Duration of the course

Full Time	Part Time
One Month (4 weeks)	Two Months (8 weeks)
10 am to 5 pm	3 hr a day

Course Fee

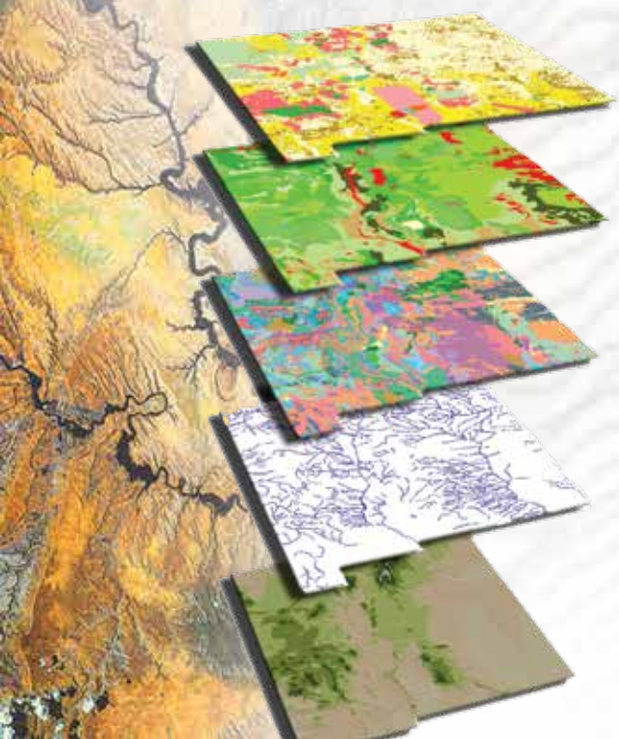
₹ **10,000/-** (Rupees Ten Thousand only)

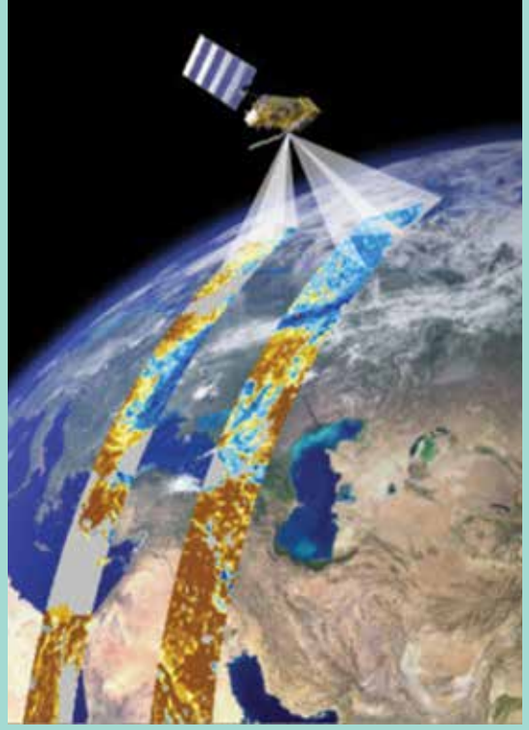
Who can join this course

- Any graduate with a professional degree such as Engineering, Agriculture, Forestry and others
- Post Graduate in Science subjects
- Post Graduate in Management
- Diploma in Engineering with Experience

Location of Training Centres

CED Head quarters, Thiruvananthapuram
CED Regional Centre, Hyderabad
CED Eastern Regional Centre, Bhubaneswar





For details and to take admission, contact :

i. **The Course Co-ordinator**
Centre for Environment and Development
Thozhuvancode, Vattiyoorkavu P.O
Thiruvananthapuram – Kerala 695 013
Tel : 0471 – 2369721 / 2369722
Fax : 0471 – 2369720
Email : gis@cedindia.org

ii. **The Course Co-ordinator**
Centre for Environment and Development, Regional Centre
2 B (b), 2nd Floor, 6-2-47, 1714
Yeturu Towers, A C Guards
Hyderabad – 500004. 040 – 23314341
Email : cedhyd@cedindia.org

iii. **The Course Co-ordiantor**
Centre for Environment and Development
Eastern Regional Centre
Trisulia, Naranpur P O, Belagachhia
Cuttack (Dist), Odisha
Ph : 0671 – 2120022
Email : cederc@cedindia.org

Certificate Course in

Geographic Information System & Remote Sensing

At

Thiruvananthapuram,
Hyderabad & Bhubaneswar

Centre for Environment and Development

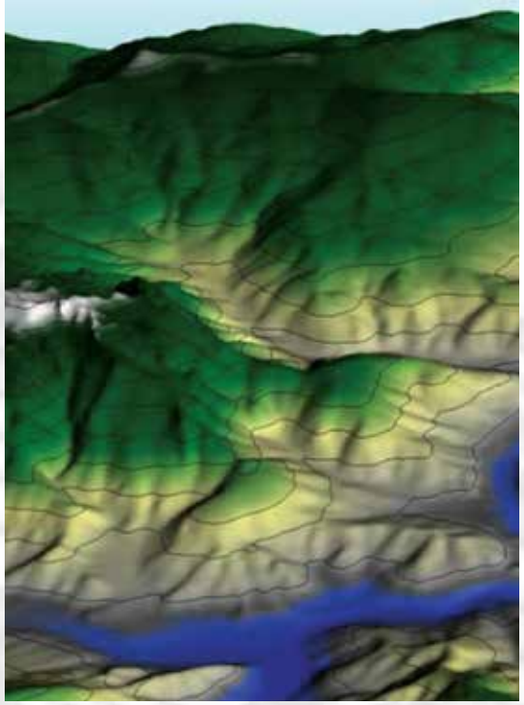
About CED

The Centre for Environment and Development, founded in 1993 is an autonomous research & development institution with activities spread over nine states of the country. CED is a Centre of Excellence of Ministry of Urban Development, Government of India and also the National Key Resource Centre of Ministry of Drinking Water and Sanitation, Government of India. It is also the Regional Resource Agency of Ministry of Environment and Forests, Government of India.

CED has its head quarters at Thiruvananthapuram, Eastern Regional Centre at Bhubaneswar and another Regional Centre at Hyderabad. CED has completed nearly 100 projects out of which half of them using Remote Sensing and GIS. Presently CED is involved in the preparation of GIS Base maps for 37 Urban Local Bodies in Andhra Pradesh. CED is having well established Geoinformatics laboratory with latest ArcGIS (version 10.1) software and ERDAS Imagine 2013 Software at Thiruvananthapuram, Hyderabad and Bhubaneswar.

GIS Training at CED

Remote Sensing and Geographic Information System are powerful tools which have revolutionized our understanding and approach to the earth's resources and environment and



their management. Knowledge in these modern technologies has become essential, especially for those scientists, technologists, managers and planners who handle large amount of spatial data. Remote sensing is the technique of acquiring information about the earth surface from a vantage position in space or air. Thematic maps, the main outputs of remote sensing, form the primary inputs in GIS. Global Positioning System (GPS) is a new technology for defining the geographical location of any data. Today, these three technologies, Remote sensing, GIS and GPS, constitute a powerful combination known as Geoinformation Technology or Geoinformatics. Digital photogrammetry, digital cartography and digital survey will also become essential complementary techniques in geoinformatics.

CED started the short term course in GIS and Remote Sensing in 1996 and is continuing the program for the last 17 years and have trained nearly 1500 professionals during these period. The training include theory classes covering all the important modules both in GIS, Remote Sensing and GPS, practical training and a project work.

Course Content

- **Course overview**
- **Introduction to GIS**
- **Database theory**
- **Overview of ArcGIS, ArcGIS interfaces**
- **Mapping concepts**
- **Spatial data models**
- **ArcGIS data models** (data input & georeferencing) (Theory)
- **ArcGIS data models** (data input & georeferencing) (Practical)
- **GPS**
- **Geodatabase** (Theory)
- **Subtypes & domains, labels & annotation Geodatabase**
- **Research Methodology**
- **GIS case studies**
- **Assignment I** (Presentation on GIS applications)
- **Cartography** (Theory)
- **Digital Cartography** (Practical)
- **Vector analysis** (Theory)
- **Vector analysis** (Practical)
- **Raster Analysis** (Theory & Practical)
- **Principles and Applications of Remote Sensing**
- **Digital Image Processing & Classification**
- **Image Processing** (Practical)
- **3 D analysis** (Theory & Practical)
- **Assignment II** (PPT on Project identified)
- **Geostatistical Analysis** (Theory and Practical)
- **Web GIS / Open GIS**
- **Network Analysis** (Theory)
- **Linear Referencing** (Theory)
- **Network Analysis & Linear Referencing** (Practical)
- **Final Examination** (Theory)
- **Final Examination** (Practical)
- **Submission of Project Report**