

Sistem Maklumat Geografi (GIS)

Program sarjana dalam Sistem Maklumat Geografi (GIS) memberi tumpuan kepada integrasi perkakasan, perisian, data bagi merakam, mengurus, memanipulasi, menganalisis dan memaparkan semua bentuk maklumat geografi yang dirujuk (spatial) data dan penggunaan GIS yang menunjukkan perhubungan. Bidang ini merangkumi konsep GIS termasuk data spatial struktur, sumber data dan kaedah pemindahan, unjuran dan menyelaraskan sistem, "georeferencing", "metadata", perisian sokongan, sistem penentuan global, pengambilalihan dan penyusunan data dari peta, tinjauan lapangan, gambar-gambar udara dan imej satelit, integrasi penderiaan jauh dan GIS, serta teknik-teknik analisis spatial asas dan canggih seperti lapisan, pengeluaran, dan lain-lain interpolasi. Kawasan kajian juga meliputi integrasi teknologi satelit dan GIS untuk pelbagai bidang aplikasi pemerhati bumi dalam model bencana, aplikasi alam sekitar, aplikasi marin dan pantai, sumber asli dan aplikasi pembangunan bandar.

Geographic Information System (GIS)

The postgraduate programme in Geographic Information System (GIS) focuses on the integration of hardware, software for capturing, managing, manipulating, analysing, and displaying all forms of geographically referenced information (spatial) data and the utilisation of a GIS that reveals relationships. This field covers GIS concepts including spatial data structures, data sources and transfer methods, projections and coordinate systems, georeferencing, metadata, supporting software, global positioning systems, the acquisition and compilation of data from maps, field surveys, aerial photographs and satellite images, the integration of remote sensing and GIS, as well as fundamental and advanced spatial analysis techniques such as overlay, extraction, and interpolation, etc. The area of research also covers integration of satellite technology and GIS for various multi-disciplinary earth observation applications in disaster modeling, environmental applications, marine and coastal applications, natural resources and urban development applications.