MASTER PROGRAM

ATMOSPHERIC SCIENCE

Photo: Earth Science and Remote Sensing Unit, NASA, Johnson

Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

FAKULTÄT
FÜR MATHEMATIK, INFORMATIK
UND NATURWISSENSCHAFTEN

ATMOSPHERIC SCIENCE

CONTENT

The Atmospheric Science study program is a study of physics with a special focus on the atmosphere. Our program has an emphasis on modelling and offers individual specialization options. The Master's program is focused on research-oriented learning.

Atmospheric Science is a degree program with

- fascinating topics: climate, environment, weather
- methodological diversity – computer simulations, satellites, physical theory
- great practical applicability – climate change, severe weather warnings, renewable energies
- study opportunities in all geoscience- and climate-related subjects as an interdisciplinary education
- direct access to international research on many different topics, which are covered by the multitude of research groups at the KlimaCampus Hamburg

APPLICATION

The Master's program starts every year in the winter semester. Subject-specific application instructions can be found on our homepage:
www.mi.uni-hamburg.de/atmo-science

Please apply online between 15 February and 31 March at
https://www.uni-hamburg.de/en/campuscenter/bewerbung/master/online-bewerbung.html

WEATHER AND CLIMATE – ATMOSPHERIC PHYSICS

JOB PROFILE

The broad education in atmospheric physics and the acquired IT and experimental skills enable students to work in many different fields. Atmospheric scientists work primarily in climate and environmental research institutes, for weather services, or in the field of renewable energies. They are familiar with using super computers, handling large data volumes, and modern measurement techniques, which gives them key qualifications to enter future-oriented fields of work like Big Data or Artificial Intelligence. The Master's degree opens the door to many responsible and diversified occupations in research and development.

1	Radiation and Climate	Atmospheric Dynamics	Advanced Core Elective[1]	Free Elective[2]
2	Boundary Layer Modelling	Experimental Meteorology	Advanced Core Elective[1]	Free Elective[2]
3	Atmospheric Study Project (Master Thesis)		Advanced Core Elective[1]	Free Elective[2]
4	Master Thesis			

[1] Mandatory electives cover our research areas and include numerical methods and modelling, atmospheric general circulation, numerical weather prediction, wave dynamics, experimental methods, also advanced courses from other climate physics programs (OCP, ICCS), graded

[2] Open for all courses at Universität Hamburg, no grading

Physical modelling at Environmental Wind Tunnel Laboratory

WHY HAMBURG?

With its unique KlimaCampus network, Hamburg is a stronghold of meteorology. All relevant climate sciences are represented at the University and work together on an interdisciplinary basis. In this network, the Meteorological Institute is at the heart of the Cluster of Excellence CLICCS that is based at the University. The Max Planck Institute for Meteorology and the German Climate Computing Center are also located on the University campus.

PROGRAM STRUCTURE

The broad range of elective courses in semester 1 and 2 of study allows for individual specialization – from weather to climate science, from global circulation to urban climate applications. At the same time, many students work as student assistants and thereby gain insight into the numerous research areas of the KlimaCampus Hamburg. These contacts often lead to new research ideas for Master's theses. The theses are usually integrated into current research projects and are divided into the initial phase in semester 3 and the implementation phase in semester 4. Once you earned the Master of Science degree, the institutes of the KlimaCampus Hamburg offer opportunities for doctoral studies in many externally funded projects. Typically, around half of our graduates go on to earn a doctorate.

YOUR WAY – TO US!

PREREQUISITES

Have you got a Bachelor's degree already? Then, a Master's degree is a natural next step in your scientific career as it is required for practically all positions in science and research. Even if you prefer a position in the public or private sector, it is an important component to advance your career.

If you have obtained a Bachelor's degree in Meteorology, Oceanography, Physics, Mathematics, Environmental Physics, Engineering, and related subjects with emphasis on mathematics and physics, we will gladly inform you individually about the formal admission requirements


UPAS / MI

GET IN TOUCH!

ACADEMIC ADVISING / COURSE OR STUDY GUIDANCE

Questions can best be answered in a personal conversation:

040 42838-5078

atmoscience@uni-hamburg.de

METEOROLOGY STUDENT COUNCIL

The direct link to our students:

fsr.mi@uni-hamburg.de

www.mi.uni-hamburg.de/atmo-science

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CONTACT

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... ON THE WEB

mi.uni-hamburg.de/en/studium

klimacampus-hamburg.de

wetter.uni-hamburg.de

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