NPTEL Video Course - Civil Engineering - NOC:Higher Surveying

Subject Co-ordinator - Prof. Ajay Dashora

Co-ordinating Institute - IIT - Guwahati

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Introduction to Higher Surveying
Lecture 2 - Understanding reference system, reference frame, and coordinate system for Earth
Lecture 3 - Coordinate and datum transformations
Lecture 4 - Projected coordinate system
Lecture 5 - Fundamentals of astronomy
Lecture 6 - Applications of concepts of astronomy
Lecture 7 - Time
Lecture 8 - Application of concepts of astronomy and time
Lecture 9 - Fundamental concepts of error, accuracy, and error propagation
Lecture 10 - Applications of error propagation
Lecture 11 - Observation Equation Method of adjustments
Lecture 12 - Condition Equation Method and Combined Method of adjustments
Lecture 13 - Analysis of adjustments and reporting of errors
Lecture 14 - Global Positioning System (GPS)
Lecture 15 - Introduction to Photogrammetry
Lecture 16 - Vertical photogrammetry
Lecture 17 - Stereo photogrammetry
Lecture 18 - Analytical photogrammetry - I
Lecture 19 - Analytical photogrammetry - II
Lecture 20 - Photogrammetric products
Lecture 21 - Image matching
Lecture 22 - Close range photogrammetry
Lecture 23 - Fundamentals of LiDAR
Lecture 24 - LiDAR data acquisition
Lecture 25 - Geolocation and errors of LiDAR data
Lecture 26 - Information extraction from LiDAR data
Lecture 27 - RADAR fundamenetals - I
Lecture 28 - RADAR fundamenetals - II
Lecture 29 - RADAR fundamenetals - III

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

www.digimat.in

```
Lecture 30 - Radargrammetry
Lecture 31 - Geoscience perspective for RADAR applications
Lecture 32 - Fundamental concepts of hydrographic survey
Lecture 33 - Field procedures for hydrographic Surveying
Lecture 34 - Modern techniques for hydrographic Survey
Lecture 35 - Navigation
Lecture 36 - Conclusive lecture
```

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

www.digimat.in