



## Exchange Courses Master in Earth Sciences 2023-2024

click on the course code for more information

Course Code	Course Name	Slot	Admission requirements
<b>Period 1 September – November</b>			
<a href="#">GEO4-1401</a>	Structure and composition of the earth's interior	1-A	Sufficient knowledge of physics and mathematics
<a href="#">GEO4-1440</a>	Microbes and biogeochemistry	1-A	
<a href="#">GEO4-4436</a>	River and delta systems	1-A	
<a href="#">GEO4-1415</a>	Dataprocessing and inverse theory	1-B	Good knowledge of Fourier analysis and linear algebra
<a href="#">GEO4-1405</a>	Paleoceanography and climate variability	1-B	Basic knowledge of paleoceanography, experience with spreadsheet programs such as Excel.
<a href="#">GEO4-4404</a>	Land surface hydrology	1-B	Basic knowledge of quantitative analysis
<a href="#">GEO4-1403</a>	Petrological and Geochemical Evolution of the Earth	1-C	
<a href="#">GEO4-1435</a>	Adv. Petrology: from microscopic properties to geological processes	1-C	Basic knowledge of mineralogy and petrology
<a href="#">GEO4-4412</a>	Statistics and data analysis in physical geography	1-C	
<a href="#">GEO4-1439</a>	Aquatic and environmental chemistry	1-C	Basic calculus, derivatives and integration, thermodynamics
<a href="#">GEO4-1434</a>	Principles of Groundwater Flow	1-D	Basic knowledge of physics, calculus, ordinary and partial differential equations.
<b>Period 2 November – January</b>			
<a href="#">GEO4-4435</a>	Morphodynamics of tidal system	2-A	Fluvial Systems (per 1)
<a href="#">GEO4-1412</a>	Astronomical climate forcing and time scales	2-D	
<a href="#">GEO4-1408</a>	Theoretical seismology	2-A	Background in Geophysics or System Earth Modelling
<a href="#">GEO4-1409</a>	Tectonophysics	2-B	Knowledge of Continuum mechanics & rheology
<a href="#">GEO4-1443</a>	Stable isotopes in Earth Sciences	2-A	
<a href="#">GEO4-1514B</a>	Vertebrate evolution (tetrapods)	2-C	
<a href="#">GEO4-1411</a>	Structural analysis of deformed rocks	2-C	
<a href="#">GEO4-1453</a>	Introduction to Physical Oceanography	2-C	
<a href="#">GEO4-4417</a>	Unsaturated zone hydrology	2-C	
<a href="#">GEO4-1517A</a>	Applied stratigraphy and subsurface basin analysis	2-C	
<a href="#">GEO4-1418</a>	Dynamics of basins and orogens	2-A	
<a href="#">GEO4-1450</a>	Coastal Ecology	2-D	
<a href="#">GEO4-4408</a>	Remote Sensing	2-D	
<a href="#">GEO4-1433</a>	Hydrogeological transport phenomena	2-A	Knowledge of Principles of groundwater flow
<b>Period 3 February - April</b>			
<a href="#">GEO4-1438</a>	Paleomagnetism	3-A	
<a href="#">GEO4-4406</a>	Land surface process modelling	3-A	
<a href="#">GEO4-4434</a>	Morphodynamics wave-dominated coasts	3-A	Fluvial Systems, Morphodynamics of Tidal Systems
<a href="#">GEO4-1417</a>	Adv. Mineralogy: minerals as materials	3-A	
<a href="#">GEO4-1425</a>	Earth mineral resources	3-B	
<a href="#">GEO4-1416</a>	Dynamics of the earth's mantle	3-B	
<a href="#">GEO4-1422</a>	Reconstructing extreme climate transitions	3-B	
<a href="#">GEO4-4403</a>	Coastal zone and river management	3-B	
<a href="#">GEO4-4409</a>	Reconstructing quaternary environments	3-C	
<a href="#">GEO4-1452</a>	Ocean Law and Policy	3-C	
<a href="#">GEO4-1410</a>	Mechanisms of deformation and transport	3-D	
<a href="#">GEO4-1419</a>	Dynamics of sedimentary systems	3-D	
<a href="#">GEO4-1421</a>	Reactive transport in the hydrosphere	3-D	
<a href="#">GEO4-4425</a>	Hazards and risk assessment	3-D	
<b>Period 4 April - June</b>			
<a href="#">GEO4-1424A</a>	Applied geophysics	4-A	Data processing and inverse theory
<a href="#">GEO4-1427</a>	Computational geophysics	4-D	Differential equations, Linear algebra, Programming & modelling earth process
<b>Period 4-1 May (part 1, fulltime!)</b>			
<a href="#">GEO4-1420</a>	Organic geochemistry	4-F	
<a href="#">GEO4-1432</a>	Environmental hydrogeology	4-F	Knowledge of Principles of groundwater flow or Hydrogeological transport phenomena
<b>Period 4-2 June (part 2, fulltime!)</b>			
<a href="#">GEO4-4423</a>	Hydrology and climate	4-F	Knowledge of Principles of groundwater flow, Land surface or Unsaturated zone hydrology
<a href="#">GEO4-1454</a>	Ice-ocean-climate	4-F	

■ No Entry Requirements  
■ Limited Entry Requirements  
■ Hard Entry Requirements

\* Master courses are only open to students holding a **relevant** Bachelor's degree