SUBSURFACE ENERGY ENGINEERING (ONLINE – SEPTEMBER START – PART TIME) (MSc/PgDip/PgCert)

63UHF6B1/ 63UHF6VX/ 63UHF6VZ

Duration: MSc 27 months part-time; PgDip 24 months part-time; PgCert 12 months part-time

This programme equips engineers with the skills required for the subsurface energy industry, including soil and environmental engineering. Modelling concepts and approaches for subsurface energy production and storage are covered using applied engineering, geoscience, and fundamentals of hydrogeology. The programme also introduces sustainability in mineral processing and engineering more generally, which are required to achieve energy transition and net zero emissions. The programme is aligned to the Scottish Government's plan to achieve net-zero emissions by 2045.

Content: All Candidates must take the following compulsory courses:

Year 1

EG506C	Subsurface Transport Processes (15 Credit Points)
GL5059	Near Surface and Environmental Geophysics (15 Credit Points)
EG55M3	Energy Conversion and Storage (15 Credit Points)
EG557B	Critical Minerals for Energy Transition and Sustainability (15 Credit Points)
Year 2	
EG503B	Geothermal and Hydro Energy (15 Credit Points)
EG504L	Carbon Capture, Utilisation and Storage (CCUS) (15 Credit Points)
EG555W	Sustainable Engineering Challenges (15 Credit Points)
EG556B	Simulation of Flow in Porous Media (15 Credit Points)

Year 3 (for MSc candidates only)

EG59F2 MSc Individual Project (60 Credit Points)

Assessment: By a combination of written examination and course work as prescribed for each course. In addition, MSc candidates must submit a dissertation on their individual project and may be required to undergo an oral examination. The degree of MSc shall not be awarded to a candidate who fails to achieve a CGS Grade of D3 or above in the individual project, irrespective of their performance in other courses.