

Master's programme in geology and geophysics: Preliminary teaching programme for academic year 2024-25

Code	Course name	Scope (cr)	Period	Languages	Form of teaching / Method of completion	Open university studies	Open to exchange students	Open to other degree programmes	Additional information
GEOM1002	Conducting scientific research	10 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	no	no	
GEOM1003	Scientific engagement	5 cr	1.-4. period	Finnish and English	online teaching (not time-bound)	only for degree students	no	no	
GEOM1004	Internship	5 cr	1.-4. period	Finnish and English	online teaching (not time-bound)	only for degree students	no	no	
GEOM2002	All about teeth	5 cr	May intensive period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2003	Applied geophysics	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2005	Clastic sedimentology	5 cr	August intensive period	English	contact teaching	only for degree students	yes	no	
GEOM2006	Earthquake seismology	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2007	Environmental geochemistry	5 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2008	Field course of solid earth geophysics	5 cr	1. period	English, Finnish - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2010	Fossil recognition and introduction to invertebrate palaeontology	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	Highly recommended for paleontology master's students and exchange students at the Department of Geosciences and Geography. open to students from any other study program of the University of Helsinki
GEOM2012	Geodynamics	5 cr	1. period	English - Completely in English (or multilingual)	contact and distance teaching	only for degree students	yes	no	
GEOM2014	Glacial geology	5 cr	2. and 4. period	English	distance teaching				Book exam on general exam day.
GEOM2015	Ground penetrating radar	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2017	Pohjavesivarojen hallinta (Groundwater resources and management)	5 cr	3. period	Finnish and English	contact teaching	only for degree students	yes	yes	
GEOM2020	Introduction to hominin ecology and evolution	5 cr	3. period	English/Finnish - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2023	Isotope geochemistry	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	MSc Level students in Geosciences and comparable disciplines
GEOM2024	Life on the Baltic continent - A Palaeozoic history. Field course and seminar.	5 cr	May intensive period	English - Only examination possible in English	contact teaching	only for degree students	yes	yes	
GEOM2025	Lithosphere structure and dynamics	5 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	
GEOM2026	Mammalian ecomorphology and introduction to vertebrate paleontology	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	Highly recommended for paleontology master's students and exchange students at the Department of Geosciences and Geography. open to students from any other study program of the University of Helsinki
GEOM2027	Metamorphic geology	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	
GEOM2031	Pollen analysis	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2034	Quantitative hydrogeology and flow modeling	5 cr	2. period	Finnish and English	contact and distance teaching	only for degree students	yes	yes	Course is open also to other than degree program students. If the course is full, the priority is given to the students of the Master's Programme in Geology and Geophysics.
GEOM2037	Seismogram and time series analysis	5 cr	August intensive period	English - Only examination possible in English	contact teaching	only for degree students	yes	yes	Physics and Applied Math students welcome
GEOM2038	Solid Earth geochemical methods	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	
GEOM2039	Environmental isotopes	5 cr	4. period	English, Finnish - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	
GEOM2041	Terrestrial paleoenvironments during the Cenozoic	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	Highly recommended for paleontology master's students and exchange students at the Department of Geosciences and Geography. open to students from any other study program of the University of Helsinki
GEOM2042	Theory of seismic waves	5 cr	2. period	English - Only examination possible in English	contact teaching	only for degree students	yes	yes	
GEOM2043	Ympäristöanalyttiset menet. Analytical methods of environmental research	5 cr	1.-2. period	Finnish and English	contact teaching	only for degree students	no	no	Course is for geology and geography degree students starting thesis work.
GEOM2044	Glacial sedimentary environments	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	Priority is given to the degree programme students (MSc Geology and Geophysics), but if there are vacant places, Fin-Geo students have priority over exchange students.
GEOM2046	Satellite positioning	5 cr	1.-2. period	Lectures in English, support available also in Finnish	contact teaching	only for degree students	yes	yes	
GEOM2048	Applied hydrogeochemistry	5 cr	1. period	English, Finnish - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	
GEOM2049	Hydrogeologian tutkimusmenetelmät (Hydrogeology field course)	5 cr	1. period	Finnish and English	contact and distance teaching	only for degree students	yes	no	
GEOM2051	3D Geological modeling	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	In Fin-Geo
GEOM2052	Book exam	5 cr	1.8.2026-31.7.2027	English	distance teaching				
GEOM2059	Environmental magnetism	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2062	Advanced field course in petrology and structural geology	5 cr	4. period	English - Completely in English (or multilingual)	contact and distance teaching	only for degree students	yes	yes	
GEOM2064	Advanced hydrogeology	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	Available for students from other universities based on cross-institutional agreements, as well. At least one basic course in Hydrogeology is needed before this course.
GEOM2067	Methods in paleoenvironmental reconstructions	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2068	Field excursion in geology and geophysics	5 cr	14.9.-9.11.2026	English	contact teaching	only for degree students	no	no	
GEOM2070	Basics of ore mineral systems	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	In Fin-Geo
GEOM2071	Advanced critical mineral systems	5 cr	May intensive period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	no	In Fin-Geo
GEOM2074	Theory of electromagnetic geophysical methods	5 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	yes	yes	
GEOM2075	Chronological methods in multidisciplinary studies	5 cr	3. period	English	contact teaching	only for degree students	yes	yes	
GEOM2076	Lupineous geology	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	only for degree students	no	no	