

BSC (HONS) GEOSCIENCE

Programme Learning Outcomes

Programme Learning Outcomes for BSc in Geoscience (NFQ Level 8, Major Award)

On successful completion of this programme, students should be able to:

- Show a clear understanding of planet Earth as an integrated system, involving application of all aspects of the Geosciences including the physical, chemical and biological sciences to the study of the solid Earth, oceans and atmosphere;
- Demonstrate a mastery of geoscience principles, concepts and terminology and understand their relevance to the world of today particularly in the context of geological time and global change;
- Have competence in identifying rocks, minerals and fossils both macroscopically and microscopically in a laboratory and field environment and place them in a context of modern Geoscience;
- Apply the principles of collection, analysis and interpretation of Geoscience data while undertaking an independent field-based geoscience research project;
- Recognise and interpret the large-scale internal Earth processes and the features produced by them. Have a good working knowledge of the theory of plate tectonics;
- Be conversant with the principles of sedimentation and stratigraphy and the broader concept of geological time;
- Source information on current geoscience issues and critically appraise it for scientific credibility and relevance particularly in the context of geohazards (e.g., earthquakes, flooding, landslides), their monitoring and mitigation;
- Synthesise and apply published information and data from the Earth sciences to the analysis of geoscience and environmental problems;
- Communicate effectively, orally and in written reports, about Earth and other related environmental issues.