

MSc in Environmental Science

AUTUMN 2023

B - Natural Hazards and Risk

Course	Course ID	Person in charge	Semester	Nb hours	NB ECTS	Eval.	Venue / Room
Introduction, general presentation and team presentation	Intro	P. de Anna	SA	2		/	
Module 1 / Compulsory							
Masters Project Preparation (MPP)	MPP	P. de Anna, G. Mariéthoz	SA	20 C, TP	4	P	
Applications of environmental science seminar series	AESS	N Chèvre, N Linde, MH. Demon, J Hünziker	SA	12 S	1	P	
Introduction to Scientific Programming with Python	ISPP	T. Beucler	SA	16 C, TP	2	P	
Module 2 / Optional - Student chooses amongst the courses for a total of 20 ECTS							
Environmental time-series analysis	ETSA	J. Irving	SA	48 C, TP	5	P / E	
Remote sensing of Earth systems	RS	G. Mariéthoz / G. Antoniazza	SA	48 C, TP	5	P	
Scientific computing	SC	Y. Podladchikov	SA	48 C, TP	5	P	
Advanced Geospatial Data Analysis – practical concepts and envir. appl.	AGDA	M. Tonini	SA	24 C, TP	3	P	
Principles of scientific data acquisition	PSA	C. Schmidt	SA	24 C, TP	3	P	
Module 3B / Orientation Natural hazards and risk							
Communication on environmental risks	CER	M. Jaboyedoff	SA	32 C, TP	3	P	
Advanced quantitative risk and vulnerability	AQR	M. Jaboyedoff	SA	40 C, TP	3	O	
Monitoring techniques for slope dynamics	MT	M.H. Derron	SA	48 C, TP	5	P	

Glossary : C: Cours
 Evaluation: O: Oral
 T: Terrain
 P:Pratique
 TP: Travaux pratiques
 Cci: Contrôle continu avec inscription

1 38	Monday 18.09.23	Tuesday 19.09.23	Wednesday 20.09.23	Thursday 21.09.23	Friday 22.09.23
8h30-10h	JEÛNE FÉDÉRAL				
10h15-11h					
11h15-12h					
lunch break 12h-14					
14h-15h					
15h-16h					
16h-17h					
17h-18h					

2 39	Monday 25.09.23	Tuesday 26.09.23	Wednesday 27.09.23	Thursday 28.09.23	Friday 29.09.23
8h30-10h	ETSA			MT	ISPP
10h15-11h			MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h			ISPP	ETSA	
15h-16h					
16h-17h		AGDA	Intro	AGDA	
17h-18h					

3 40	Monday 02.10.23	Tuesday 03.10.23	Wednesday 04.10.23	Thursday 05.10.23	Friday 06.10.23
8h30-10h	ETSA			MT	ISPP
10h15-11h	SC		MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h		SC	ISPP	ETSA	
15h-16h					
16h-17h		AGDA		AGDA	
17h-18h					

4 41	Monday 09.10.23	Tuesday 10.10.23	Wednesday 11.10.23	Thursday 12.10.23	Friday 13.10.23
8h30-10h	ETSA	MT		MT	ISPP
10h15-11h	SC		MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h		SC	ISPP	ETSA	MPP
15h-16h					
16h-17h		AGDA		AGDA	
17h-18h					

5 42	Monday 16.10.23	Tuesday 17.10.23	Wednesday 18.10.23	Thursday 19.10.23	Friday 20.10.23
8h30-10h	ETSA	MT		MT	ISPP
10h15-11h	SC		MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h		SC	ISPP	ETSA	MPP
15h-16h					
16h-17h		AGDA		AGDA	
17h-18h					

6 43	Monday 23.10.23	Tuesday 24.10.23	Wednesday 25.10.23	Thursday 26.10.23	Friday 27.10.23
8h30-10h	ETSA	MT		MT	
10h15-11h	SC		MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h		SC	MPP	ETSA	
15h-16h					
16h-17h		AGDA		AGDA	
17h-18h					

7 44	Monday 30.10.23	Tuesday 31.10.23	Wednesday 01.11.23	Thursday 02.11.23	Friday 03.11.23
8h30-10h	ETSA	MT	CER	MT	
10h15-11h	SC	CER	MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h		SC	MPP	ETSA	AESS
15h16h					
16h-17h		AGDA		AGDA	
17h-18h					

8 45	Monday 06.11.23	Tuesday 07.11.23	Wednesday 08.11.23	Thursday 09.11.23	Friday 10.11.23
8h30-10h		AQR	CER	AQR	
10h15-11h		CER		CER	
11h15-12h					
lunch break 12h-14					
14h-15h	AQR				
15h16h					
16h-17h					
17h-18h					

9 46	Monday 13.11.23	Tuesday 14.11.23	Wednesday 15.11.23	Thursday 16.11.23	Friday 17.11.23
8h30-10h	ETSA			MT	
10h15-11h	SC		MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h		SC	MPP	ETSA	AESS
15h16h					
16h-17h		PSA		PSA	
17h-18h					

10 47	Monday 20.11.23	Tuesday 21.11.23	Wednesday 22.11.23	Thursday 23.11.23	Friday 24.11.23
8h30-10h	ETSA	AQR	CER	MT	
10h15-11h	SC	CER	MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h	AQR	SC	MPP	ETSA	AESS
15h16h					
16h-17h		PSA		PSA	
17h-18h					

11 48	Monday 27.11.23	Tuesday 28.11.23	Wednesday 29.11.23	Thursday 30.11.23	Friday 01.12.23
8h30-10h	ETSA	AQR	CER	MT	
10h15-11h	SC	CER	MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h	AQR	SC	MPP	ETSA	AESS
15h16h					
16h-17h		PSA		PSA	
17h-18h					

12 49	Monday 04.12.23	Tuesday 05.12.23	Wednesday 06.12.23	Thursday 07.12.23	Friday 08.12.23
8h30-10h	ETSA	AQR	CER	MT	
10h15-11h	SC	CER	MT	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h	AQR	CER	MPP	ETSA	AESS
15h16h					
16h-17h				PSA	PSA
17h-18h					

13 50	Monday 11.12.23	Tuesday 12.12.23	Wednesday 13.12.23	Thursday 14.12.23	Friday 15.12.23
8h30-10h	ETSA	AQR	CER	AQR	
10h15-11h	AQR	CER	AQR	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h	AQR	SC	MPP	ETSA	AESS
15h16h					
16h-17h		PSA		PSA	
17h-18h					

14 51	Monday 18.12.23	Tuesday 19.12.23	Wednesday 20.12.23	Thursday 21.12.23	Friday 22.12.23
8h30-10h	ETSA	AQR	CER		
10h15-11h	SC	CER	AQR	RS	RS
11h15-12h					
lunch break 12h-14					
14h-15h	AQR	SC	MPP	ETSA	
15h16h					
16h-17h		PSA		PSA	
17h-18h					