

## **Mangalore University**

## Geoinformatics, Department of Marine Geology

Mangalagangothri – 574199 Karnataka, INDIA (http://www.mangaloreuniversity.ac.in/marine-geology)

## Good opportunities for a bright future in Geoinformatics

**Geoinformatics** course is of 2 years duration having 4 semesters. M.Sc. course in Geoinformatics was introduced in the Department of Marine Geology, Mangalore University during 1999-2000.. Geoinformatics course is offered in few universities in the country..

Geoinformatics is the science/technology which develops and uses information science infrastructure to address the problems related to branches of science mainly geosciences, cartography, geography and also engineering. Geoinformatics mainly comprises of Remote Sensing Global (RS),Geographic Information System (GIS), Positioning System (GPS), Geodesy, Computer Applications and Web Designing. Geoinformatics is also called as Geoinformation Science/ Geographic Information Science/ Geospatial Techniques/Geographic Information Technology. The data related to earth surface features can be collected through remote sensing and this spatial data can be integrated with secondary (non spatial data) using geographical information system. Using GPS the coordinate information (mainly latitude, longitude and elevation) can be collected. Finally, the data will processed be using various software packages to the get accurate information about the earth surface features.

Eligibility criteria: The candidates applying for the 2 years P.G. program in Geoinformatics course should have the following qualification: Students having B.Sc. degree in any subject, B.Sc. Agricultural Science, B.E., B.Tech, B.Arch. with a minimum of 50% marks in the qualifying examination are eligible to apply to the M.Sc. geoinformatics course with a minimum of 45%. (40% for SC/ST category).

Research Opportunities after completion of the course in different fields of earth, atmosphere and ocean science to get Ph.D. degree and Post-Doctoral research in various universities, research &

development institutions and CSIR in India, private institutions, and multinational corporations and overseas labs./universities.

Employability for M.Sc. in Geoinformatics students: After M.Sc. in Geoinformatics students can join Indian Space Research Organisation (ISRO), Geological Survey of India (GSI); Central Ground Water Board (CGWB), Oil and Natural Gas Corporation (ONGC), Space Application Centre, (SAC) National Remote Sensing Service Centre (NRSC), Indian National Centre for Ocean Information Services (INCOIS), National Institute of Oceanography (NIO), Karnataka State Remote Sensing Application Centre (KSRSAC), Mines and Geology Department of State Governments, and multinational corporations etc. Research and Faculty positions in engineering colleges, post-graduate departments/universities.

**Employability and Research opportunities for M.Sc. in Geoinformatics students:** Excellent opportunities to carryout research in different fields of earth, atmosphere and ocean science to get Ph.D. in various universities and institutes. Research & Development institutions, Private and multinational corporations, teaching posts in Undergraduate and Postgraduate courses.

## **Details about the course**

M.Sc. GEOINFORMATICS course is a 4 Semester choice based credit system. The structure of the program mainly consists of Cartography; Remote Sensing and Photogrammetry; Geographical Information System; Fundamentals of Earth Sciences; Data Base Management System; Digital Image Processing; Advanced GIS; Applied Geomorphology and Geoenvironmental Science; Fundamentals of Geoinformatics; GIS in Marine Resources and Coastal Zone Management GIS in Land and Water Resources; GIS in Urban Planning and Disaster Management; GIS in Agriculture and Forestry; Computer Programming; Geoinformatics of Coastal Environments, Field work and Dissertation.

Facilities: Remote Sensing and GIS Laboratories, MultiMate satellite images of Coastal Karnataka; ERDAS IMAGINE (Image Processing software) Arc Info, Arc view (GIS software); Sea truth spectroradiometer, Mirror Stereoscopes with parallax bar Large-format Optical Enlarger and Optical Pantograph etc.

For Admission details please see: http://www.mangaloreuniversity.ac.in

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