SUBSURFACE ENERGY ENGINEERING (ON-CAMPUS – JANUARY START – FULL TIME) (MSc/PgDip/PgCert)

57HF6JB1/61HF6SVX/62HF6SVZ

Duration: MSc 12 months full-time; PgDip 9 months full-time; PgCert 4 months full-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:

Stage 1

PD5506	Getting Started at the University of Aberdeen (0 Credit Points)
EG551J	Energy Conversion and Storage (15 Credit Points)
EG557A	Critical Minerals for Energy Transition and Sustainability (15 Credit Points)
EG555S	Sustainable Engineering Challenges (15 Credit Points)
EG555Z	Simulation of Flow in Porous Media (15 Credit Points)

Stage 2 (for MSc candidates only)

EG59M2	MSc Individual	Project	(60 Credit Points
LGJSIVIZ	IVIOC II IUIVIUUAI	r i Ulecti	(OU CIEUIL FUIIL

Stage 3

FC502A	Coothormal and Hudro Energy (15 Cradit Paints)
EG503A	Geothermal and Hydro Energy (15 Credit Points)
EG504K	Carbon Capture, Utilisation and Storage (CCUS) (15 Credit Points)
EG505Y	Subsurface Transportation Surfaces (15 Credit Points)
GL5059	Near Surface & Environmental Geophysics (15 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.