

Master of Science in Applied Economics (MScAPEC)

Objectives

The Master of Science in Applied Economics is one of the first economics programmes in Switzerland focusing on economic methods that are directly applied to real-world problems. With its specialisations in Sustainability and Data Science, students acquire skills in two of the most exciting and relevant domains in economics.

Economists use theoretical models and empirical methods to understand, predict, and evaluate economic decisions and policies. The programme teaches how to use these methods to shed light on a wide range of relevant issues. For example, students approach questions such as: How can society tackle climate change? What are the costs and benefits of globalization? How can policymakers predict economic crises? What are the causes of economic inequality?

The programme has a strong data-driven approach using state-of-the-art statistical software and programming languages. In addition, it teaches students critical thinking, an analytical approach to problem solving, and skills to effectively communicate evidence-based scientific results to a non-expert audience. Due to small classes, the methods are taught in a personalized and interactive environment. Our academic professors and external lecturers from renowned policy institutions and the private sector ensure that the emphasis remains on applying the methods to real-world problems, rather than on technical details.

Acquired skills

Students develop the skills required for cutting-edge economic analysis, including:

- A core set of models for microeconomic and macroeconomic policy analysis
- State-of-the-art empirical methods implemented in the most widely used software (R, Python, Stata)
- The ability to read and reflect on the scientific literature, and apply these insights to real-world issues
- Communicate evidence-based analyses to support economic decision makers
- Conduct an independent project by completing a research or internship thesis

Students have the option to obtain specialisations in Sustainability and Data Science. These specialisations enable students to enhance their knowledge in these fields and signal their skills to potential employers.



Degree awarded

Master of Science in Applied Economics with optional tracks in:

- Sustainability
- Data Science

Credits: 90 ECTS

Duration: 3 semesters

Language: English

Admission conditions

A Bachelor's degree is required. Students with a degree in Economics and Business from a Swiss university are directly admitted. Other applications are reviewed by the admissions committee. Students who graduated in another discipline (e.g., Political Science, Sociology, International Relations, Engineering Sciences, etc.) or from a Swiss University of Applied Sciences (HEG/HES/FH), and have acquired at least 30 ECTS in Economics, can be admitted directly. For other students lacking some of the requirements, admission to the programme may be conditional on completing a pre-programme (one or two semesters) that is tailored to their background.

Application deadline

Students have to apply before April 30 to start the programme in the fall semester, and before November 30 to start in the spring semester. Late applications are possible subject to availability. Students who need a visa must allow enough time to complete the application procedure before classes begin.

Registration

Bureau des immatriculations Av. du 1^{er}-Mars 26 CH-2000 Neuchâtel +41 32 718 10 00

Information

Institute of Economic Research Phone: +41 32 718 14 00 master.economics@unine.ch www.unine.ch/mscapec



Career opportunities

The programme teaches skills highly relevant on today's job market. 91% of students find a job in 3 months after graduation. They work in the private sector (36%), public sector (32%), and at International Organisations, NGOs or in Academia (32%). The programme has a history of excellent placements in various sectors, including:

- Private: UBS, Swiss Life Group, China Construction Bank, Caitong Securities, Banque Bonhôte, J.P. Morgan, Partners Group, Huawei Technologies, Price Waterhouse Cooper, Philip Morris International, TEP Energy
- Public: Swiss Confederation (energy, economy, statistics departments), Cantons of Vaud and Neuchâtel (budget and statistics departments), Australian Department of Finance
- International Organisations: World Trade Organisation, World Intellectual Property Organisation
- NGO: World Economic Forum, Medair NGO
- Academia: Universities of Jönköping, Maryland, Frankfurt, Lausanne, as well as Canadian Energy Research Institute, FORS, Swiss Center for Expertise in Social Sciences

Course structure

The programme lasts 3 semesters. Students have to attend a core set of compulsory courses during the first two semesters. The remaining credits can be acquired from a variety of elective courses. During the third semester, students write a Master's thesis on a topic of their choice, which can be combined with an internship. The programme can be extended to 6 semesters and therefore allows sufficient flexibility to accommodate part-time work.

Interactive teaching

The programme maintains a policy of small classes, with around 20 students per cohort who enjoy maximum support and close supervision by the teaching staff. All courses are interactive and promote students' learning experience, providing a unique atmosphere in the classroom and greatly facilitates exchanges between students and professors.

Master's Programme (90 ECTS)

Compulsory courses (36 ECTS)

- Microeconomic policy
- Applied macroeconometrics
- Behavioral economics
- Social policy
- Applied microeconometrics
- Globalization and trade policy
- Economic research and A
- Macroeconomic policy

Elective courses (36 ECTS)

- Political economy
- Health economics and policy
- Empirical labor economics
- Monetary policy in a new era
- International finance and macroeconomics

Elective courses: Data Science (min. 12 ECTS)

- Data management
- Programming
- Machine learning: Theory, fairness and privacy
- Reinforcement learning and decision making under uncertainty
- Machine learning

Elective courses: Sustainability (min. 12 ECTS)

- Global public goods
- Environmental economics
- Sustainable finance
- Innovation and technology policies

Master's Thesis (18 ECTS)²

- Research thesis
- Internship thesis

¹ Elective courses that are not listed above require the programme director's prior approval.

² To follow a track in Sustainability or Data Science, the Master's thesis has to be written on a topic in the corresponding field.