

<b>GIE 508: GEOINFORMATIS OF COASTAL ENVIRONMENTS (Open Elective)</b>		
Unit 1	<b>Introduction:</b> Concepts of Geoinformatics. Outlines of Remote Sensing, Air Photo Interpretation, and Geographic Information System. Aerial photos and remote sensing of coastal environment.	6 hrs
Unit 2	<b>Outlines of Indian Satellites:</b> Indian space Program, Scientific Pay loads from India and abroad, Bhuvan: Description of 3D Satellite Mapping. IRS-P4, Ocean Sat-II: Description and Payloads. IRS-IC/D. A brief note on Hyper spectral Remote Sensing. Resource sat, Cartosat - I & II etc.	6 hrs
Unit 3	<b>Data and Data products:</b> List of Data and Data Models. Digital Data Products, Topographic Sheets and Theme Analysis, Hydrographic Sheets, Outlines of the I.H.O. Bathymetric measurements and outlines of Echo-sounders and Multibeam unit.	6 hrs
Unit 4	<b>Coastal Environments:</b> Geomorphology of Coasts. Classification of Coastal Environments. Relevance Geology and Geotectonic to the genesis of coasts.	6 hrs
Unit 5	<b>Spatial Analysis of Coastal Environments:</b> Collection of Spatial Data from Coastal Environments. Data Interpretation and use of GIS in modeling studies.	6 hrs
Unit 6	<b>Coastal Regulations and Zones:</b> Outlines of CRZ-I, CRZ-II, CRZ-III and CRZ-IV. Amendments to the CRZ norms.	6 hrs
Unit 7	<b>Coastal Development:</b> Definition and Description of Ports and Harbours. Application of EIA and CRZ to development Ports and Harbours. EIA Norms and Criteria for Recreation and Water sports.	6 hrs
Unit 8	<b>Coastal Information System:</b> Concepts of a Coastal Information System. Use of GIS in developing a Coastal Information System. Use of RS and GIS in developing coastal information system.	6 hrs

#### BIBLIOGRAPHY

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2. Aradhana, A. 2006. Special Economic Zones: Revisiting the Policy Debate. Economic and Political Weekly, Vol. XLI Nos. 43 and 44, 4-10
3. Aradhana, A. 2009. Genesis, Evolution, and the Changing Role of SEZs in Asia: A Comparative Analysis of Taiwan. Korea and India, Mimeo, Korean Institute of Economic Policy (KIEP) 2-12.
4. Berling, G.L. and Roy, W.W. 1989. Application of Aerial Photographs and Remote sensing Imagery in Urban research and studies. Monticell, 6-33.
5. Bonham- Carter G.F., 1994. Geographic Information System for Geoscientists, Pergamon Press, Tarrytown, New York, 6-9.
6. Brench, M. C., 1971. City Planning and Aerial information. Harvard Uni., Cambridge. 12-45.
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8. Land, T. G. 1999. ArcView-3D Analyst. ESRI press. 6-23.
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