

MSc in Environmental Science

AUTUMN 2022

B - NATURAL HAZARDS & RISK

Course	Course ID	Person in charge	Semester	Nb hours	NB ECTS	Eval.	Venue / Room
<b>Introduction, general presentation and team presentation</b>							
	Intro	P. de Anna	SA			/	
<b>Module 1 / Compulsory</b>							
Masters Project Preparation (MPP)	MPP	P. de Anna, G. Mariéthoz, A. Ballu	SA	32 C, TP	4	P	
Applications of environmental science seminar series	AESS	N Chèvre, N Linde, MH. Derron, J Hünziker	SA	12 S	1	P	
Introduction to Scientific Programming with Python	ISPP	T. Beucler	SA	16 C, TP	2	P	CR
<b>Module 2 / Optional - Student chooses 4 out of 7 courses</b>							
Environmental time-series analysis	ETSA	J. Irving	SA	48 C, TP	5	P / E	1x Norm 1x CR
Remote sensing of Earth systems	RS	G. Mariéthoz / S. Lane	SA	48 C, TP	5	P	CR
Machine learning for earth and environmental sciences	MLEE	T. Beucler	SA	40 C, TP	5	P	CR
Scientific computing	SC	Y. Podladchikov	SA	48 C, TP	5	P	CR
<b>Module 3B / Orientation Natural hazards and risk</b>							
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	MT

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

1	Monday 19.09.22	Tuesday 20.09.22	Wednesday 21.09.22	Thursday 22.09.22	Friday 23.09.22
8h30-10h	JEÛNE FÉDÉRAL	Intro			
10h15-11h					
11h15-12h					
lunch break					
13h-14					
14h-15h					
15h-16h					
16h-17h					
17h-18h					

2	Monday 26.09.22	Tuesday 27.09.22	Wednesday 28.09.22	Thursday 29.09.22	Friday 30.09.22
8h30-10h	ETSA		RS	MT	ISPP
10h15-11h			MT	RS	MT
11h15-12h					
lunch break					
13h-14			ISPP	ETSA	
14h-15h					
15h-16h			MPP		
16h-17h					
17h-18h					

3	Monday 03.10.22	Tuesday 04.10.22	Wednesday 05.10.22	Thursday 06.10.22	Friday 07.10.22
8h30-10h	ETSA		RS	MT	ISPP
10h15-11h	SC		MT	RS	MT
11h15-12h					
lunch break					
13h-14		SC	ISPP	ETSA	
14h-15h					
15h-16h			MPP		
16h-17h					
17h-18h					

4	Monday 10.10.22	Tuesday 11.10.22	Wednesday 12.10.22	Thursday 13.10.22	Friday 14.10.22
8h30-10h	ETSA		RS	MT	ISPP
10h15-11h	SC		MT	RS	MT
11h15-12h					
lunch break					
13h-14		SC	ISPP	ETSA	
14h-15h					
15h-16h			MPP		
16h-17h					
17h-18h					

5	Monday 17.10.22	Tuesday 18.10.22	Wednesday 19.10.22	Thursday 20.10.22	Friday 21.10.22
8h30-10h	ETSA		RS	MT	ISPP
10h15-11h	SC		MT	RS	MT
11h15-12h					
lunch break					
13h-14		SC	ISPP	ETSA	
14h-15h					
15h-16h			MPP		
16h-17h					
17h-18h					

6	Monday 24.10.22	Tuesday 25.10.22	Wednesday 26.10.22	Thursday 27.10.22	Friday 28.10.22
8h30-10h	ETSA		RS	MT	MLEE
10h15-11h	SC		MT	RS	MT
11h15-12h					
lunch break					
13h-14		SC	MLEE	ETSA	
14h-15h					
15h-16h			MPP		
16h-17h					
17h-18h					

7	Monday 31.10.22	Tuesday 01.11.22	Wednesday 02.11.22	Thursday 03.11.22	Friday 04.11.22
8h30-10h	ETSA		RS	MT	MLEE
10h15-11h	SC		MT	RS	
11h15-12h					
lunch break					
13h-14h		SC	MLEE	ETSA	AESS
14h-15h					
15h-16h			MPP		
16h-17h					
17h-18h					

8	Monday 07.11.22	Tuesday 08.11.22	Wednesday 09.11.22	Thursday 10.11.22	Friday 11.11.22
8h30-10h		CER			MLEE
10h15-11h		CER			
11h15-12h					
lunch break					
13h-14h		CER	MLEE		
14h-15h					
15h-16h					
16h-17h					
17h-18h					

9	Monday 14.11.22	Tuesday 15.11.22	Wednesday 16.11.22	Thursday 17.11.22	Friday 18.11.22
8h30-10h	ETSA	AQR	RS	MT	MLEE
10h15-11h	SC	CER	MT	RS	CER
11h15-12h					
lunch break					
13h-14h		SC		ETSA	AESS
14h-15h	AQR				
15h-16h					
16h-17h					
17h-18h					

10	Monday 21.11.22	Tuesday 22.11.22	Wednesday 23.11.22	Thursday 24.11.22	Friday 25.11.22
8h30-10h	ETSA	AQR	RS	MT	MLEE
10h15-11h	SC	CER	MT	RS	CER
11h15-12h					
lunch break					
13h-14h		SC	MLEE	ETSA	AESS
14h-15h	AQR				
15h-16h			MPP		
16h-17h					
17h-18h					

11	Monday 28.11.22	Tuesday 29.11.22	Wednesday 30.11.22	Thursday 01.12.22	Friday 02.12.22
8h30-10h	ETSA	AQR	RS	MT	MLEE
10h15-11h	SC	CER	MT	RS	CER
11h15-12h					
lunch break					
13h-14h		SC	MLEE	ETSA	AESS
14h-15h	AQR				
15h-16h			MPP		
16h-17h					
17h-18h					

12	Monday 05.12.22	Tuesday 06.12.22	Wednesday 07.12.22	Thursday 08.12.22	Friday 09.12.22
8h30-10h	ETSA	AQR	RS	MT	MLEE
10h15-11h	SC	CER	MT	RS	CER
11h15-12h					
lunch break					
13h-14h		CER	MLEE	ETSA	AESS
14h-15h	AQR				
15h-16h			MPP		
16h-17h					
17h-18h					

13	Monday 12.12.22	Tuesday 13.12.22	Wednesday 14.12.22	Thursday 15.12.22	Friday 16.12.22
8h30-10h	ETSA	AQR	RS	AQR	MLEE
10h15-11h	AQR	CER	AQR	RS	CER
11h15-12h					
lunch break					
13h-14h			MLEE	ETSA	AESS
14h-15h	AQR				
15h-16h			MPP		
16h-17h					
17h-18h					

14	Monday 19.12.22	Tuesday 20.12.22	Wednesday 21.12.22	Thursday 22.12.22	Friday 23.12.22
8h30-10h	ETSA	AQR	RS	AQR	MLEE
10h15-11h	SC	CER	AQR	RS	CER
11h15-12h					
lunch break					
13h-14h		SC	MLEE	ETSA	
14h-15h	AQR				
15h-16h			MPP		
16h-17h					
17h-18h					