degree or university qualification may be judged equivalent and give access to the Master's program, with or without conditions.

## **Enrolment and final dates**

The candidate's application must be submitted to the UNIL Admissions Department before 30<sup>th</sup> April: www.unil.ch/immat

Candidates needing a study visa : 28<sup>th</sup> February

# Start of courses

Mid-September. Academic calendar: www.unil.ch/central/calendar

## Part-time Master's degree

Under certain conditions, this Master's program can be followed part-time: www.unil.ch/formations/master-temps-partiel

**General information on studies** www.unil.ch/soc

#### **Career prospects**

www.unil.ch/perspectives/unil-et-apres https://heccareer.ch/

Accommodation and financial assistance www.unil.ch/sasme

### International

www.unil.ch/international





