

Course code	Course name	Study credits	Study period	Language of instruction	Mode of teaching	Open university teaching (open university tuition fees to be announced later)	Open to exchange students / students of other degree programmes
Compulsory courses for all study tracks							
ATM301	Atmospheric and Earth Sciences Today	5 cr	1. period	English	contact teaching	no	yes
ATM302	Climate.now (5 cr)	5 cr	2. period	English	distance teaching (time-bound)	yes, joint implementation	yes
ATM386	Climate.now (2 cr)	2 cr	all year round	English	Independent study, no teaching	yes, joint implementation	yes
ATM303	Project course in atmospheric sciences	3 - 5 cr	1.-4. period	English	Independent study, no teaching	no	no
ATM345	Atmospheric science seminar for Master's students	5 cr	1.-4. period	English	includes both contact and distance teaching	no	no
ATM380	Solutions.now	5 cr	4. period	English	distance teaching (time-bound)	yes, joint implementation	yes
ATM384	Integrating art and science	5 cr	May intensive	English	contact teaching (field course)	no	no to exchange students, yes to other students
Optional courses for all study tracks							
ATM373	Leadership for Sustainable Change	5 cr	3. period	English	distance teaching (time-bound)	yes, joint implementation	yes
ATM377	Introduction to Earth System Modelling	5 cr	4. period	English	contact teaching	no	yes
ATM378	Sustainable.now	5 cr	1. period	English	distance teaching (time-bound)	yes, joint implementation	yes
ATM379	SystemsChange.now	5 cr	3. period	English	distance teaching (time-bound)	yes, joint implementation	yes
ATM382	ClimateComms.now	2 cr	3. period	English	distance teaching (time-bound)	yes, joint implementation	yes
ATM389	Living with changing climate	5 cr	2. period	English	distance teaching (time-bound)	yes, joint implementation	yes
ATM396	Application of AI/ML techniques in Atmospheric Science	5 cr	11-15 August 2025 in Lahti	English	contact teaching	no	no
ATM397	Forests and Climate Change	2 cr	1.-4. period	English	online teaching (not time-bound)	yes, joint implementation	yes
ATM398	Climate University for Virtual Exchanges (Cluvex)	1 cr	autumn 2025, intensive period	English	distance teaching (time-bound)	no	yes
ATM398	Climate University for Virtual Exchanges (Cluvex)	1 cr	spring 2026, intensive period	English	distance teaching (time-bound)	no	yes
ATM404	Environmental and Climate Regulation in the EU	5 cr	4. period	English	includes both contact and distance teaching	no	yes
Data Science courses							
ATM5001	Statistical Analysis of Environmental Field Measurements	5 cr	1. period	English	contact teaching	no	yes
ATM308	Statistical Tools for Climate and Atmospheric Science	5 cr	2. period	English	includes both contact and distance teaching	no	no (yes Climate uni and EnCHIL students)
ATM309	Analysis of atmosphere-surface interactions and feedbacks	5 cr	6.-17.10.2025	English	contact teaching	no	yes
ATM4171	Introduction to Machine Learning for Atmospheric and Earth System Research	5 cr	4.5.-31.5.2026	English	contact teaching	no	yes
Study track in Aerosol Physics							
ATM304	Aerosol Physics II	5 cr	2. period	English	contact teaching	no	yes
ATM318	Aerosol measurement techniques	5 cr	2. period	English	contact teaching	no	yes
ATM319	Atmospheric observations of aerosols, clouds and trace gases	5 cr	May intensive	English	includes both contact and distance teaching	no	yes
ATM326	Health Effects of Fine Particles	5 cr	3. period	English	distance teaching (time-bound)	no	yes
ATM368	Aerosol Optics	5 cr	3. period	English	contact teaching	no	yes
ATM371	Laboratory course in aerosol physics	5 cr	3. period	English	contact teaching	no	yes
ATM381	Physical and chemical characterization of charged molecules and clusters at atmospheric pressure	5 cr	1. period	English	contact teaching	no	yes
ATM394	Advanced aerosol chemistry	5 cr	1. period	English	includes both contact and distance teaching	no	yes
Study track in Biosphere-atmosphere cycles							
ATM328	Global biogeochemical cycles	5 cr	3. period	English	contact teaching	no	yes
ATM359	Eddy covariance intensive course	5 cr	3. period	English	contact teaching	no	yes
Study track in Geophysics of the hydrosphere							
ATM336	Dynamic Oceanography	5 cr	3. period	English	contact teaching	no	yes
ATM337	Descriptive Oceanography	5 cr	2. period	English	contact teaching	no	yes
ATM338	Surface Water Waves	5 cr	2. period	English or Finnish	contact teaching	no	yes
ATM340	Coastal Oceanography	5 cr	4. period	English	contact teaching	no	yes
ATM342	Frozen Ground	5 cr	1. period	English	contact teaching	no	yes
ATM344	Global Hydrology	5 cr	3. period	English	contact teaching	no	yes
ATM346	Physics of lakes and rivers	5 cr	4. period	English	contact teaching	no	yes
Study track in Atmospheric chemistry and analysis							
ATM306	Basics of atmospheric chemistry	5 cr	2. period	English	contact teaching	no	yes
ATM307	Atmospheric and aerosol chemistry	5 cr	3. period	English	contact teaching	no	yes
Study track in Remote sensing							
ATM323	Advanced Course in Radar Meteorology	5 cr	3. period	English	contact teaching	no	yes
ATM324	Laboratory Course in Radar Meteorology	5 cr	4. period	English	contact teaching	no	yes

ATM325	Satellite remote sensing methods in aerosol science	5 cr	4. period	English	contact teaching	no	yes
Study track in Meteorology							
ATM315	Numerical Meteorology I	5 cr	3. period	English	contact teaching	no	yes
ATM316	Numerical Meteorology II	5 cr	4. period	English	contact teaching	no	yes
ATM317	Laboratory Course in Numerical Meteorology	5 cr	3.-4. period	English	contact teaching	no	yes
ATM322	Meteorological observation systems	5 cr	2. period	English	contact teaching	no	yes
ATM332	Terrestrial water, carbon and nitrogen cycles	5 cr	2. period	English	contact teaching	no	yes
ATM347	Boundary Layer Physics I	5 cr	4. period	English	contact teaching	no	yes
ATM348	Dynamics of Atmospheric Flow Structures I	5 cr	1. period	English	contact teaching	no	yes
ATM349	Dynamics of Atmospheric Flow Structures II	5 cr	2. period	English	contact teaching	no	yes
ATM351	Mesometeorology	5 cr	3. period	English	contact teaching	no	yes
ATM352	Synoptic Meteorology I	5 cr	2. period	English	contact teaching	no	yes
ATM354	Cloud Physics	5 cr	2. period	English	contact teaching	no	yes
ATM355	Atmospheric General Circulation I	5 cr	3. period	English	contact teaching	no	yes
ATM356	Convective Weather Systems and Climate	5 cr	4. period	English	contact teaching	no	yes
ATM357	Atmospheric Radiation	5 cr	1. period	English	contact teaching	no	yes
ATM395	Numerical Meteorology III	5 cr	all year round	English	no lecturing, independent studying	no	yes
Climate University module courses							
ATM383	Leadership for sustainable change	2 cr	all year round	English	no lecturing, independent studying	yes, joint implementation	yes
ATM385	Introduction to sustainability	3 cr	all year round	English	no lecturing, independent studying	yes, joint implementation	yes
ATM387	Political economy of Sustainability	2 cr	all year round	English	no lecturing, independent studying	yes, joint implementation	yes
ATM388	Sustainability and the Arts	1 cr	all year round	English	no lecturing, independent studying	yes, joint implementation	yes
ATM405	Una Europa Virtual Exchanges for Sustainability (UnaVex)	1 cr	autumn 2025, intensive period	English	distance teaching (time-bound)	no	yes
ATM405	Una Europa Virtual Exchanges for Sustainability (UnaVex)	1 cr	spring 2026, intensive period	English	distance teaching (time-bound)	no	yes

Courses that are not taught during the academic year 2025-2026:

ATM310	Time Series Analysis in Geosciences	5 cr	not offered 25-26	English, Finn	includes both contact and distance teaching
ATM311	Simulations of Formation of Molecular Clusters	5 cr	not offered 25-26	English	contact teaching
ATM312	Aerosol Modelling	5 cr	not offered 25-26	English	contact teaching
ATM313	Chemical Transport modelling I	5 cr	not offered 25-26	English	contact teaching
ATM314	Chemical transport modelling II	5 cr	not offered 25-26	English	contact teaching
ATM327	Fine Particles in Occupational Environments	5 cr	not offered 25-26	English	distance teaching (time-bound)
ATM360	First Steps in Biosphere-Atmosphere Modelling		not offered 25-26	English	contact teaching
ATM372	Atmosphere of planets from our solar system and beyond	5 cr	not offered 25-26	English	contact teaching
ATM321	Field Course in Micrometeorology and Hydrology	5 cr	not offered 25-26	English	contact teaching
ATM333	Turbulence Theory	5 cr	not offered 25-26	English	contact teaching
ATM334	Measurement Methods in Hydrospheric Geophysics	5 cr	not offered 25-26	English	contact teaching
ATM335	Geophysics of Snow and Ice	5 cr	not offered 25-26	English	contact teaching
ATM339	Oceanography of the Baltic Sea	5 cr	not offered 25-26	English	contact teaching
ATM341	Polar Oceans and Ice	5 cr	not offered 25-26	English	contact teaching
ATM343	Glaciology	5 cr	not offered 25-26	English	contact teaching
ATM402	Oceanography of the Baltic Sea II	5 cr	organized on-dem	English	contact teaching
ATM4131	Time Series Analysis in Geosciences II	5 cr	not offered 25-26	English, Finn	includes both contact and distance teaching
ATM320	Mass Spectrometry in Atmospheric Sciences and Environmental analysis	5 cr	not offered 25-26	English	contact teaching
ATM358	Atmospheric photochemistry and reaction kinetics	5 cr	not offered 25-26	English	contact teaching
ATM331	Theory of Micrometeorological Flux Measurements	5 cr	not offered 25-26	English	contact teaching
ATM353	Synoptic Meteorology II	5 cr	not offered 25-26	English	contact teaching
ATM362	Stratospheric Dynamics and Chemistry	5 cr	not offered	English	contact teaching
ATM364	Laboratory Course in Synoptic Meteorology	5 cr	not offered	English	contact teaching