

**Ministry of Earth Sciences
ICMAM Project Directorate, Chennai**

Training programmes scheduled during 2010 – 2011 (from August 2010 onwards)

The following training programmes are scheduled during the year 2010-11. Details about the training and eligibility criteria are listed below.

S.NO	PROGRAMME	PERIOD	ABOUT THE PROGRAMME
1.	Applications of GPS, GIS and RS in shoreline Management	August 16 th – 18 th , 2010	<p>Collection of information on beach geomorphology and associated oceanographic parameters are an integral part of understanding coastal erosion and deposition process. The training is designed to provide a good exposure and hand-on experience to the participants on beach profile measurements, surf zone parameters survey techniques using classical methods, advanced Global Positioning System (GPS) instruments and its interpretation in Geographic Information system (GIS) platform.</p> <p>This training is specially designed for PWD Engineers of Tamil Nadu state responsible for coastal protection work.</p>
2.	Geoinformatics for coastal Disaster Management	September 27 th – Oct., 1 st , 2010	<p>Disasters cannot be prevented totally. However, timely warning and planning can minimize the effect of a disaster. The use of modern tools like Geographical Information Systems (GIS) Remote Sensing and Global positioning systems (GPS) can be of vital importance in the preparation of coastal disaster management plans. This five-day training programme would cover topics on assessing the vulnerability of the Indian coast to disasters such as tsunami, storm surges etc, fundamentals and applications of GIS and Remote Sensing in preparation of coastal vulnerability maps. Practical sessions would include hand-on session on GIS software and steps involved in the preparation of a coastal hazard map. The training programme also incorporates a one day field-trip to demonstrate the use of GPS for collection of spatial data on coastal infrastructure.</p> <p>This training programme would be very useful to professionals from state Govts. / research personnel involved in coastal disaster management projects.</p>

3	Marine GIS for coastal pollution management	Nov 22 nd to 25 th , 2010	<p>The assessment of status of marine pollution is being carried out using the point data collected on specified parameters in a transect manner. For eg., under the COMAPS programme of Min of Earth Sciences, samples for analysis of 25 pollution related parameters are being collected on a transect pattern at 0,2,5,10 km in the sea. As point will provide avenues for limited interpretation, using GIS techniques the point data can be converted as spatial data to derive information on extent spread of chemical elements including pollutants in the sea. Such information is useful to understand the spatial and quantitative (in terms of sq.km) distribution of different concentrations of chemical elements. This is one of the essential requirement for mitigating pollution and also to take decisions to draw seawater for human related use such as desalination and mariculture. During the training programme there will be few lectures on marine pollution and hands on classes on use of GIS to prepare spatial maps of pollutants.</p> <p>The training will be useful to Scientists working on Pollution control and Pollution assessment. The candidates willing to attend the training should have working knowledge of GIS.</p>
4	Multi-hazard (tsunami, storm surge and sea-level rise) and Vulnerability mapping	Dec 6 th – 10 th , 2010	<p>The Indian coast is prone to disasters such as tsunami, storm surge and sea-level rise and hence it is imperative that a spatial database is prepared and maintained on vulnerable areas which would be essential for future planning, rescue and relief operations. This five-day training programme would be an eye-opener on the fundamentals of GIS, concepts of multi-hazardmapping, preparation of multi-hazard maps using GIS. The training programme also incorporates a one day field-trip to demonstrate the use of GPS for collection of spatial data on coastal infrastructure.</p> <p>This training programme would be very useful to professionals from state Govts. / research personnel involved in coastal disaster management projects.</p>
5	Preparation of shoreline	Jan 17-22,2011	The training program would provide practical, science-based training to professionals who make

	management plans		<p>decisions about shoreline management along Indian coast. The training is designed to help coastal managers involved in control of coastal erosion. There will be lectures on basic aspects on shoreline management, field visits to collect data on shoreline using equipment and practical classes for use of the field data in preparing GIS based shoreline changes maps.</p> <p>This training programme would be very useful to professionals from state Govt. officials / research personnel involved in shoreline management studies.</p>
6	Applications of web-GIS for coastal hazard management	Feb 15 – 19, 2011	<p>The WebGis development represents a natural answer to the growing requests for dissemination and use of geographical information data for coastal disaster management. WebGis originates from a combination of web technology and the Geographical Information System, which is a recognised technology that is mainly composed of data handling tools for storage, recovery, management and analysis of spatial data. This five days training programme would cover fundamentals of WebGIS, coastal disasters, preparation of vulnerability maps and dissemination of coastal vulnerability maps using WebGis. The training programme also incorporates a one day field-trip to demonstrate the use of GPS for collection of spatial data on coastal infrastructure. This training programme would be very useful to professionals from state Govts./ research personnel involved in coastal disaster management projects.</p> <p>Working knowledge in GIS is necessary to participate in the training.</p>
7	Oil spill modelling, risk assessment and sensitivity mapping of coastal habitats	March 21 – 25, 2011	<p>Training on oil spill modelling, risk assessment and sensitivity mapping of coastal habitats is proposed to be held from 21-23 March 2011. The main focus of the training is to provide the knowledge on application of modern scientific tools and techniques such numerical modelling and GIS in understanding the fact and behavior of an oil spill, risk assessment, Resource and sensitivity mapping, contingency planning and related issues of marine environment. The training is targeting middle level officers from Government and Port sector who are involved in Oil related activities in marine environment. It is expected that the</p>

			applicants should have basic computer knowledge, exposure of GIS and modelling tools.
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There is no course fee for all training programmes. However, the expenditure on travel, boarding and lodging will have to be borne by the candidates. Guest House facility on payment basis is available in the campus.

Interested candidates can apply through their institutions after a separate call notice is placed in the web site which is normally placed 30 days before commencement of the training programme.