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9. Michael Zeiler, Modelling Our World: The ESRI Guide to Geodatabase Design. ESRI Press, 24-31.
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GIE 508: GEOINFORMATIS OF COASTAL ENVIRONMENTS (Open Elective)

Skills, employability and entrepreneurship: This course is open to other disciplines such as chemistry, physics, life sciences, statistics and computer sciences. Students who study this course will learn about monitoring of coastal and marine environment environments by using remote sensing and GIS techniques. Therefore, students can perform better in their career if they study this course thereby utilizing their skills of the interdisciplinary science. Students have employability in government organizations and private companies including MNCs.

Unit 1	**Introduction:** Concepts of Geoinformatics. Outlines of Remote Sensing, Air Photo Interpretation, and Geographic Information System. Arial photos and remote sensing of coastal environment.	6 hrs
Unit 2	**Outlines of Indian Satellites**: 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	**Data and Data products:** 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	**Coastal Environments**: Geomorphology of Coasts. Classification of Coastal Environments. Relevance Geology and Geotectonic to the genesis of coasts.	6 hrs
Unit 5	**Spatial Analysis of Coastal Environments:** Collection of Spatial Data from Coastal Environments. Data Interpretation and use of GIS in modeling studies.	6 hrs
Unit 6	**Coastal Regulations and Zones:** Outlines of CRZ-I, CRZ-II, CRZ-III and CRZ-IV. Amendments to the CRZ norms.	6 hrs

Unit 7	**Coastal Development:** 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	**Coastal Information System:** Concepts of a Coastal Information System. Use of GIS in developing a Coastal Information System. Use of RS andGIS in developing coastal information system.	6 hrs

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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
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