This course consists of two units:

1. Introduction to Geographic Data
2. Using a Geographic Information System

Aims of each unit and your learning outcomes are outlined in the following section.

- To familiarise you with the different types of spatial information and how that information is stored and then used by a GIS.
- To outline the different methods of projecting geographic information and how data can be converted from one projection to another.
- To give you a first 'hands-on' experience of using a GIS.

By the end of this unit you should be able to:
- list and describe attributes of geographic data and the types of spatial objects
- explain how spatial objects can be stored within a GIS using raster and vector data formats
- define geo-referencing and describe different types of geo-referencing systems
- describe why and how geo-

- To familiarize you with the use of a GIS.
- To familiarize you with basic spatial operations that be performed using a GIS.
- To familiarize you with the concept of 'loose coupling' – the process of moving information between a data management, GIS and statistics package.

  To familiarize you with a method for organizing a small-to-medium-scale GIS projects.[1]

By the end of this unit you should be able to:

- display a map within the GIS package ArcView
- import tabular data into a GIS project, link it to a map projection and visualize the spatial features of the data
- perform basic query operations, using a GIS
- describe the advantages and disadvantages of choropleth mapping
- perform basic GIS calculations – determine the length of boundaries, areas of polygons, create buffer zones around defined areas.