

**STUDY PLAN MSc IN ENVIRONMENTAL METEOROLOGY  
A.Y. 2023-24  
(ex D.M. 270/04)**

1st YEAR												
I SEMESTER - Trento campus												
Code	No.	Courses	Lecturers	SSD	CFU	B	C	D	E	F	Hours	Notes
140531	1	Introduction to meteorology and climatology*		FIS/06	6	6					60	
140532	2	Environmental Fluid Mechanics		ICAR/01	9	9					90	
140533	3	Environmental measurements		GEO/12	9	9					90	
140534	4	Environmental physical chemistry		CHIM/03	6	6					60	
<i>TOT. I sem.</i>					30	30	0	0	0	0		
II SEMESTER - Trento campus												
Code	No.	Courses	Lecturers	SSD	CFU	B	C	D	E	F	Hours	Notes
140571	5	Atmospheric boundary layer and turbulence		FIS/06	6	6					60	
140536	6	Numerical methods for environmental processes		MAT/08	6		6				60	
140587	7	Hydrology**		ICAR/02	6		6				60	
140538	8	Biosphere, atmosphere and climate interactions		BIO/07	6	6					60	
<i>TOT. II sem.</i>					24	12	12	0	0	0		
<i>TOT. I year</i>					54	42	12	0	0	0		

II YEAR												
I SEMESTER Innsbruck campus												
Code	No.	Courses	Lecturers	SSD	CFU	B	C	D	E	F	Hours	Notes
140539	9	Atmospheric radiation and remote sensing		FIS/06	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	
140541	12	Dynamical and synoptic meteorology		FIS/06	6	6					60	
<i>TOT Mandatory CFU II sem.</i>					20	17	0	0	0	3		
II SEMESTER Trento/Innsbruck campus												
		MSc. Thesis and courses		SSD	CFU	B	C	D	E	F	Hours	Notes
		MSc. Thesis			30				30			
<i>TOT Mandatory CFU II sem.</i>					30	17	0	0	30	0		
		Elective courses			16			16				
<i>Total II Year</i>					120	59	12	16	30	3		

Elective Courses												
		Elective courses	Lecturers		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
<b>2nd Year - I Semester - Innsbruck campus***</b>							
140564	Physics of the Climate System	FIS/06	5		5		50
140565	Mountain Meteorology	FIS/06	5		5		50
140566	Numerical Modelling of Weather and Climate	MAT/08	6		6		60
140567	Climate and Cryosphere Modelling	FIS/06	3		3		30
140568	Geostatistics	GEO/12	5		5		45
140574	Scientific Programming	ING-INF/05	5		5		50
140572	Cryosphere in the climate system	ICAR/02	5		5		50
140606	Advanced Topics: Aviation Meteorology	FIS/06	4		4		30
	Advanced Topics: Avalanches	ICAR/01	6		6		60

\* 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 is offered also to students holding other BSc who have taken basics of meteorology at BSc level: the modified study plan needs to be passed by the Education Committee, upon checking the contents of meteorology exams taken at BSc level.

\*\* 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 is offered also to students holding other BSc who have taken basics of hydrology at BSc level: the modified study plan needs to be passed by the Education Committee, upon checking the contents of hydrology exams taken at BSc level.

\*\*\* 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://fuonline.uibk.ac.at/public/fuonline\\_iv.home](https://fuonline.uibk.ac.at/public/fuonline_iv.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)]