



UNIVERSITÀ
DI TRENTO



universität
innsbruck

MSc in
Environmental Meteorology
Double-degree Programme



Master of Science in Environmental Meteorology

The double-degree Master of Science Programme in Environmental Meteorology is jointly managed by the **University of Trento** and the **University of Innsbruck**.

The courses offered within the programme cover a variety of topics related to **atmospheric and climate processes** and their connections with **environmental systems**.

Students will be stimulated to get familiar with different ways of approaching the sciences of weather, climate and environment, including **experimental** techniques, theoretical **analysis** and numerical **simulations**.

Graduates in Environmental Meteorology will be able to prepare and present weather forecasts, perform atmospheric and environmental measurements, analyze and interpret data from observations, as well as run numerical models for the simulation of atmospheric and environmental processes.

Lectures are given at the University of Trento throughout the first year and at the **University of Innsbruck** during the first semester of the second year.

The fourth semester, devoted to the thesis and related activities, may be spent at either of the two Universities, or at another university, research body or operational organization (weather service, environmental agency, etc.) upon suitable agreement.

The Environmental Meteorology Master is taught in collaboration with the Fondazione Edmund Mach (FEM).

Programme overview

Degree awarded

- Master of Science - "Laurea Magistrale" - in Environmental Meteorology awarded by the University of Trento
- Master of Science awarded by the University of Innsbruck

Language

English

Class size

Up to 30 students

Duration

2 years full-time

Intake

- Mid September lectures start in Trento for the 1st year
- Beginning of October lectures start in Innsbruck for the 2nd year

Workload

The total workload for each student is 120 ECTS (European Credit Transfer System)

Fees and funding (approximate range)

- EU citizens: 340€ - 3.400€ (based on income/merit)
- Non EU citizens: 1.000€ - 4.500 € (based on merit)
- Income/merit based scholarships and tuition waivers available

Admission

Selection criteria

- Assessment of previous studies and their coherence with the programme
- Academic curriculum
- English language proficiency
- Motivation letter
- Interview

Application deadlines (check online for updates)

- February for non-EU citizens living outside Italy
- June for EU citizens and non-EU citizens regularly living in Italy

How to apply

- Access the online application form
- Upload the required documents (CV and motivation letter, Bachelor transcript of records, English language certification, any other useful document)
- Submit your application online by the deadline
- Check online for more information and updates
www.unitn.it/mastermeteo

Requirements

- Bachelor degree (or equivalent)
- Strong background in the following areas:
 - Mathematics and Statistics
 - Theoretical and Applied Physics, including Geophysics
 - Chemistry
- English at B2 level of the Common European Framework of Reference for Languages



Study Plan

1st year courses at the University of Trento

- Introduction to meteorology and climatology (6 ECTS)
- Environmental fluid mechanics (9 ECTS)
- Environmental measurements (9 ECTS)
- Environmental physical chemistry (6 ECTS)
- Atmospheric boundary layer and turbulence (6 ECTS)
- Numerical methods for environmental processes (6 ECTS)
- Hydrology (9 ECTS)
- Biosphere, atmosphere and climate interactions (6 ECTS)
- Elective course (6 ECTS)



2nd year courses

1st semester: at the University of Innsbruck

- Atmospheric radiation and remote sensing (5 ECTS)
- Reading, writing and presenting scientific contents (3 ECTS)
- Atmospheric chemistry and biogeochemistry (6 ECTS)
- Dynamical and synoptic meteorology (6 ECTS)
- Elective courses (10 ECTS)

2nd semester: either at the University of Trento or at the University of Innsbruck

- Master Thesis (30 ECTS)

Career opportunities

The curriculum of the MSc in Environmental Meteorology aims at preparing highly qualified graduates, who upon specific training will be enabled to exploit their skills and qualifications at an international level as:

- Weather forecasters (in either public or private weather services, or as free-lance professionals)
- Consultants (for engineering firms, farmers' organisations, insurance companies, law firms)
- Aviation meteorologists
- Experts in the assessment and/or forecasting of solar radiation, wind and precipitation for energy conversion plants from renewable sources
- Experts in air quality monitoring and management
- Researchers, academics
- Experts in education and communication: instructors, media operators, teachers



Environmental meteorologists provide meteorological support and assistance to decision makers in a variety of fields: air quality monitoring and management, civil protection, transport infrastructures management (including aviation, railways, roads and navigation), water resource management, management of systems for energy conversion from renewable sources, agricultural operations, forest management, adaptation and mitigation of climate change impacts.



Students and lecturers of the MSc in Environmental Meteorology on the roof terrace of the Institute of Atmospheric and Cryospheric Sciences (ACINN) at the University of Innsbruck during a visit on 21 November 2018.



CONTACT DETAILS

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