

**MASTER OF SCIENCE IN FINANCE (90 OR 120 ECTS)
 OPTIONAL TRACK IN DATA SCIENCE AND SUSTAINABILITY (120 ECTS)**

Code	Course	Instructor	ECTS	Status	H/ week	Grading Policy
S1 - Autumn						
5AF2003	Investments	Hasler M.	6	Mandatory	4	E
5AF2009	Fixed Income	Guidotti I.	3	Mandatory	2	E
5AF2001	Financial Accounting	Fiechter P.	6	Mandatory	4	E
5AF2041	Quantitative Methods for Finance	Hasler M.	6	Mandatory	4	EI+E
	Elective courses		9	Elective		
S2 - Spring						
5AF2008	Corporate Finance	Salva C.	6	Mandatory	4	EI+E
5AF2002	Derivatives	Cujean J.	6	Mandatory	4	E
5AF2019	ESG Disclosure	Fiechter P.	3	Mandatory	2	EI
5AF2020	Financial Analysis and Valuation	Salva C.	3	Mandatory	2	EI+E
5AF2039	Finance Ethics	Fiole E.	3	Mandatory	2	E
	Elective courses		9	Elective		
S3 - Autumn						
5AF2028	Equity Research Contest	Salva C.	6	Mandatory	4	EI
5AF2030	Alternative Investments	Hasler M.	6	Mandatory	4	EI
5AF2048	Financial Technology	Mihet R.	3	Mandatory	2	EI+E
5AF2026	Risk Management	Mihet R.	3	Mandatory	2	EI+E
	Elective courses		12	Elective		
Total MScF - 90 ECTS			90			
5AF2044	Master thesis		30			
5AF2045	Internship thesis*		30			
	Track in Data Science ¹		30			
	Track in Sustainability ¹		30			
Total MScF - 120 ECTS			120			

*The duration of the internship is a minimum of 12 weeks full-time (3 months) and a maximum of 6 months (full-time or part-time).

¹For track registration, refer to the programme directive or the programme website.

A reading week (*semaine de lecture*) takes place in week 45 of the autumn semester. It enables students, at mid-semester, to identify possible gaps in their understanding of the subject matter, the acquisition of knowledge and the learning of methods. The reading week is an integral part of the programme and may be accompanied by mock, or mid-term, exams in some courses.

Grading Policy

E: Exam during the exam session at the end of the semester.

EI: Evaluation organised during the semester.

Retake exam after 1 failure: unless otherwise specified in the course description, 2h written exam during the exam session at the end of the semester or the September session.

The detailed terms of evaluation are specified in the course descriptions.

List of elective courses :

Code	Course	Instructor	ECTS	H/week	Grading Policy
S1 - Autumn					
5ER2001	Principles in Economics	Wald G.	6	2+2	E
5ST2001	Econometrics	Starica C.	6	4	EI+E
5AF2029	Programming	Macko V.	3	2	E
5ER2048	Monetary Policy in a New Era	Canetg F.	3	2	EI
5MI1005	Data Science for Business	Cotofrei P.	6	4	EI+E
5MI2017	Data Management	Ciorascu I.	6	4	EI+E
5AF2017	Applied Macroeconometrics	Kaufmann D.	6	4	EI+E
5ER2050	Behavioral Economics	Zihlmann C. / Wald G.	3	2	EI+E
5ER2017	Global Public Goods	Solleder J.-M.	3	2	E
5ER2055	Sustainable Cities	Loumeau G.	6	4	E
S2 - Spring					
5AF2049	Sustainable Finance	Efremenko P.	6	4	EI+E
5AF2007	Portfolio Management	Sonney F.	3	2	E
5ER2052	International Finance and Macroeconomics	Kaufmann D.	3	2	E
5MI2045	Computational Thinking**	Macko V.	3	1 week	EI
5EN2035	Global Corporate Governance and Ethics	Duberry J.	3	2	EI
2GG2036	Cours interdisciplinaire en changements climatiques et sociétés	Schneider L. / Intervenant-e-s externes	5-6 ^a	2	EI
5EN2050	Colloquium on Academic Writing	Reuter E.	3	2	EI
5MI2003	Business Analytics	Cotofrei P.	6	4	EI+E
5MI2018	Machine Learning	Ciorascu I.	6	4	EI+E
5ER2020	Applied Microeconometrics	Lanz B.	6	4	EI+E
5ER2053	Economic Research and AI	Gallea Q.	3	2	EI+O
5ER2023	Environmental Economics	Mathys N.	3	2	E
5MI2019	Managing Data Science Projects	Stoffel K.	3	2	EI+E
S3 - Autumn					
5AF2050	Sustainable Investing	Bolliger G.	3	2	EI+E
5ST2001	Econometrics	Starica C.	6	4	EI+E
5AF2029	Programming	Macko V.	3	2	E
5MI1005	Data Science for Business	Cotofrei P.	6	4	EI+E
5MI2017	Data Management	Ciorascu I.	6	4	EI+E
5AF2017	Applied Macroeconometrics	Kaufmann D.	6	4	EI+E
5ER2001	Principles in Economics	Wald G.	6	2+2	E
5ER2050	Behavioral Economics	Zihlmann C. / Wald G.	3	2	EI+E
5ER2048	Monetary Policy in a New Era	Canetg F.	3	2	EI
5ER2017	Global Public Goods	Solleder J.-M.	3	2	E
5ER2055	Sustainable Cities	Loumeau G.	6	4	E
Off-semesters^b					
5AF2040	Internship with report ^c		3		
5AF2031	CFA level I		6		
5AF2042	GARP/FRM part I exam		6		
5AF2043	CFA Institute Research Challenge Final		3		

It is possible to take a course (from another faculty/university) that is not on this plan, subject to the agreement of the programme director. Requests need to be sent, by e-mail, to the Study Advisor (conseil-etudes.SECO@unine.ch)

**Course enrolment is done in IS-Academia during the course registration period for the spring semester 2026.

^a See course description for the allocation of 6 credits.

^b For course enrollment details, see <https://www.unine.ch/seco/formations/master-of-science-in-finance/current-students/>

^cThe duration of the internship is a minimum of 6 weeks full-time (1.5 months) and a maximum of 6 months (full-time or part-time).

To obtain the Data Science or the Sustainability Track :

- 1. Students need to obtain 120 ECTS (60 mandatory courses and 60 elective courses)**
- 2. Students need to take at least 30 ECTS in the data science/sustainability course list (see below)**

Track in Data Science (30 ECTS in the following list)

Code	Course	Instructor	ECTS	Semester	H/week	Grading Policy
3IN2011	Machine Learning and Data Mining ^c	Dimitrakakis C.	5	Autumn	4	E
5AF2017	Applied Macroeconometrics	Kaufmann D.	6	Autumn	4	EI
5AF2048	Financial Technology	Mihet R.	3	Autumn	2	EI+E
5ST2001	Econometrics	Starica C.	6	Autumn	4	EI+E
5AF2029	Programming	Macko V.	3	Autumn	2	E
5AF2026	Risk Management	Mihet R.	3	Autumn	2	EI+E
5MI1005	Data Science for Business	Cotofrei P.	6	Autumn	4	EI+E
5MI2017	Data Management	Ciorascu I.	6	Autumn	4	EI+E
5AF2007	Portfolio Management	Sonney F.	3	Spring	2	E
5MI2012	Computational Thinking**	Macko V.	3	Spring	1 week	EI
5MI2018	Machine Learning	Ciorascu I.	6	Spring	4	EI+E
5MI2003	Business Analytics	Cotofrei P.	6	Spring	4	EI+E
5ER2020	Applied Microeconometrics	Lanz B.	6	Spring	4	EI+E
5ER2053	Economic Research and AI	Gallea Q.	3	Spring	2	EI+O
3IN2064	Reinforcement Learning and Decision Making Under Uncertainty ^c	Dimitrakakis C.	5	Spring	4	EI+E
5MI2019	Managing Data Science Projects	Stoffel K.	3	Spring	2	EI+E

Track in Sustainability (30 ECTS in the following list)

Code	Course	Instructor	ECTS	Semester	H/week	Grading Policy
5AF2050	Sustainable Investing	Bolliger G.	3	Autumn	2	EI+E
5ER2017	Global Public Goods	Solleder J.-M.	3	Autumn	2	E
5ER2055	Sustainable Cities	Loumeau G.	6	Autumn	4	E
5AF2019	ESG Disclosure	Fiechter P.	3	Spring	2	EI
5AF2039	Finance Ethics	Fiole E.	3	Spring	2	E
5AF2049	Sustainable Finance	Efremenko P.	6	Spring	4	EI+E
5EN2035	Global Corporate Governance and Ethics	Duberry J.	3	Spring	2	EI
5ER2023	Environmental Economics	Mathys N.	3	Spring	2	E
2GG2036	Cours interdisciplinaire en changements climatiques et sociétés	Schneider L. / Intervenant-e-s	5-6 ^a	Spring	2	EI
5ER1021	Sustainable Development Economics ^b	Strobl R.	3	Spring	2	E

**Course enrolment is done in IS-Academia during the course registration period for the spring semester 2026.

^aSee course description for the allocation of 6 credits.

^bThis course may only be chosen by students who have not yet validated the course as part of their bachelor's degree at the University of Neuchâtel.

^cEnrollment in the course and exam is subject to specific conditions and must be completed within the designated deadlines: see

mcs.unibnf.ch/organization/

LEARNING OUTCOMES

<i>On completion of this programme, students will be able to:</i>
Overarching skill
<ul style="list-style-type: none"> Develop expertise in finance using financial theory, economic reasoning, state-of-the art quantitative techniques and sustainable behavior.
Knowledge and understanding acquired in the program:
<ul style="list-style-type: none"> Describe the mechanics of equity, fixed income and derivatives markets
<ul style="list-style-type: none"> Describe economic theories used in the process of conducting financial decisions
<ul style="list-style-type: none"> Identify econometrics and programming techniques to build optimal strategies for financial and firm decision-making
Applying knowledge and understanding:
<ul style="list-style-type: none"> Apply financial theory to solve a variety of problems in investment management, corporate finance, and risk management
<ul style="list-style-type: none"> Build expectations about corporate and financial risks
<ul style="list-style-type: none"> Use data and modelling techniques to reach financial decisions
Making judgements:
<ul style="list-style-type: none"> Build recommendations based on the financial position and performance of a firm
<ul style="list-style-type: none"> Justify strategies based on the financial needs, goals, or profile of a client, a corporation, a bank or a firm
<ul style="list-style-type: none"> Evaluate the ethical implications of financial decision-making and financial practices
Communication skills:
<ul style="list-style-type: none"> Synthesize information in verbal presentation and written reports
<ul style="list-style-type: none"> Conduct discussions with actors active in the financial and corporate sector
<ul style="list-style-type: none"> Share knowledge and ideas effectively in team and through team-work
Learning skills:
<ul style="list-style-type: none"> Acquire skills and information in an independent manner
<ul style="list-style-type: none"> Adapt to the changing business and working environment
<ul style="list-style-type: none"> Choose appropriate financial research methodology to develop new and innovative solutions