NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Civil Engineering - NOC: Introduction to Geographic Information Systems
Subject Co-ordinator - Dr. Arun K. Saraf
Co-ordinating Institute - IIT - Roorkee
Sub-Titles - Available / Unavailable
                                         MP3 Audio Lectures - Available / Unavailable
Lecture 1 - What is Geographic Information Systems ?
Lecture 2 - Different components of GIS
Lecture 3 - Different types of vector data and concept of topology
Lecture 4 - Raster data models and comparisons with vector
Lecture 5 - TIN data model and comparisons with raster
Lecture 6 - Non-spatial data (attributes) and their type
Lecture 7 - Raster data compression techniques
Lecture 8 - Spatial database systems and their types
Lecture 9 - Pre-processing of spatial datasets
Lecture 10 - Geo-referencing
Lecture 11 - Different map projections
Lecture 12 - Spatial interpolation techniques
Lecture 13 - Digital Elevation Models and different types of resolutions
Lecture 14 - Quality assessment of freely available DEMS
Lecture 15 - GIS analysis - Part 1
Lecture 16 - GIS analysis - Part 2 (Overlaying Operations)
Lecture 17 - GIS analysis - Part 3 (Buffer Analysis)
Lecture 18 - Classification Methods
Lecture 19 - Errors in GIS and Key elements of maps
Lecture 20 - Limitations of GIS
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