## **MSC (GEOINFORMATICS)**

## **Programme Learning Outcomes**

Programme Learning Outcomes for MSc in Geoinformatics (NFQ Level 9, Major Award)

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

- Explain the theoretical and practical principles and concepts that underpin the technologies of Geographical Information Systems and Science (GIS), Remote Sensing (RS), and related areas of Geoinformatics (e.g. global navigation satellite systems, geospatial data analysis, web applications);
- Apply knowledge of these technologies in a variety of sectors (e.g. local and national government, industry, commerce, the public sector, resource management) and at scales from the local to the global;
- Appreciate the current uses and users of Geoinformatics within Irish industry, policy and education, and evaluate how the discipline will support future economic and social developments in the country;
- Use a variety of Geoinformatics methods and tools including computational analysis, fieldwork, numerical modelling and computer programming using several leading software and programming packages;
- Prepare and present seminars, write reports and create cartographic and web-based Geoinformatics products to a professional standard;
- Apply the Geoinformatics skills and knowledge gained to real world problems through completion of an independent project based on directed research.
- Prepare a research paper according to the format of a standard scientific journal.