UNIVERSITÀ DI TRENTO

universität innsbruck

STUDY PLAN MSc IN ENVIRONMENTAL METEOROLOGY AND CLIMATE PHYSICS
A.Y. 2025-26

1st YEAR														
I SEMESTER - Trento campus														
Code	***No.***	***Courses***	***SSD***	***CFU***	***B1***	***B2***	***B3***	***B4***	***C***	***D***	***E***	***F***	***Hours***	***Notes***
140531	1	Introduction to meteorology and climatology*	FIS/06	6				6					60	
140732	2	Enviromental Fluid Mechanics	GEO/12	6				6					60	
140733	3	Environmental measurements	FIS/01	9	9								90	
140534	4	Environmental physical chemistry	CHIM/03	6					6				60	
			TOT. I sem.	*27*	*9*	*0*	*0*	*12*	*6*	*0*	*0*	*0*		
II SEMESTER - Trento campus														
Code	***No-***	***Courses***	***SSD***	***CFU***	***B1***	***B2***	***B3***	***B4***	***C***	***D***	***E***	***F***	***Hours***	***Notes***
140571	5	Atmospheric boundary layer and turbulence	FIS/06	6				6					60	
140729	6	Mathematical models and numerical methods for environmental processes	FIS/02	6		6							60	
140587	7	Hydrology**	ICAR/02	6					6				60	
140730	8	Advanced topics in modern physics	FIS/02	9		9							90	
			TOT. II sem.	*27*	*0*	*15*	*0*	*6*	*6*	*0*	*0*	*0*		
			TOT. I year	*54*	*9*	*15*	*0*	*18*	*12*	*0*	*0*	*0*		

II YEAR														
I SEMESTER Innsbruck campus														
Code	***No.***	***Courses***	***SSD***	***CFU***	***B1***	***B2***	***B3***	***B4***	***C***	***D***	***E***	***F***	***Hours***	***Notes***
140734	9	Atmospheric radiation and remote sensing	FIS/03	5			5						50	
140542	10	Reading, writing and presenting scientific contents		3								3	30	
140540	11	Atmospheric chemistry and biogeochemistry	BIO/10	6					6				60	
140731	12	Synoptical-Dynamical meteorology	FIS/06	6				6					60	
			TOT Mandatory CFU I sem.	*20*	*0*	*0*	*5*	*6*	*6*	*0*	*0*	*3*		
II SEMESTER Trento/Innsbruck campus														
		MSc. Thesis and courses	***SSD***	***CFU***	***B1***	***B2***	***B3***	***B4***	***C***	***D***	***E***	***F***	***Hours***	***Notes***
140543		MSc. Thesis		30							30			
			TOT Mandatory CFU II sem.	30	0	0	0	0	0	0	30	0		
		Elective courses		16						16				

TOT. II Year	*66*	*0*	*0*	*5*	*6*	*6*	*16*	*30*	*3*				
Total Program	**120**	**9**	**15**	**5**	**24**	**18**	**16**	**30**	**3**				

Elective Courses													
		Elective courses		**16**						**16**			***160***	***Notes***
1st Year - II Semester - Trento campus													
140585		Air pollution modelling	FIS/06	6						6			60	
140586		Hydrological modelling	ICAR/02	6						6			60	
140607		Introduction to climate change	FIS/06	6						6			60	
140575		Tropical meteorology and climate	FIS/06	6						6			60	
2nd Year - I and II Semester - Innsbruck campus* **														
140564	I Semester	Physics of the Climate System	FIS/06	5						5			50	
140566		Numerical Modelling of Weather and Climate	MAT/08	6						6			60	
140567		Modeling of Climate and Cryosphere	FIS/06	3						3			30	
140714		Advanced weather forecasting course	GEO/12	5						5			45	
140574		Scientific Programming	ING-INF/05	5						5			50	
140565		Mountain Meteorology	FIS/06	5						5			45	
140606		Advanced Topics: Aviation Meteorology (alternate years)	FIS/06	4						4			30	
140735		Advanced Topics: Snow and Avalanches (alternate years)	ICAR/01	6						6			60	
140568	II Semester	Geostatistics	GEO/12	5						5			45	
140572		Cryosphere in the climate system	ICAR/02	5						5			50	
140716		Advanced Topics: Visualizing scientific data	FIS/06	3						3			30	
140717		Advanced Topics: Numerical models in glaciology	FIS/06	3						3			30	
140718		Advanced Topics: Urban Meteorology	FIS/06	3						3			30	

* Students holding a BSc Degree in Ingegneria per l'Ambiente e il Territorio from the University of Trento who have taken "*Fondamenti di meteorologia e climatologia*" may substitute this course with one of the FIS/06 elective courses, i.e. either "*Air pollution modelling*", or "*Introduction to climate change*", or "*Tropical meteorology and climate*". This option if offered also to students holding other BSc who have taken basics of meteorology at BSc level: the study plan changes request needs to be approved upon checking the contents of meteorology exams taken at BSc level (send the request to supportostudentimesiano@unitn.it)

** Students holding a BSc degree in Ingegneria per l'Ambiente e il Territorio from the University of Trento will have "Hydrology" by default substituted with "Hydrological modelling" in their study plan. This option if offered also to students holding other BSc who have taken basics of hydrology at BSc level: the study plan changes request needs to be approved, upon checking the contents of hydrology exams taken at BSc level (send the request to supportostudentimesiano@unitn.it)

*** the list of elective courses at the University of Innsbruck may be subject to changes from one Academic year to the other. When submitting the choice of elective courses in their study plan, students are recommended to check the most updated list of available courses at the web-page https://lfuonline.uibk.ac.at/public/lfuonline_lv.home [path: Faculty of Geo- and Atmospheric Sciences/Master's Programme Environmental Meteorology according to the curriculum 2018 (120 ECTS-Credits)/2nd Year of Study (University of Innsbruck)/Compulsory Modules (30 ECTS-Credits)]