

## Graduate Diploma in Geographic Information Systems (Grad Dip GIS)(6886650)

### **Course Feature**

This course introduces students to the 'building blocks' of GIS systems, including data structures, relational databases, spatial queries and analysis. The focus then moves on to sources of spatial data including Global Positioning System (GPS), operational systems such as smartcard ticketing and transaction data along with web-based sources highlighting both the potential and challenges associated with integrating each data source within a GIS environment. The unit is hands-on involving learning how to use the latest GIS software to analyse several problems of interest using real 'big data' sources and to communicate the results in a powerful and effective way. These include identifying potential demand for new services or infrastructure, creating a delivery and scheduling plan for a delivery firm or examining the behaviour of travellers or consumers over time and locations

### **Pre-requisite**

Any Bachelors degree

### **Mode of Learning**

Online/ English/ Video Lessons/ Readers/ Submission of study report

### **Subjects (Total 80 credits) (Each 8 credits)**

- GIS601-PrinciplesGIS
- GIS602-Principle of GPS
- GIS603-Relational databases
- GIS604-Smartcard-Ticketing-
- GIS605 Spatial data system
- GIS606 Spatial queries and analysis
- GIS607 SpatialDecisionMaking0
- GIS608 Building Block of GIS
- GIS609 integrating data source within a GIS environment
- GIS610 Large spatial datasets analysis
- GIS Software