

Cours	Enseignant-e-s	★ S1	🌱 S2	★ S3	🌱 S4	Examen	Crédits	
<b>Master of Science in Hydrogeology and Geothermics</b>								<b>TOTAL 120</b>
<b>Fundamentals of geothermics, hydrogeology and hydrochemistry</b>								<b>TOTAL 18</b>
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	
<b>Fundamental skills</b>								<b>TOTAL 12</b>
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	
<b>Hydrogeological systems</b>								<b>TOTAL 9</b>
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	
<b>Methods I</b>								<b>TOTAL 12</b>
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		28pg				controle continu	3	
<b>Resources management I</b>								<b>TOTAL 9</b>
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	
<b>Methods II</b>								<b>TOTAL 12</b>
Stochastic hydrogeology	P. RENARD		28pg			controle continu	3	
Numerical modelling of transport and geomechanical processes II	S. MILLER		28pg			controle continu	3	
Field camp II	L. HALLORAN			10j		controle continu	6	
<b>Advanced methods</b>								<b>TOTAL 3</b>
Remote sensing	P. BRUNNER		28pg			controle continu	3	
Geological modelling	C. ROQUES		28pg			controle continu	3	
<b>Resources management II</b>								<b>TOTAL 9</b>
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	
<b>Master thesis preparation and Master thesis research</b>								<b>TOTAL 36</b>
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	