

Cours	Enseignant-e-s	★ S1	🌱 S2	★ S3	🌱 S4	Examen	Crédits	
Master of Science in Hydrogeology and Geothermics								TOTAL 120
Fundamentals of geothermics, hydrogeology and hydrochemistry								TOTAL 18
Hydrological and hydrogeological processes	P. BRUNNER	56pg				écrit	6	
Hydrochemistry	D. HUNKELER	28pg				écrit	3	
Geodynamics, earthquake physics and geothermics	S. MILLER	56pg				écrit	6	
Geothermal field trip	S. MILLER	5j				controle continu	3	
Fundamental skills								TOTAL 12
Mathématiques et statistique	J. Straubhaar	28pg				écrit	3	
Scientific method and communication	L. HALLORAN S. MILLER	28pg				controle continu	3	
Essais hydrauliques	P. RENARD	28pg				controle continu	3	
Field camp I	L. HALLORAN	5j				controle continu	3	
Hydrogeological systems								TOTAL 9
Systèmes karstiques	P. Jeannin	28pg				controle continu	6	
Fractured systems	B. VALLEY	28pg				controle continu	3	
Systèmes aquifères alluviaux	C. ROQUES	28pg				controle continu	3	
Methods I								TOTAL 12
Natural and artificial tracers	D. HUNKELER	28pg				écrit	3	
Hydrogeophysics and borehole geophysics	B. VALLEY	28pg				controle continu	3	
Hydrogeological modelling	P. BRUNNER L. HALLORAN	28pg				controle continu	3	
Numerical modelling of transport and geomechanical processes I	S. MILLER	28pg				controle continu	3	
Resources management I								TOTAL 9
Water supply and protection	D. HUNKELER B. VALLEY	28pg				controle continu	3	
Contaminants Hydrogeology	D. HUNKELER	28pg				controle continu	3	
Engineering geology and geotechnics	B. VALLEY	28pg				controle continu	3	
Methods II								TOTAL 12
Stochastic hydrogeology	P. RENARD		28pg			controle continu	3	
Hydrogeological modelling	P. BRUNNER L. HALLORAN		28pg			controle continu	3	
Field camp II	L. HALLORAN			10j		controle continu	6	
Resources management II								TOTAL 9
Urban hydrogeology	M. SCHIRMER		28pg			controle continu	3	
Humanitarian hydrogeology	P. BRUNNER E. MILNES		28pg			controle continu	3	
Systèmes géothermiques peu profonds	V. BADOUX		28pg			controle continu	3	
Advanced methods								TOTAL 3
Remote sensing	P. BRUNNER		28pg			controle continu	3	
Geological modelling	C. ROQUES		28pg			controle continu	3	
Master thesis preparation and Master thesis research								TOTAL 36
Seminar and project	P. BRUNNER D. HUNKELER S. MILLER P. RENARD B. VALLEY		90pg			controle continu	6	
Master thesis research	P. BRUNNER D. HUNKELER S. MILLER B. VALLEY			300pg	300pg	mémoire / dissertation	30	