GIS is a fast growing dynamic field that maps geographical information to inform key decision making and planning processes.

GIS Specialists produce digital maps that show geographic features of an area, e.g. soil types, micro-climates, vegetation types, distribution of animal populations, human populations and their activities. Other scientists and managers use this information to develop policies, predict changes and develop appropriate ways to manage the environment. Very important in the context of climate change and ecosystem degradation, this work can be used to alert decision makers to possible disasters such as storms, floods and droughts that could occur and put in place necessary disaster management measures.

GIS Specialists work in an office environment predominantly using computer equipment.
**Skills**

GIS Specialists have a combination of good ICT, mathematical and analytic skills and benefit from:

- Good spatial competence
- Strong analytical and research skills
- Proficiency with technology
- Accuracy and attention to detail
- Good communication skills, both written and verbal

**Tasks**

Specific tasks of the GIS Specialist includes using GIS as a tool for research, developing maps for recording and reporting through databases.

**Studies**

BSc, BA or BSocSc with subjects such as Environmental Management, Geography, Mathematics and Computer Science or a National Diploma in Nature Conservation with electives in Computer Technology.

Some Universities offering these courses include UNISA, NMMU, UP, UCT, WSU, SU, DUT, CPUT, TUT, MUT, UFH and UniVen

**Employers**

- Private companies (e.g. Mainstream Renewable Power)
- Local Government agencies (e.g. Ekurhuleni Metropolitan Municipality)
- Provincial Environmental agencies (e.g. LEDET, MDEDET)
- National Government Agencies (e.g. DEA, DWA)