

GIS: Geographic Information System



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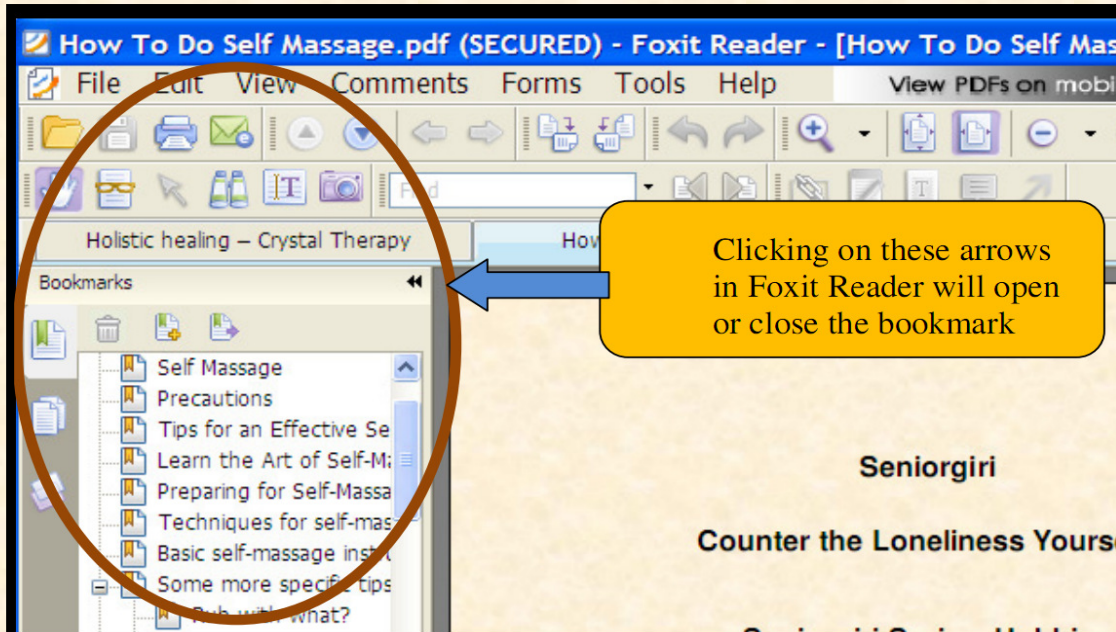
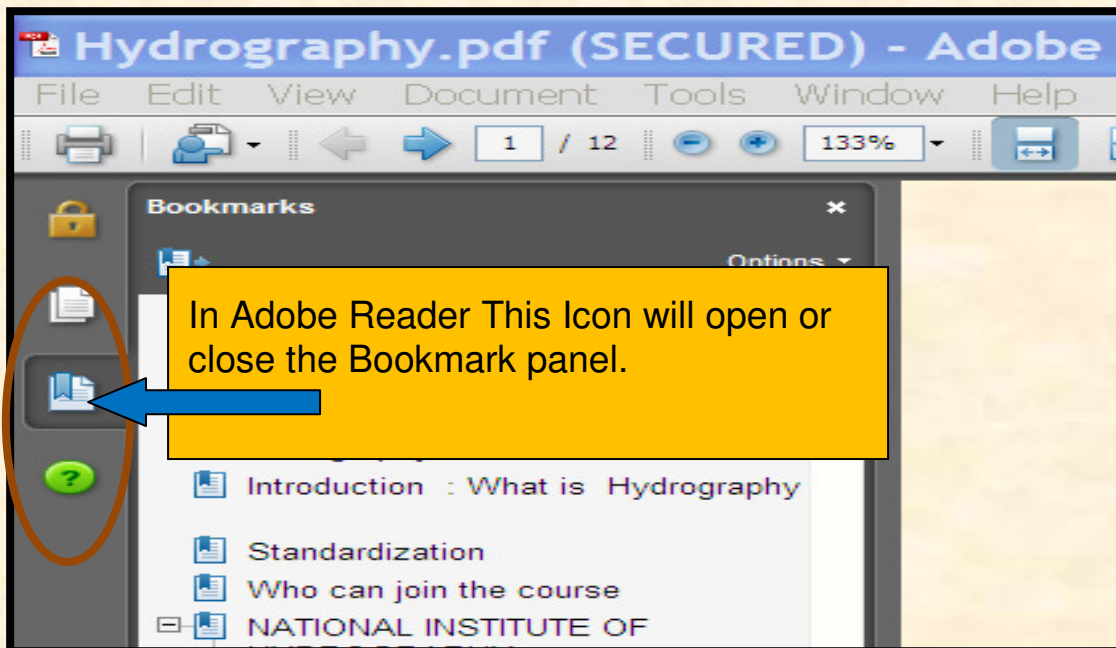
This document provides valid links to
various courses. All the links are working
and secure as on September 2011.

For any amendment, comment, suggestion,
criticism or praise, please contact me on
shobham@yahoo.com .

Unusual
Careers

Navigate The Document Easily

You can open the Book mark panel to navigate to the topics directly. For Adobe and Foxit Reader , follow the instructions



GIS

What is GIS?

GIS stands for Geographic Information System. or Geospatial information system.

Basically this is a new way to make maps.

In traditional maps places were marked on a flat surface showing direction and distance. They were made by survey tools or aerial photographs.

Now they are made by using satellite pictures and data using computers and special software. Today maps are more informative and interactive. They can show a lot more specific information easily. This data is not only about the place, but the topography, and all environments.

This can happen because a lot of data is collected and stored and analyzed using a software to get desired results.

GIS is not a single item, but a **complete system of hardware and software** managed by special trained personnel.

This computer system is capable of capturing, storing, analyzing, and displaying geographically referenced information; that is, data identified according to location. It can be easily analyzed and shared according to needs.

This technology can be used for scientific investigations, resource management, and development planning.

GIS in an integrated multidisciplinary science consisting of the following Traditional disciplines:

Geography

Information Technology

Statistics

Computer Science

Cartography

Photogrammetry

Mathematics

Surveying

Civil Engineering

Remote Sensing

Geostatistics

GIS Today

GIS is everywhere.

Most people use it without being aware. GIS in its simplest form is "computerized mapping". GPS devices, Google Earth, and geotagging all use GIS.

There are 24 GPS satellites orbiting earth are constantly broadcasting data about their location and exact time. Points of interest, addresses (lines or points), and aerial or road data is all stored in a database that is accessed by your device. This is the basis of of response that you get in your GPS Devise.

The most prevalent desktop GIS application is free, and quiet powerful. With over 400 million total Google Earth is by far the most used GIS application in the world.

Global Positioning System

Global Positioning System (GPS) devices can be found everywhere - they're used in cars, boats, airplanes, and even in cellular phones. Handheld GPS receivers are carried by hikers, surveyors, map makers, and others who need to know where they are.

Difference between GIS and GPS

GPS: The Global Positioning System is a network of 24 satellites that orbits around the earth 24 hours.

The receiver device (which is commonly known as "GPS") needs to be connected to at least 4 satellites to determine its location, and hence speed, direction and time.

GPS is an American system, and it's the only completely implemented global navigation satellite system.

There are other GNSS like Russian GLONASS, European Galileo, the proposed Chinese COMPASS, and Indian IRNSS.

GPS devices are now widely, not just used but also, integrated into other devices like cars, smart phones, and cameras.

Geographic Information System (GIS) is the implementation of database for spatial data.

If a database can have text, numbers, dates, and photos, it can have maps as well.

It's not just about the location, it's about querying the location and analyzing that location with respect to other locations. GIS is a mix of science (Geography), information systems, and modern software technologies

Difference between GPS and remote sensing

The Global Positioning System uses an array of near earth orbit satellites and a fancy radio in the hand to help you find out where on earth you are.

Remote Sensing uses satellite to take a picture from space so that Farmers can see what is growing on their land. It is also used by Governments to identify the extent and severity of damage from earthquakes, floods, volcanic eruptions.

Some common GIS terminology

Spatial

Relating to 'space' or 'location'

Geospatial

Relating to location on earth, commonly used term to describe many GIS data and analysis.

Photogrammetry

Photogrammetry is the science of making measurements from photographs.

Geostatistics

It is a branch of statistics focusing on spatial or spatiotemporal datasets.

It is applied in diverse disciplines including petroleum geology, hydrogeology, hydrology, meteorology, oceanography, geochemistry, geometallurgy, geography, forestry, environmental control, landscape ecology, soil science, mining and agriculture

Remote sensing

It is the acquisition of information about an object or phenomenon, without making physical contact with the object.

It generally refers to the use of aerial sensor technologies to detect and classify objects on Earth (both on the surface, and in the atmosphere and oceans) by means of propagated signals (e.g. electromagnetic radiation emitted from aircraft or satellites).

GPS

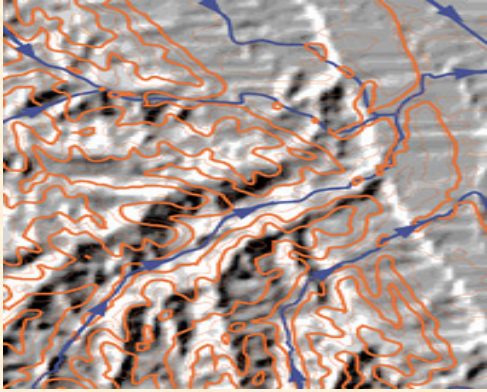
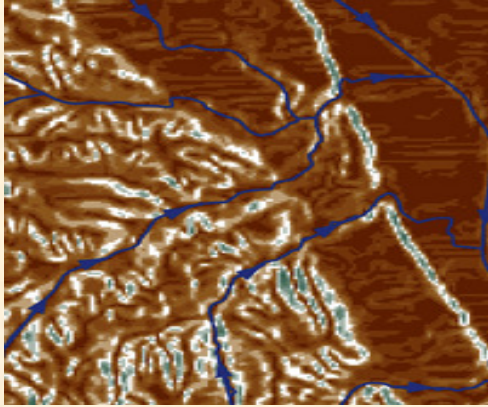
Global Positioning System, a satellite based system that gives accurate location information anywhere on earth.

What is special about GIS

The way maps and other data have been stored or filed as layers of information in a GIS makes it possible to perform complex analyses.

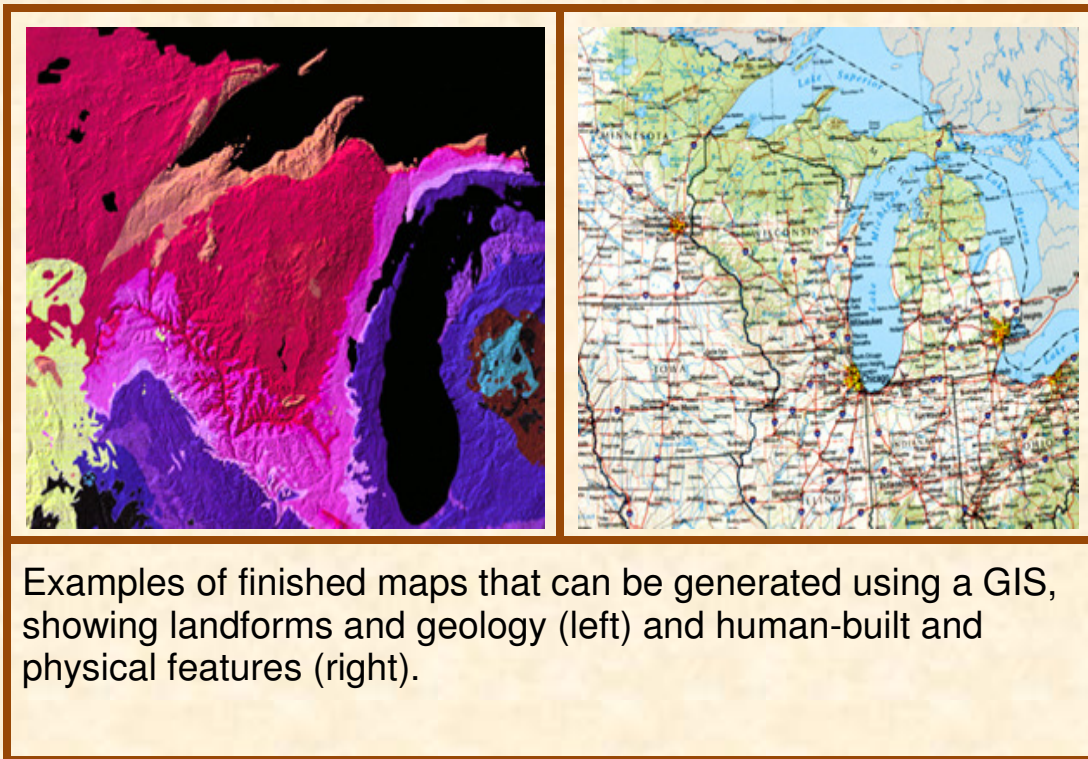
Overlay

Using maps of wetlands, slopes, streams, land use, and soils (figs. 19a-f), the GIS might produce a new map layer or overlay that ranks the wetlands according to their relative sensitivity to damage from nutrient runoff.

	
Shaded-relief map and contour lines generated from the digital elevation model in the study area.	Map showing the steepness of slopes in the study area, created by GIS from the digital elevation model.

Data output

A critical component of a GIS is its ability to produce graphics on the screen or on paper to convey the results of analyses to the people who make decisions about resources. Wall maps, Internet-ready maps, interactive maps, and other graphics can be generated, allowing the decision makers to visualize and thereby understand the results of analyses or simulations of potential events



GIS applications

Users of GIS's are

Indigenous people, communities, research institutions, environmental scientists, health organizations, land use planners, businesses, and government agencies at all levels.

GIS is now finding its place in business and related fields. Business GIS is usually most effective in advertising and marketing, sales, and the logistics of where to locate a business.

Through Information storage; spatial pattern identification; visual presentation of spatial relationships; remote sensing some uses are :

- Crime mapping
- Historical geographic information system
- Tracking of natural disasters

Hydrology

GIS Applications for Water, Wastewater, and Stormwater Systems

Growth in India

Indian Geospatial Market is on the verge of a humongous growth.

Previously most Indian GIS companies relied on outsourced business from overseas markets. However, now business from the Indian market is increasing though slowly.

Election commission in India has pioneered GIS in big way.

Companies like HCL, Infosys and Wipro are joining TCS and Satyam for GIS projects in India. In addition a large number of small companies are also starting.

Components of GIS

The next step in understanding GIS is to look at each component of GIS and how they work together.

These components are:

- Hardware
- Software
- Data
- People

Hardware

Workstation - It is the central piece of equipment which runs the GIS software and is the attachment point for ancillary equipment.

Digitizer- Data collection require the use of digitizer a for conversion of hard copy data to digital data and a GPS data logger to collect data in the field.

Web Servers

Software

Different types of software are important for GIS.

GIS application package - Such software is essential for creating, editing and analyzing spatial and attribute data, therefore these packages contain a myriad of GIS functions inherent to them. Extensions or add-ons are software that extends the capabilities of the GIS software package.

Component GIS - seeks to build software applications that meet a specific purpose and thus are limited in their spatial analysis capabilities.

Utilities are stand-alone programs - These perform a specific function. For example, a file format utility that converts from one type of GIS file to another.

Web GIS software - It helps serve data through Internet browsers.

Data

Data is the core of any GIS.

Majority time and effort in GIS is spent on collecting, formatting and storing the source data. So it is important to understand the nature of the GIS data and collection methods.

Two broad categories of GIS data are:

Vector: In a GIS, real-world objects are represented using points, lines or polygons.

For example, a city government may store the location of garbage collection sites as points, roads as lines and property boundaries as polygons.

Raster: Raster data can be thought of as a photograph. Commonly used raster data is aerial photos, satellite images, scanned maps and digital elevation models.

These 'pictures' can be called a GIS data source when they contain information about the location - which part of the real-world do they represent.

Hence, the raster data formats allow for storing real world coordinates of each pixel in the data.

All GIS data, contains two-types of information - location and information about the location. So vector data will have coordinates (location) and attributes (information about the location).

*Example: A point data for a garbage collection site will have Coordinates - latitude and longitude of earth
Attributes - zip code, pickup time etc.*

Metadata.- Documentation of GIS datasets is known as Metadata. It contains all information as the coordinate system, when the data was created, when it was last updated, who created it and how to contact them and definitions for any of the code attribute data.

People

Well-trained GIS professionals knowledgeable in spatial analysis and skilled in using GIS software are essential to the GIS process.

There are three factors to the people component:

Education - The right education is key; taking the right combination of classes. Selecting the right type of GIS job is important.

Career path - A person highly skilled in GIS analysis should not seek a job as a GIS developer if they haven't taken the necessary programming classes.

Networking- Continuous networking with other GIS professionals is essential for the exchange of ideas as well as a support community.

GIS Software

GIS software encompasses a broad range of applications, all of which involve the use of some combination of digital maps and georeferenced data.

The most popular GIS software packages are:

- ESRI
- MapInfo
- IDRISI
- Manifold
- InterGraph
GeoMedia
- SmallWorld
- GRASS
- MS MapPoint
- ERDAS Imagine

How does GIS work?

Many computer databases that can be directly entered into a GIS are being produced by Federal, State, tribal, and local governments, private companies, academia, and nonprofit organizations.

Following images and information are from U.S. Geological Survey (USGS) information poster.
http://egsc.usgs.gov/isb/pubs/gis_poster/

There are six steps used in a GIS operation.

- 1. Data Capture**
- 2. Data Integration**
- 3. Data Storage**
- 4. Manipulation**
- 5. Analysis**
- 6. Projection and Registration**

Here follows a brief description of these.

1. Data capture

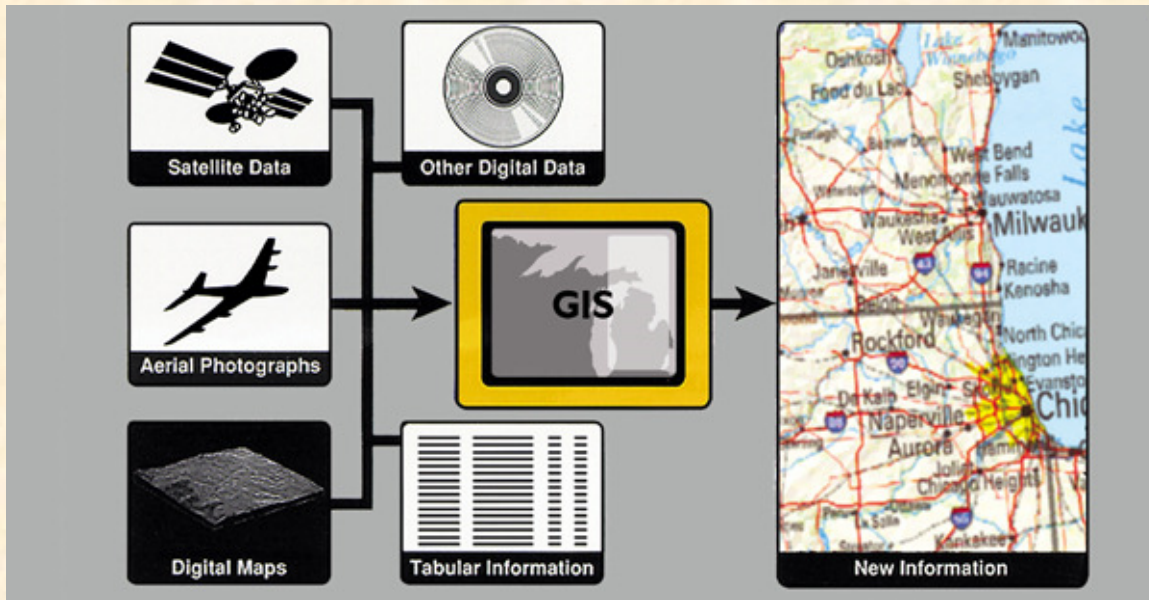
Putting the information into the system—means to identify the objects on the map, their absolute location on the Earth, and their spatial relationships.

Software tools that automatically extract features from satellite images or aerial photographs are gradually replacing what has traditionally been a time-consuming capture process. Objects are identified in a series of attribute tables—the "information" part of a GIS.

Spatial relationships, such as whether features intersect or whether they are adjacent, are the key to all GIS-based analysis.

2. Data integration

A GIS makes it possible to link, or integrate, information that is difficult to associate through any other means. Thus, a GIS can use combinations of mapped variables to build and analyze new variables.



Data integration is the linking of information in different forms through a GIS.

For example, using GIS technology, it is possible to combine agricultural records with Hydrography data to determine which streams will carry certain levels of fertilizer runoff.

Agricultural records can indicate how much pesticide has been applied to a parcel of land. By locating these parcels and intersecting them with streams, the GIS can be used to predict the amount of nutrient runoff in each stream.

3. Data Storage

Once the data have been digitally compiled, digital map files in the GIS are stored on magnetic or other digital media. Data storage is based on a Generic Data Model that is used to convert map data into a digital form.

The two most common types of data models are Raster and Vector. Both types are used to simplify the data shown on a map into a more basic form that can be easily and efficiently stored in the computer.

4. Manipulation

Once data are stored in a GIS, many manipulation options are available to users. These functions are often available in the form of "Toolkits."

Toolkits provide processing functions such as data retrieval, measuring area and perimeter, overlaying maps, performing map algebra, and reclassifying map data.

Data manipulation tools include Coordinate change, Projections, and Edge matching, which allow a GIS to reconcile irregularities between map layers or adjacent map sheets called Tiles.

5. Analysis

The heart of GIS is the analytical capabilities of the system.

The analysis functions use the spatial and non-spatial attributes in the database to answer questions about the real world.

Geographic analysis the study of real-world processes by developing and applying models. Results of geographic analysis are shown with the help of charts or maps.

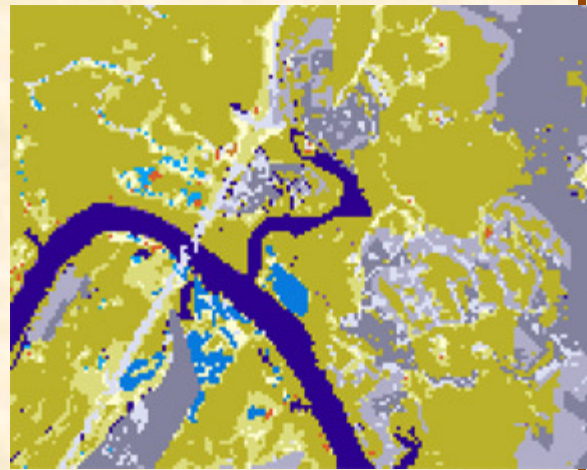
An important use of the analysis is the possibility of predicting events in another location or at another point in time.

A GIS can emphasize the spatial relationships among the mapped objects.

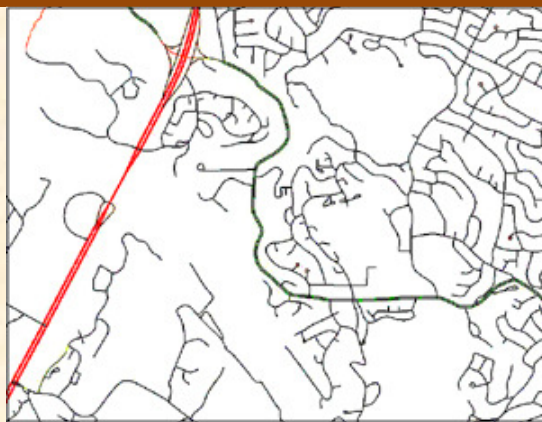
While a computer-aided mapping system may represent a road simply as a line, a GIS may also recognize that road as the boundary between wetland and urban development between two census statistical areas.



Landsat 7 satellite image from which land cover information can be derived.



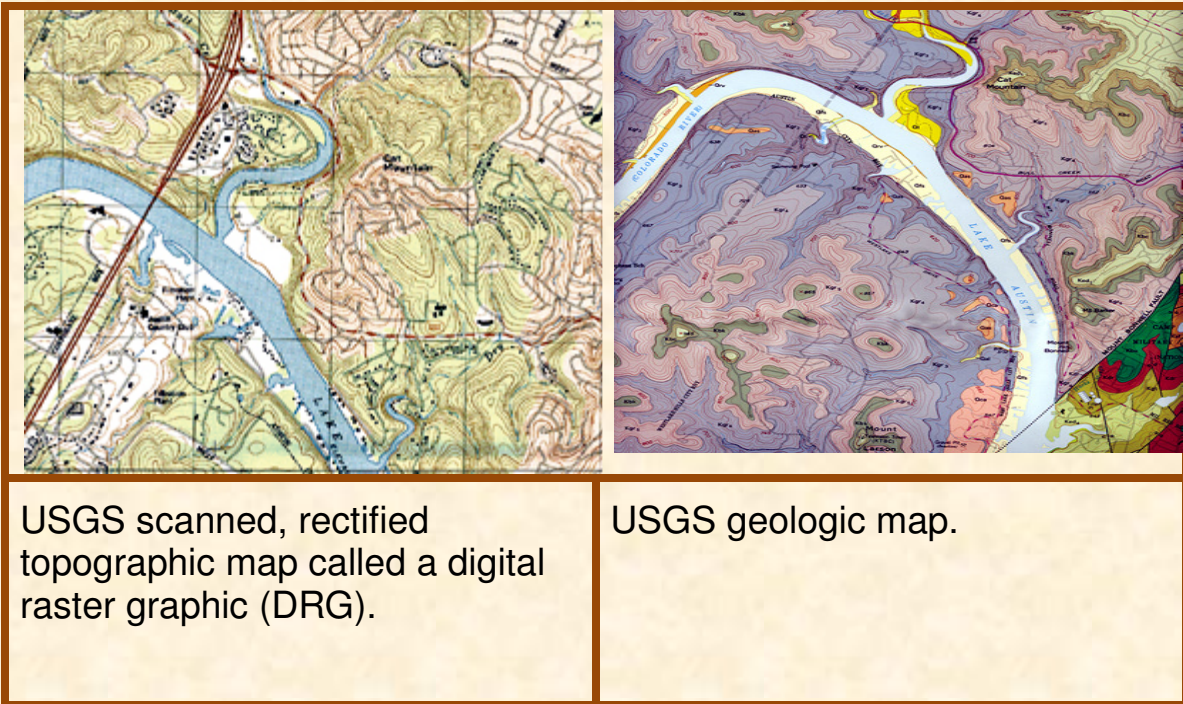
Satellite image data in previous figure have been analyzed to indicate classes of land uses and cover.



U.S. Geological Survey (USGS) digital line graph (DLG) data of roads.



USGS DLG of rivers.



6. Projection and registration

Projection is a fundamental component of mapmaking.

A projection is a mathematical means of transferring information from the Earth's three-dimensional, curved surface to a two-dimensional medium—paper or a computer screen.

Different projections are used for different types of maps because each projection is particularly appropriate for certain uses. For example, a projection that accurately represents the shapes of the continents will distort their relative sizes.

A Career in GIS

A guide for anyone looking to step into the GIS industry or seeking to move to a different role in the field

People from a variety of background like Geography, Environmental Science, Engineering and Computer Science can make a career in GIS.

Education

Your first step is to get relevant education for GIS. Education for GIS is generally offered by Universities, Colleges and Government Organizations. Being in the industry requires domain expertise in the application area, along with technical expertise in GIS. Hence the courses offered in GIS are also very diverse. There are following broad types of courses

Certificate in GIS (Diploma in GIS): short courses covering basic GIS techniques and knowledge of applications.

Executive programs: very short programs aimed at educating non-GIS executives on basics of GIS

Masters/PhD in GIS: Advanced programs covering the broad range of applications as wells as in-depth knowledge on certain domains

Programming is becoming a key requirement for GIS professionals. The industry is moving towards internet mapping and leveraging the power of cloud computing.

Every GIS professional nowadays must acquire reasonable expertise in the area of programming and building web applications to have a brighter prospect at landing with a job.

Soft Skills Needed

- Remote sensing
- Database programming
- Photogrammetry
- Image processing
- Digital cartography
- Automated mapping
- Faculty management
- Information technology
- Business and information management

Technical Skills Needed:

- Knowledge of two or more GIS packages.
- Good IT technical skills. Macro/C/C++ / Visual Basic programming skills.
- Understanding of math and statistical analysis.
- A basic understanding of the concepts in a relational database.
- Oracle or related RDBMS skills including development skills.
- Excellent verbal/written communication skills.
- Good writing skills - for documentation, training and processes.
- Good analytical/problem solving skills.
- Good knowledge of cartography, GIS, database management and programming

Disciplines Using GIS Software

GIS is a cross-disciplinary field and is found in the classrooms of many academic departments including those listed here.

Agriculture

- Pest Management
- Plant Science
- Soil Science

Architecture

- City and Regional Planning
- Environmental Design
- Landscape Architecture
- Urban Design

Business

- Operations Research
- Real Estate Management
- Transportation & Fleet Management

Humanities

- Religion

Military Science

- Base Management
- Battlefield Management
- Supply and Logistics

Natural Resource Management

- Fisheries
- Forestry
- Parks and Recreation
- Wildlife Management
- Water Resources

- Management
- Botany
- Coastal Studies
- Environmental Science
- Marine Biology
- Hydrography
- Oceanography

Public Health and Medicine

- Environmental Health
- Epidemiology
- Health Care Management

Physical Sciences

- Geology, Geosciences, Earth Science
- Geographic Information Sciences
- Geochemistry
- Hydrology
- Meteorology and Climatology
- Seismology Research

Social Sciences

- Anthropology and Archaeology
- Criminal Justice
- Geography
- Sociology
- Travel and Tourism

GIS Professionals

GIS is often associated with making maps, but GIS professionals do much more than that. GIS is used to manage human activities. GIS professionals visualize, analyze, and model our world to help organizations make informed decisions.

GIS and RS professional training impart skills for environmental impact assessment, biodiversity assessment, natural resource management, environmental modelling, town planning, public utility work and many socio-economic development issues

GIS careers include responsibilities such as

- Cartographic design
- Data analysis
- Computer programming
- Database administration
- Project management
- System administration
- Careers in GIS can also encompass business development, managerial, and administrative roles.

Career options

Many public and private companies employ GIS graduates at various levels. Public sector organisations like ISRO, NRSA, National Informatics Centre (NIC) and other governmental departments like urban developmental authorities and municipal bodies employ GIS trained personnel based on their requirements.

However, the percentage of jobs in private companies is higher than in the government departments. One can also

pursue research in the field of geoinformatics which becomes highly beneficial for future career development.

GIS digitisers/GIS operators: This is an entry-level job where the conversion of paper map into digital environment takes place using CAD related software.

The minimum eligibility criterion is a diploma in any discipline with basic knowledge of CAD/GIS. Prior experience is not required in many cases.

GIS technicians/GIS engineers: The candidate should have a fair amount of working knowledge in any GIS software and good mapping knowledge with 1-2 years of experience.

GIS analysts: You need a basic knowledge of mapping and good skills in GIS applications and software with a few years of experience. Your duty is to examine the company's project specifications and development of new GIS tools, wherever necessary. A fair share of GIS programming skills is an advantage.

Business development managers: You need a minimum of 2-5 years of experience with good knowledge about GIS business activities. Should have worked in domestic and international market with proven abilities.

GIS project manager: The candidate should have a minimum of 5 years of experience in GIS project management, database design and development, GIS application development and familiarity with current versions of GIS products. He should have a good GIS background and high qualifications.

Consultant: A consultant's primary duties are the complete analysis, design and documentation of a project. He has to work closely with

business development/sales and project managers in drafting responses to RFP/tenders and preparing project proposals.

One can also work as

- **GIS Data Specialist**
- **GIS Mapping Technician**
- **GIS Mapping Assistant**
- **GIS Application Specialist**
- **GIS Business Analyst**
- **GIS Programmer**
- **GIS Analyst-Environmental**
- **GeoSpatial Software Engineer**
- **Geographer**
- **Cartographic designer**
- **Database administrator.**

At the end of this document I have also provided links for jobs.

Employment

GIS is an important emerging and evolving industry throughout the world.

GIS careers exist in every imaginable discipline, from environmental science to commercial businesses and much more. This wide range of opportunities available lets you combine your passions or interests with GIS for a satisfying and successful career.

Governments are generally the biggest employer of GIS professionals in a country.

Most GIS programs are directly or indirectly funded by government efforts.

Several other companies engage in consulting who provide services to the private sector as well as to the government.

Software development companies also employ GIS professionals for development of GIS software products.

Remunerations:

As in any field, salary depends on training, experience and education as well as work field.

In general, salaries in private field are above average than in government organizations.

Salaries for those working in geoinformatics are quite good as compared to other fields. It is always preferable to have advanced degrees with working experience.

The salary range in United States is between \$31,387 for an entry-level analyst to \$83,333 for a GIS supervisor.

Courses

I have listed many resources, Universities, Institutes for short courses, and online courses.

Esri provides the standard training and many institute follow it. Products include ArcView 3.x, ArcGIS, ArcSDE, ArcIMS, ArcWeb services and ArcGIS Server.

Most courses cover this , but some cover other software too.

I have also listed some free resources.

I would suggest if you are unsure about the subject, first try these free courses on the net. They will give you an idea if this is the line for you.

All the links are correct and secure as on Sept. 2011.

Free classes

1. U.S. Geological Survey

Getting Started with a GIS

<http://webgis.wr.usgs.gov/globalgis/tutorials/index.html>

2. University of South Carolina

GIS Short Course Handouts

Download PDF files.

<http://www.cas.sc.edu/gis/training/handouts.html>

3. Introduction to ArcGIS

This tutorial is intended to introduce you to the basic use of ArcGIS 8.2.

<http://web.mit.edu/gis/www/introarcgis/>

4. Pennsylvania Spatial Data Access (PASDA)

PASDA has created a series of tutorials designed to assist PASDA users with data, software, and applications available through the site. While some of them are associated with specific GIS software, they are based upon principles and techniques common to most GIS products.

<http://www.pasda.psu.edu/tutorials/default.asp>

5. Trimble

A tutorial is designed to give you a good basic understanding of the principles behind GPS without loading you down with too much technical detail.

<http://www.trimble.com/gps/index.shtml>

6. The National Center for Geographic Information Analysis (NCGIA)

The following Core Curriculum literature provides fundamental course content assistance for educators as lecture materials. 75 unit lessons.

<http://www.geog.ubc.ca/courses/klink/gis.notes/ncgia/toc.html#UNIT38>

7. Canada Centre for Remote Sensing

The Canada Centre for Remote Sensing is pleased to offer this tutorial on remote sensing technology and its applications. This interactive module is intended as an **overview** at a senior high school or early university level and touches on physics, environmental sciences, mathematics, computer sciences and geography.

http://www.ccrs.nrcan.gc.ca/resource/tutor/fundam/index_e.php

8. Remote Sensing

This comprehensive Remote Sensing tutorial by Dr. Nicholas M. Short is awesome!

<http://rst.gsfc.nasa.gov/>

9. Global Positions

Free tutorials for ArcGis

<http://www.globalpositions.com/Free.html>

10. Esri free courses

Browse through this catalogue of free lessons

<http://training.esri.com/gateway/index.cfm?fa=search.results&cannedsearch=2>

11. Learn2Map Free GIS Tutorial and Shapefile Atlas

<http://www.mapcruzin.com/free-learn-to-map-gis-tutorial-and-shapefile-atlas.htm>

In just a few minutes you can begin to learn how to create sophisticated maps. The easy-to-follow step-by-step distance learning online tutorial is based on free resources. There is nothing to purchase. All you need to begin mapping today is the Learn2Map™ Tutorial and Atlas.

<http://www.mapcruzin.com/free-learn-to-map-gis-tutorial-and-shapefile-atlas.htm>

12. GIS Primer:

Comprehensive GIS resource from National Informatics Center (NIC), India

Free online lessons: <http://gis.nic.in/gisprimer/>

13. Introduction to GIS:

For teachers and learners

With Quantum GIS, we offer an alternative - software that is free of cost and free in a social sense. You can make as many copies as you like. When learners leave school one day they can use this software to build their skills, solve problems at work and make the world a better place.

All of this software is Free and can be freely copied and shared.

<http://linfiniti.com/dla/>

Degree Courses

I have not given individual eligibility criteria as they are mostly the same.

The Departments are different in many Universities; to distinguish,

Name of departments are in green.

The degree offered is in purple.

For all extra information please contact the institutes, all addresses are provided with each name.

For PG courses:

Eligibility: With minimum 50% aggregate in one of the following:

- (i) B.Sc. with a combination of any two of these subjects--Geography, Geology, Botany, Environmental Science, Mathematics, Physics, Statistics, Agriculture, Soil Science, Computer Science
- (ii) B.Sc. (Hons.) in any one of the subjects mentioned above.
- (iii) B.Tech., B.E., A.M.I.E.
- (iv) M.Sc. in any one of the subjects mentioned above
- (v) B.A. (Hons.)/M.A. in Mathematics, Statistics, Geography

1. Adhiyamaan College of Engineering, Hosur**M.tech Remote sensing.****2 years**<http://www.adhiyamaan.ac.in/mers.php>**Address**

ADHIYAMAAN COLLEGE OF ENGINEERING,
DR.M.G.R NAGAR, HOSUR,
KRISHNAGIRI DISTRICT,
TAMIL NADU, INDIA- 635 109
Principal Office 261020
principal@adhiyamaan.ac.in
<http://www.adhiyamaan.ac.in/mers.php>

2. Anna University**Institute of Remote Sensing (IRS)**<http://www.annauniv.edu/RemoteSensing/index.html>**Undergraduate, postgraduate and research degree courses**

S.NO	BRANCH NAME	Duration	Intake
1	Geoinformatics B.E	4 years	30
2	Remote Sensing M.Tech	2 years	15
3.	M.E. GEO INFORMATICS	2 years	15
4.	M.S. (By Research)		
5.	Ph.D		

Address

Dr. P. Mannar Jawahar

Vice-Chancellor 22351445/ 7001 / 9400

vc@annauniv.edu

Dr.S.Shanmugavel

Registrar 22352161 /7003 / 9403

registrar@annauniv.edu

3. Banaras Hindu University

Department of Geography

<http://www.bhu.ac.in/geography/index.php>

PG Diploma in Remote Sensing & GIS

One Year / Intake: : Max. 20 Min.10

Special Fees: Rs.40, 000/- to be paid in two equal installments at the beginning of each semester

Address

The Head

Department of Geography

Faculty of Science

Banaras Hindu University

Varanasi-221005, INDIA

Telephones 0542- 2307336 (O) / 0542-2575638 (R)/

0542-2308006 (R) 0-9415336706 (M)

Email ID. vkkumra@rediffmail.com

<http://www.bhu.ac.in/geography/admission.php>

4. Bharathiar University, Coimbatore

BU-DRDO CENTRE FOR LIFE SCIENCES

M.Tech in RS & GIS

Address

Bharathiar University,

Coimbatore - 641 046.

General Phone Numbers : (91) 422-2428100, 2422223, 2422234, 2422272, 2422321, 2422335.

Fax : (91) 422-2422387.

Admission, Affiliation and General Administration

Registrar 0422-2428108, 2428111, 2428114

0422-2422203

Fax: 091-422-2425706

Email : regr@buc.edu.in

<http://www.b-u.ac.in/bu-drdo/glance.html>

5. Bharathidasan University

Centre for Remote Sensing

http://www.bdu.ac.in/schools/geo_sciences/crs/

M.Tech Geological Remote Sensing and Geoinformatics

Integrated M.Tech Geological Remote Sensing and Geoinformatics

Address

Centre for Remote Sensing

Bharathidasan University

Khajamalai Campus

Tiruchirappalli - 620 023

Tamilnadu, India

+91-0431 – 2331667

cersbard@yahoo.co.in

http://www.bdu.ac.in/schools/geo_sciences/crs/

6. CENTRE FOR ENVIRONMENT AND DEVELOPMENT (CED)

GEOINFORMATICS COURSES AT THIRUVANANTHAPURAM

CED offers managerial and career courses in GIS and Remote Sensing for national as well as International candidates.

One year Post Graduate Certificate Course on Geoinformatics (G4)

All Sundays and Second Saturdays – 10 am to 5 pm

Eight months course work and Four months project work

Course fee Rs. 30,000/-

Course Venue: CED Head Quarters, Vattiyoorkavu,
Thiruvananthapuram

Address

CENTRE FOR ENVIRONMENT AND DEVELOPMENT (CED)

Thozhuvancode, Vattiyoorkavu P.O

Thiruvananthapuram – 695 013

Tel: 0471 2369720, 21. Email: gis@cedindia.org
director@cedindia.org

CED Eastern Regional Centre, Duplex 7, Surya
Vihar, Near Big Bazar, KIIT P.O., Bhubaneswar,
Orissa, Pin-751031.

Phone 0674 2726132/ Phone : 0471 2369720, 0471
2369721 Fax : 2369720

Training : gis@cedindia.org, cedgis@gmail.com

Consultancy : consultancy@cedindia.org

General : office@cedindia.org

Executive Director : director@cedindia.org

Website : www.cedindia.org

7. Central University Of Karnataka

Department of Geography

M.Sc. in Geospatial Applications in Regional Development

Duration 2 years / Intake 30 Students

http://www.cuk.ac.in/dept_geo_sci.html

Address

Central University of Karnataka
(Established by an Act of the Parliament in 2009)
II Floor, Karya Soudha,
Gulbarga University, GULBARGA-585 106

Shri. Anup K Pujari
Registrar 08472-278056
apujari@yahoo.com / anuppujari@hotmail.com

http://www.cuk.ac.in/dept_geo_sci.html

8. Guru Jambheshwar University of Science & Technology**The Department of Environmental Science and Engineering****M. Tech. (Geo-informatics)**

2 years / intake 30

Rs. 60000 / per annum

http://www.gjust.ac.in/faculty/department/program/dese/evs_dpt.htm

Address :

Registrar
Guru Jambheshwar University of Science & Technology,
Hisar - 125001|
Haryana (India)
Vice Chancellor 01662-263101
Registrar 01662-263104

www.gjust.ac.in

9. Himachal Pradesh University, Shimla

<http://hpuniv.nic.in/>

Faculty of Social Sciences / Department of Geography

<http://hpuniv.nic.in/socisc.htm>

PG Diploma in Remote Sensing (G.I) Geography

One year / Intake 10 students.

Address

Himachal Pradesh University
 Summer Hill, Shimla - 171 005
 Phones: Office: 0177 - 2831363
 Fax No: 0177- 2830775
<http://hpuniv.nic.in/vcoff.htm>

10. IIRMR.

<http://www.iirmr.org/courses/courses.html>

The IIRMR is registered with NRSA, Hyderabad for consultancy in this field.

Following is the small description of courses offered at IIRMR.

Course Name	Specialization	Minimum Qualification	Duration
Ph.D.	Geoinformatics	M. Phil or P.G.	2 Years for M.Phil./M.Tech 3 Years for P.G.
M.Phil.	Geoinformatics	P.G. *	1 Year
M.Sc.	Geoinformatics	B.A./B.Sc. *	2 Years
B.Sc.	Geoinformatics	12th	3 Years
Diploma	Geoinformatics	Graduate	1 Year

Certificate	Geoinformatics	Graduate	Variable
-------------	----------------	----------	----------

* - Degree in any field of Science, Engineering, Geography, or Agriculture.

Note - Some courses are run under distance mode with regular classes at IIRMR. Degree is provided from Vinayaka Mission University Salem, Tamilnadu, and CMJ University, Shillong

Address

Indian Institute of Resources Management Research,
10/214, Madhyam Marg,
Mansarover,
Jaipur-302020,
Raj. India
Ph.: 91-141-3251637,
Mobile: 09414847222, 09314531884.
Fax: 91-141-2390349
E-Mail: info@iirmr.org

11. Indian Institute of Information Technology and Management – Kerala

School of Informatics -

MSc. in Geoinformatics

2 years

<http://www.iiitmk.ac.in/msc-in-geoinformatics>

Address

IIITM-Kerala,IIITM-K Building,
Techno park Campus
Trivandrum
Kerala 695 581 |
India
Phone + 91 471 2527567 / + 91 471 2700777 / + 91 471 2527568

info@iiitmk.ac.in

12. Indian Institute of Remote Sensing (IIRS)

M.Sc (Geoinformatics and Geohazards)

Duration: 2 years

www.iirs-nrsa.gov.in

<http://www.iirs.gov.in/dynamic.php?action=M.Sc>

M.Tech in Remote Sensing and GIS applications:

IIRS is affiliated to the Andhra University.

<http://www.iirs.gov.in/dynamic.php?action=M.Tech>

Ph. D. Programmes at IIRS

<http://www.iirs.gov.in/dynamic.php?action=Ph.D>

IIRS provides **PG Diploma** in Geoinformatics and Natural Hazards and Disaster Risk Management dealing with various aspects of satellite remote sensing, GIS, natural hazards and risk management.

This is an international course of IIRS and being organized jointly with Faculty of Geoinformation Sciences (earlier known as ITC), University of Twente (UoT), The Netherlands.

<http://www.iirs.gov.in/dynamic.php?action=PG+Diploma>

Address

Programme Co-ordinator (Academics)

Indian Institute of Remote Sensing

4, Kalidas Road,

Dehradun - 248 001 (India)

Tel: + 91 - (0)135 - 2524105 , 2524106 , 2524107.

Fax: + 91 - (0)135 - 2741987 / 2748041

E-mail: pca@iirs.gov.in

www.iirs-nrsa.gov.in

13. Indian Institute of Surveying & Mapping, Hyderabad

<http://soisti.ap.nic.in/tcourses.htm>

Many courses at all levels

Address

The Additional Surveyor General ,
Indian Institute of Surveying & Mapping,
Survey of India
Uppal, Hyderabad A.P. INDIA .Pin- 500039.
Fax : +91-40-27200286
E-mail : iismsoi-ap.nic.in
Phone : EPABX 27201181, 27201185, 27201186.

14. Indian Institute of Technology Bombay

Centre of Studies in Resources Engineering : PG Programme

<http://www.csre.iitb.ac.in/CSRE/pg.html>

M. tech Natural Resources Engineering

Address

Indian Institute Of Technology
Centre Of Studies In Resources Engineering
Powai , Mumbai - 400 076
Phone No : (+91-22) 2576 7660 , 2576 7662 , / 2576
7666 , 2572 3190 , 2572 5947
EPABX : (+91-22) 2572 2545 / Extn : 7660 , 7661 ,
7662 , 7666
Fax : (+91-22) 2572 3480 Tele Fax : (+91-22) 2572 3190
Email : hod@csre.iitb.ac.in
Website : www.csre.iitb.ac.in

15. Indian Geoinformatics Centre

<http://www.indiangeo.in/>

Training - Standard Instructor Led Certificate Course

<http://www.indiangeo.in/Training.php>

Address

GIS Centre

W-12 (Old No. W-57), 3rd Main Road,
Anna Nagar, Chennai 600 040 India
Work Hours: 9.30 am to 6.30 pm Monday to Saturday
Phone: +91 44 30522020
Email: enquiry@indiangeo.in

16. Institute of Geoinformatics and Technology (IGT)

<http://igtindia.in/index.html>

PG Diploma in Geoinformatics.

One Year. Distance Mode.
Course Fees: Rs. 46000/- Only.

http://igtindia.in/courses_offered.html

Address

IGT

SCO No. 82,
Second Floor,
Sector - 10A, Gurgaon - 122001
Haryana,
INDIA

Telephone Land Line: +91-124-4275520. / Mobile No.:
+91-9953111411.

(Office Timing: 09.00 A.M. To 06.00 P.M)

Electronic Mails:

General Information: info@igtindia.in

Director: sbhardwaj@igtindia.in

Career: career@igtindia.in

Webmaster: www.igtindia.in

17. Jadavpur University, Kolkata

The Computer Aided Design (CAD) Centre

<http://cadcentreju.org/available-courses.html>

P.G. Diploma in Applied Remote Sensing & GIS (Geoinformatics)**Duration 1 year (3 days/week)**

Time Theory: 2 hrs/class; Lab: 3 hrs/class

Fees Rs.40,000/- for General Candidates

Rs.45,000/- for Sponsored Candidates

Address:

The Director
Computer Aided Design Centre
Dept. of Computer Science & Engg.
Jadavpur University
Kolkata-700 032 West Bengal, India
Telephone : +91 33 2414 6844
Email : cadcentr@cadcentreju.org
<http://cadcentreju.org/available-courses.html>

18. Jamia Millia Islamia –**Faculty of Natural Sciences / Department of Geography****P. G. Diploma in Digital Cartography****P. G. Diploma in Remote Sensing and GIS Applications****Address**

Dean: Prof. Khalil Ahmad,
Faculty of Natural Sciences,
Jamia Millia Islamia,
New Delhi - 110025
India
+91(11) 26981717
dean.fns@jmi.ac.in
http://jmi.ac.in/Fnat/Courses_Geog.htm

19. Jawaharlal Nehru Technical University (JNTU), Hyderabad

Center for Spatial Information Technology

M.Tech in Spatial Information Technology (FTPG)

M.Tech in Geo-Informatics & surveying Technology (FTPG)

M.Tech in Remote Sensing & Geographical Information System (PTPG)

MS in Spatial Information Technology

PhD in Spatial Information Technology

Address

**Jawaharlal Nehru Technological University
Hyderabad**

Kukatpally, Hyderabad - 500 085,
Andhra Pradesh, India

E-Mail : info@jntu.ac.in

<http://www.jntu.ac.in/course-spit.php>

20. Jiwaji University Gwalior , MP

<http://jiwaji.edu/school-of-studies-earth-science.asp>

SCHOOL OF STUDIES IN EARTH SCIENCE

M.Sc. Remote Sensing and GIS

Ph.D., D.Sc.

Fees for the course :

Course	I Semester	II Semester	III Semester	IV Semester
M.Sc. Remote Sensing & GIS	Rs. 21615.00	Rs.17725.00	Rs. 19075.00	Rs. 17725.00

Payment Seat : M.Sc. - Rs. 11000/- additional to the fees for Open Seat

<http://www.jiwaji.edu/school-of-studies-earth-science.asp>

Address**Jiwaji University**

Gwalior (M.P.), India

Enquiry No.: +91 751 2442712

Fax No.: +91 751 2341768,

Prof. U.C. Singh, Head

Email : ucsingh@rediffmail.com

Dr. S.N. Mohapatra, Associate Prof.,

Email : suraj64@yahoo.com

21. Kashmir university**Faculty of Physical & Material Sciences****PGD (RS/GIS)**

Duration:1 Year Intake:18 seats

Address

The University of Kashmir,

Hazratbal,

Srinagar-190006, |

J&K, India

Telephone: Country Code : +91 0194 2420078, 2420405,
2420570, 2421346, 2424152, 2429870

Email: info@kashmiruniversity.net

<http://www.kashmiruniversity.net/roasterdetails.aspx?linkid=48>

22. Kumaun University Nainital**Center of Excellence for Natural Resource Data Management System****M.Sc./M.A. in Geographic Information Science and Technology**

2 year / Intake 30 *Fee*– Rs.42,000/-annum

Address

Prof.J.S.Rawat,

Director, Centre of Excellence for NRDMS in Uttarakhand

(Ph. 05962-235431,09411516680)

Kumaun University, SSJ Campus,

Almora

Website: www.coenrdmsalmora.org or www.kuntl.in

<http://www.coenrdmsalmora.org/edu-program.php>

23. M.D.S. University**Maharshi Dayanand Saraswati University, Ajmer / Department of Remote Sensing**

<http://www.mdsuajmer.ac.in/>

M.Sc. in Remote Sensing

2 years / 15 seats

<http://www.mdsuajmer.ac.in/demoFrameset.html>

Doctor of Philosophy (Ph.D.)

Eligibility: Master`s degree with at least 55 percent marks at the postgraduate examination of the University or an equivalent examination recognized by the University in the subject or any allied subject in which he/she wishes to pursue research.

Address

MDS University

Pushkar By pass,

Ghooghra,
Ajmer
Rajasthan 305009
Phone 0145 2787056/ 058/ 412/ 414 / 413 / Fax 0148
2787049 / 055
<http://www.mdsuajmer.ac.in/>

24. Madurai Kamaraj University

**School of Earth and Atmospheric Sciences / Department of
Environmental Remote Sensing and Cartography**

http://www.mkuniversity.org/earth_dept.htm

M.Sc. Environmental Remote sensing & Geoinformation Technology

Address

**Department of Geography
Madurai Kamaraj University**
Madurai, Tamil Nadu, India
Telephone : 458 471 Ext. : 372
Fax : +91 - 452 - 459139/459105

http://www.mkuniversity.org/earth_dept.htm

25. MANGALORE UNIVERSITY

<http://www.mangaloreuniversity.ac.in/xampp/>

Department of Geoinformatics

<http://www.mangaloreuniversity.ac.in/xampp/departments/geoinformatics.html>

M Sc. Geoinformatics

2 years / 4 semesters

Special Fee Rs. 26, 000-00 + *General Fee Rs. 10,810-00 for
*General category and for Partially Self financed Category Special
Fee of Rs. 36, 000-00 + *General Fee Rs. 10,810-00.

Foreign/NRI 3400 \$ U.S per Annum. Details in Prospectus

Address

DR. B.R. RAGHAVAN
CO-ORDINATOR IN GEOINFORMATICS
MANGALORE UNIVERSITY
MANGALAGANGOTRI- P.O
PIN 574199
INDIA
E-mail: ragvon@yahoo.com
Phone: mobile 09845406824
FAX:91-824 2284673
FAX:91-824 2287367
<http://www.mangaloreuniversity.ac.in/xampp/departments/geoinformatics.html>

26. Motilal Nehru national institute of Technology, Allahabad

<http://www.mnrit.ac.in/index.php/departments/others/gis-cell/courses>

M. Tech. (GIS & Remote Sensing) PG Programme

2 years

Eligibility for Ph.D.

M. Tech. or equivalent in GIS & Remote Sensing/ Civil Engineering/ Comp. Sc.& Engineering/ Information Technology/ Agricultural Engineering/ Mining Engineering or M.Sc. degree in GIS & Remote Sensing/ Applied Geology/ Geophysics/ Geography/ Environmental Science/ Computer Science or degree in Master of Computer Application

The candidates having experience in the field of GIS and remote sensing shall be preferred.

Address

Motilal Nehru National Institute of Technology
Allahabad - 211004, INDIA
Telephone: 91-0532-227+Ext No Fax No.: 91-0532-2545341

Email: eo@mnnit.ac.in
<http://www.mnnit.ac.in/index.php/departments/others/gis-cell/courses>

27. National Power Training Institute (NPTI)

<http://www.npti.in/>

POST GRADUATE DIPLOMA IN GIS & RS

50 weeks full time

Address

NPTI CORPORATE CENTRE
Director General
National Power Training Institute
NPTI Complex, Sector-33, Faridabad – 121003 (Haryana)
Telephone: 0-129-2275475, 2277412
Fax: 0-129-2277412
General E Mail : npti_hq@yahoo.co.in
<http://www.npti.in/>

28. North Orissa University – Baripada

<http://www.nou.nic.in/>

M.Sc. Remote Sensing & GIS

2years / Seats 16

Entrance tests .

Documents to be enclosed with the application form are:

- i) Attested copies of Certificates and mark sheets (From HSC onwards)
- ii) Attested copy of Caste Certificate.
- iii) Original receipt towards the cost of the form.
- iv) Six stamp size Photographs duly attested.
- v) One self addressed stamped (Rs 25/- for Regd. Post) envelope of size 10 x 25 cm.(from their prospectus PDF)

http://www.nou.nic.in/Admission_Guidelines.htm

Address

Shri ram Chandra Vihar

Takatpur, Baripada

Mayur bhanj

Orissa 757003

Vice- Chancellor 06792-255127(O) /06792-278275(R)

Fax:06792-255127

Registrar 06792-256906 (O) Fax:06792-255127

<http://www.nou.nic.in/>

29. Osmania University

M.Sc. Geoinformatics

2 years , Intake 30

Address

Vice Chancellor vc@osmania.ac.in

Registrar registrar@osmania.ac.in

<http://www.osmania.ac.in/Science%20College/Geography1.htm>

30. PSNACET Tamilnadu

School Of Engineering

M.Tech- REMOTE SENSING

<http://www.psnacet.edu.in/me-remote.php>

Address

PSNA College of Engineering and Technology

Kothandaraman nagar, Dindigul-624622

Tamilnadu , India

Toll free number : 1800 425 4264

Phone : **0451-2554032,2554349, / 2554401,2554402**

Fax No :**0451- 2554249**

Email id : contact@psnacet.edu.in
<http://www.psnacet.edu.in/me-remote.php>

31. Pune University

B.Sc. (Applied) in GIS and RS.

1 year

P. G. B. Sc. (Applied) in GIS and Remote Sensing

One year / intake 30

Application fee Open Category and out of Maharashtra in Rs. 500/-
Reserved Category in Rs.350/-

Course Fee Rs. 27,872/-

Syllabus of the course download from :

http://www.unipune.ac.in/dept/fine_arts/geography/Geography_webfiles/academic.htm

Address

Mr. R. R. Nannaware
Assistant Professor,
Department of Geography,
University of Pune

Contact timings - 12:00 am to 5:00 pm
*Except Holidays (1st and 3rd Saturday and all Sundays
and govt. holidays)

Department of Geography,
University of Pune,
Ganeshkhind,
Pune 411 007.
[Maharashtra State].
Telephone Number/s +91(020) 25601363 / 64 / 65
e-mail bhoogol@unipune.ac.in

32. Scanpoint Education Research Institute – SERI Baroda**Educating young India in Geomatics**

<http://www.scanpointgeomatics.com/seri.html#>

Msc. in Geomatics

We run a Degree program in partnership with Gujarat University. Scanpoint has partnered with MS University, Baroda (Department of Geography, Faculty of Science) to educate students on Principles and Applications of Remote Sensing and Geographical Information Systems.

Address

Email: info@seri.org.in

Web: www.seri.org.in

Phone: +91 79 26575371

<http://www.scanpointgeomatics.com/seri.html#>

33. School of Planning ,Ahmedabad**M.Sc. (Geomatics & Space Applications)**

http://www.cept.ac.in/index.php?option=com_content&view=article&id=66&Itemid=127

Details : download PDFs

http://www.cept.ac.in/index.php?option=com_content&view=article&id=106&Itemid=68#Geomatics%20&%20Space%20Applications

Address**CEPT University**

Kasturbhai Lalbhai Campus,
University Road,
Ahmedabad-380009,
Gujarat, India.

Phone - 0091-79-26302470 / 26302740 || Fax - 0091-79-26302075

http://www.cept.ac.in/index.php?option=com_content&view=article&id=66&Itemid=127

34. Shridhar University Pilani

M. Sc. Geo Informatics

2 Years (4 Semesters)

<http://www.shridharuniversity.ac.in/courses-offered.aspx>

Address

Pilani-Chirawa Road,
Pilani - 333031 (Rajasthan), INDIA
Phone +91 - 1596 510000, +91 - 8003 09 0120 – 23 **Fax**
+91 - 1596 51 00 02
E-mail info@shridharuniversity.ac.in
Website www.shridharuniversity.ac.in

35. Solapur University

<http://su.digitaluniversity.ac/content.aspx?ID=3>

School of Earth Sciences / Department of Geoinformatics

M.Sc. Geoinformatics 2 years Intake 16

Address

Solapur University, Solapur
Solapur Pune National Highway,
Kegaon,
Solapur 413 255
(Maharashtra) (India)
SolapurUniversitywebsite : <http://su.digitaluniversity.ac>

Telefax No.: 0217-2744770
EPABX (10 Lines) 0217-2744763, 2744766, 2744767,
2744771,
2744772, 2744773, 2744774, 2744778-2744779,
2351489

<http://su.digitaluniversity.ac/content.aspx?ID=3>

36. Symbiosis Geomatics Institute, Pune.

M.Sc. Geomatics

2 years

<http://sigpune.com/msc.html>

Post Graduate Diploma in Geoinformatics

One year part time.

http://sigpune.com/pg_geo.html

Certificate Course in Photogrammetry and Remote Sensing

Duration: 2 Months, 5 days a week (Full Time)

http://sigpune.com/photogrammetry_remote_sensing.html

Address:

Symbiosis Institute of Geoinformatics

5th and 6th Floor, Atur Centre, Gokhale Cross Road,
Model Colony, Pune – 411016

Tel.: 020 25672841 / 43

Fax: 020 25672842

Email: enquiry@sig.ac.in admissions@sig.ac.in

37. UNIGIS Programmes

These are international programs

Courses within the UNIGIS network will satisfy professional development needs and are ideal for in-service training.

UNIGIS@India is a collaborative network of the universities and organisations in India and [Centre for Geoinformatics \(Z_GIS\)](#), [University of Salzburg](#), Austria (Europe).

UNIGIS@India partner institutions offer 2 study programmes:

[2-year MSc in Geographical Information Science & Systems \(UNIGIS MSc\), and](#)

[1-year Professional Diploma in Geographical Information Systems \(UNIGIS Professional\)](#)

The Study Programme is offered in English language.

Location of Current Study Centres:

<http://www.unigis.net/study-programmes>

UNIGIS@Goa University (INDIA)

[2-year MSc in Geographical Information Science & Systems \(UNIGIS MSc\),](#)

[1-year Professional Diploma in Geographical Information Systems \(UNIGIS Professional\)](#)

Address

Dr. Mahender Kotha
Coordinator
UNIGIS@Goa University

Department of Earth Science
Goa University
Taleigao Plateau,
Goa-403 206, INDIA
e-mail: office.goauniversity@unigis.net
Web: www.unigis.net/goa

UNIGIS@Madras University (INDIA)

Offers internationally recognised academic qualification within the provisions of UNIGIS Joint-study programme in cooperation with the

Centre for Geoinformatics (Z_GIS), University of Salzburg, Austria (Europe).

MSc

2 years Evening Course

The Study Programme is offered in English language.

<http://madras.unigis.net/>

Address

Dr. R. Jaganathan

Coordinator

UNIGIS@Madras University

Department of Geography

University of Madras

Chennai - 600 005. INDIA

e-mail: office.madras.university@unigis.net

Web: www.unigis.net/madras

UNIGIS@PU Chandigarh (INDIA)

Offers internationally recognized academic distance learning qualifications through 2 different study programme:

2-year MSc in Geographical Information Science & Systems (UNIGIS MSc)

1-year Professional Diploma in Geographical Information Systems (UNIGIS Professional)

Address

Prof. Smita Bhutani

Coordinator

UNIGIS Study Programme

Department of Geography

Panjab University

Chandigarh -160 014, INDIA

Phone: +91-172-2534-259 / Fax: +91-172-2727-714

e-mail: office.pu.chandigarh@unigis.net
Web: www.unigis.net/pu_chandigarh
<http://puchandigarh.unigis.net/>

UNIGIS@ delhi India**Centre for Geoinformatics (CGIS)****Address**

All India Institute of Local Self-Government (AIILSG)
Bharat Ratna Sardar Vallabhbhai Patel Bhavan
22-23 Institutional Area|
D Block Pankha Road, Janakpuri
New Delhi-110 958, INDIA
e-mail: office.india@unigis.net
Web: www.unigis.net/india

38. University Of Mysore**The Centre for Information Science & Technology (CIST)**

<http://www.uni-mysore.ac.in/cist/>

PG Diploma in Geo-informatics - 1 year / any Degree**Address**

Prof. P. Nagabhushan
Telephone No. 0821-2415389, 2515360
E-mail: pnagabhushan@compsci.uni-mysore.ac.in
<http://www.uni-mysore.ac.in/cist/>

39. University of Jammu, J & K**Department of Remote Sensing & GIS****M.Sc 2 years****Address**

Dr. A.S. Jasrotia Course Coordinator,
M.Sc. Remote Sensing & GIS
Department of Geology,
University of Jammu, Jammu - 180006
Tel. : 0191-2435166, 94191-33793 (M) / Fax. : 0191-
2452987, 2459383

E-mail : asjasrotia@yahoo.co.uk
<http://www.jammuuniversity.in/mcsgis/about-remote-sensing.html>

40. University of Kota, Rajasthan

Department of Social Sciences

PG Diploma in Remote Sensing & GIS 1 year

Address

Sh. Ram Niwas(R.A.S)
Registrar 2472934
info@uok.ac.in.
<http://www.uok.ac.in/>

41. University of Madras

Department of Geography

M.Sc. Spatial Information Technology

<http://www.unom.ac.in/departments/geography/courses.html>

Address

Enquiry - 2539 9422
PRO - 2539 9413
Tel.Exchange - 2539 9466
Contact page :
<http://www.unom.ac.in/contact/contact.html>

42. University of Punjab

Dept. of Geography

Masters in Remote Sensing (GIS)

2 years / Seats 28

Address

**Krishna Mohan
Chairperson**
*Department of Geography
Panjab University
Sector 14
Chandigarh, U.T. - 160014
India*
Telephone: +91 2727714, 2534258, 4261
Fax: +91 172 2727714
E-mail: kmohan@pu.ac.in

<http://geography.puchd.ac.in/show-courses.php>

43. Vidyasagar University, Midnapore, West Bengal

Department of Remote Sensing & GIS :

PG and Doctoral levels

Address

Vidyasagar University,
Midnapore,
West-Bengal -721102 ,
India
Phone (91-3222-) FAX (91-3222-)
Vice-chancellor 275329(O), 263202(R) 275329
Registrar 275297 275297

http://vidyasagar.ac.in/remote_sensing/dept_remote_sensing.html

International

44. Aberystwyth University

<http://www.aber.ac.uk/en/postgrad/postgraduate-courses/taughtcourses/geography/remote-sensing-geographical-information-systems/>

Institute of Geography and Earth Sciences

Geographical Information Systems (GIS) and Remote Sensing (MSc)

Duration: 1 year

Entry Requirements: 2:1 degree in a relevant discipline; candidates with equivalent experience considered on a case-by-case basis

Masters Fees: £3550

Start Month(s): September

Address:

Contact Name: Dr Richard Lucas

University Switchboard: 01970 623111

Undergraduate Admissions: 01970 622021

ug-admissions@aber.ac.uk

Postgraduate Admissions: 01970 622023

pg-admissions@aber.ac.uk

<http://www.aber.ac.uk/en/postgrad/postgraduate-courses/taughtcourses/geography/remote-sensing-geographical-information-systems/>

GIS Short courses**45. CENTRE FOR ENVIRONMENT AND DEVELOPMENT (CED)**

<http://www.cedindia.org/2010/10/courses-in-geoinformatics/>

GEOINFORMATICS COURSES AT THIRUVANANTHAPURAM

CED offers managerial and career courses in GIS and Remote Sensing for national as well as International candidates.

The courses are utility management oriented and includes the powerful combination of GIS, Remote Sensing and GPS. They cover the basics of GIS, Remote Sensing and GPS, advanced analytical and data management capabilities of GIS etc.

I. Five Days Introductory Course on Geoinformatics (G1)

For senior level officers – conducted on specific request
Five working days – 10 am to 5 pm
Course fee: Rs. 5,000/-

II. Eight Weeks (Full-time) Diploma Course on Geoinformatics (G2)

All working Days – 10 am to 5 pm
Five weeks course work and three weeks project work
Course fee: Rs. 20,000/- For Indian candidates/US\$ 1000/- For Foreign candidates

III. Eighteen Weeks (Part-time) Diploma Course on Geoinformatics (G3)

All working Days – Morning 6.30am to 9.30am/ Evening 5pm to 8pm
Eleven weeks course work and seven weeks project work
Course fee: Rs. 20,000/- For Indian candidates/US\$ 1000/- For Foreign candidates

Address

**CENTRE FOR ENVIRONMENT AND DEVELOPMENT
(CED)**

Thozhuvancode, Vattiyookavu P.O
Thiruvananthapuram – 695 013

CED Eastern Regional Centre,

Duplex 7, Surya Vihar,

Near Big Bazar,

KIIT P.O.,

Bhubaneswar,

Orissa,751031.

Phone 0674 2726132 / Phone : 0471 2369720, 0471

2369721 Fax : 2369720 Training : gis@cedindia.org,

cedgis@gmail.com

General : office@cedindia.org

Executive Director : director@cedindia.org

Website : www.cedindia.org

46. Indian Institute of Remote Sensing (IIRS)

<http://www.iirs.gov.in/dynamic.php?action=Scheduled-Certificate+Program>

Scheduled-Certificate Program

[Basic Photogrammetry & Remote Sensing](#)

[RS & GIS in Geosciences](#)

[Land Information System](#)

[RS & GIS in Soils & Landuse Planning](#)

[RS & GIS in Water Resources Management](#)

[RS & GIS in Coastal Zone Management](#)

[RS & GIS in Forest Management](#)

[Certificate course on "Geo-Hazards" 3 Optional streams
:Hydrometeorological/ Geological/ Environmental](#)

Address

Programme Co-ordinator (Academics)
Indian Institute of Remote Sensing
4, Kalidas Road,
Dehradun - 248 001 (India)
Tel: + 91 - (0)135 - 2524105 , 2524106 , 2524107.
Fax: + 91 - (0)135 - 2741987 / 2748041
E-mail: pca@iirs.gov.in

Director IIRS
Indian Institute of Remote Sensing
4, Kalidas Road,
Dehradun - 248 001 (India)
Tel: + 91 - (0)135 - 2744583
Fax: + 91 - (0)135 - 2741987 / 2748041
E-mail: director@iirs.gov.in

47. [Indian Institute of Surveying and Mapping](#)

<http://soisti.ap.nic.in/>

COURSES ON GEODESY

Sl.No	Course Name	Batch No	Course No	Duration	Fees (Rs)	Course Capacity	Eligibility
1	Control and Detail Survey by GPS and Total Station	19	690	8Weeks	22,000	12	Graduates or Surveyors by profession
2	Map Updation using Mobile Mapping System	05	585	2 Weeks	8,900	20	Surveyors by Profession

<http://soisti.ap.nic.in/geodesy.htm>

Address

The Addl Surveyor General,

FACULTY OF GEODESY

Indian Institute of Surveying & Mapping

Survey of India

Uppal, Hyderabad

A.P. INDIA. Pin- 500039.

Fax : +91-40-27200286

E-mail: iismsoi-ap@nic.in

Phone : EPABX +91-40-27201181, +91-40-27201185,

+91-40-27201186.

48. Institute of Geoinformatics and Technology (IGT)

<http://igtindia.in/index.html>

COURSES OFFERED

Certificate Course in GIS.

60 Hours.

Mode: Full Time and Part Time.

Certificate Awarded By: Institute of Geoinformatics & Technology, Gurgaon.

Eligibility: Graduation in any stream.

Course Fees: Rs. 15000/- Only.

Certificate Course in Remote Sensing.

60 Hours

Mode: Full Time and Part Time.

Certificate Awarded By: Institute of Geoinformatics & Technology, Gurgaon.

Eligibility: Graduation in any stream.

Course Fees: Rs. 15000/- Only.

Certificate Course in GIS & Remote Sensing.

120 Hours

Mode: Full Time and Part Time.

Certificate Awarded By: Institute of Geoinformatics & Technology, Gurgaon.

Eligibility: Graduation in any stream.

Course Fees: Rs. 25000/- Only.

http://igtindia.in/courses_offered.html

Address

IGT

SCO No. 82, Second Floor, Sector - 10A, Gurgaon -
122001

Haryana, INDIA

Telephone No.:

Land Line: +91-124-4275520.

Mobile No.: +91-9953111411.

(Office Timing: 09.00 A.M. To 06.00 P.M)

Electronic Mails:

General Information: info@igtindia.in

Director: sbhardwaj@igtindia.in

Career: career@igtindia.in

Webmaster: www.igtindia.in

49. Institute of Geoinformatics and Remote Sensing (IGRS)

IGRS offers short courses of two to six months in different disciplines of geographic information technologies, such as Introduction to GIS and RS, Photogrammetry, Spatial Analysis, Geostatistics, GIS Project Development, WebGIS and Geodatabases.

Post Graduate Certificate in GIS and RS (Course Code: STL01)

6 months (150 hours) / Classes: 3 days a week 2 hours per day

Training Center: Kolkata/Hyderabad

Minimum qualification required to attend this Science graduates, post graduates from M. Sc with geography, geology, agriculture, forestry, Engineers from all streams

Post Graduate Certificate in GIS based programming (Course Code: STL02)

Duration: 4 months (150 hours) + 2 months project

Classes: 3 days a week 2 hours per day

Training Center: Kolkata/Hyderabad

Minimum qualification The course has been designed for Software professional who want to develop on ESRI desktop based software and GIS fresher /executives who want to upgrade themselves as ESRI developer

<http://www.igrs-gis.com/#>

Short Term Courses

Training Centers - Kolkata/Hyderabad

Course Name	Code:	Duration:
Basics of GIS/RS	STL03	20 hours
Digital cartography using ArcGIS	STL04 A	2 months (150 hours)
Digital cartography using MapInfo	STL04 B	2 months (150 hours)
ArcObject programming	STL05	20 hours
Course Name	Target People	
Basics of GIS/RS	Executives/Teaching professional from different stream wanting to know about GIS Graduates/Undergraduates Software professional planning to code on GIS Platform	
Digital cartography using ArcGIS	This subject introduces the student to the techniques for creating scaled maps in ArcGIS software. Course specifically designed for students/fresher/teaching professional from geography, geology back ground	
Digital cartography using MapInfo	This introduces the student to the techniques for creating scaled maps in MapInfo software. Course specifically designed for students/fresher/teaching professional from geography, geology back ground	

Course Name	Code:	Duration:
ArcObject programming	ArcView, ArcEditor, and ArcInfo share the same architecture, and the knowledge gained in this course applies to all three. The course has been designed for Software professional who want to develop on ESRI desktop based software and GIS fresher /executives who want to upgrade themselves as ESRI developer	

http://www.igrs-gis.com/IGRS_GIS_shortcourses.html

Address

Kolkata

25/1, Rustomjee Street,
Kolkata: 700019,
India
Phone:+91 33 2440 0695
+91 33 2460 2501
Fax: +91 33 2460 2494

Hyderabad

Arya 1, V Floor, Plot No 13,
P.G. Road,

Secunderabad-500003,
India
Phone:+91 40 4020 0962

Email: training@igrs-gis.com

Visit us: <http://www.igrs-gis.com>

50. ITechIdeas

<http://www.itechideas.com/reserch.php>

ITechIdeas Geo-Spatial Information System

[1. Diploma in Geographic Information System IGS001](#)

[2. Diploma in GPS Navigation System IGS002](#)

[3. Diploma in Geo-Satellite Communication IGS003](#)

[4. Diploma in GPS Instrument Technician IGS004](#)

Mail To: info@itechideas.com.

<http://www.itechideas.com/reserch.php>

51. [KABG TechGIS Services](#)

<http://kabg-techgis.com/Training.php>

[Diploma Courses](#)

[Certificate Courses](#)

Advanced Training in GIS & Remote Sensing

Address

KABG TechGIS Services

C-50 2nd Floor

Sector -2 Noida

For emails : <http://kabg-techgis.com/Contact-Us.php>

52. [kCube GIS Academy](#)

<http://www.kcubeconsulting.com/training.php>

Classroom Training at our facility: Instructor-led classes with Hands-on that combine lecture and exercises with real world scenarios, processes using various geospatial software.

Onsite Training: Most classroom courses and (customized) workshops are also offered onsite for partners or customers.

Address

kCube GIS Academy

No 23, Fourth Main Road,
Besant Nagar, Chennai,
Tamilnadu,
India.

Zipcode: 600090

Phone:

India - +91 44 24462505

For Schedule, Price information and registration send us
an email to training@kcubeconsulting.com
or contact us at +91-9940111282

53. KHAGOLAM Institute of Geoinformatics

<http://www.khagolam.com/>

Several courses are designed Both freshers and professionals.

Address

khagolam

A-Wing, 2 Floor, Sudhanshu Chamber
Station Road, Kalyan (Wast),
Thane, Mumbai-421 301, Maharashtra
Email : info@khagolam.com

Phone Number : +91 251 2209910

Mobile Number : +91 9892 998947

Office Time: 11:00 AM to 8:00 PM

Training Centers : Mumbai | Hyderabad

54. NAM Institute of Professional Studies

3 Months Diploma in Remote Sensing & GIS.

3 Months Diploma in Aerial Photo Grammetry.

Address

NAM INSTITUTE OF PROFESSIONAL STUDIES

Main Campus (South Delhi)	:	C-49, Savitri Nagar Main Road, Maharshi Dayanand Marg, Near Gullar wale Peer Baba, New Delhi -110017
Corporate Office (South Delhi)	:	1796, South Extn. Part-I, Opposite D-42, Near Dena Bank & Barat Ghar, New Delhi:-110049
Phone No	:	011-24626549, 24626548 011-26016549, 26013569
Mobile	:	+91-9911757394 +91-9540309471 +91-9312871686
E-mail	:	namipsdelhi@gmail.com info@namedu.net contact@namedu.net directornamips@gmail.com namgeoinfo@namedu.net ieltsgmtsat@namedu.net
Website	:	www.namedu.net
Blog	:	www.naminstitute.blogspot.com

55. National Atlas & Thematic mapping

http://natmo.gov.in/t_natmo.htm

The National Atlas and Thematic Mapping Organization is engaged in preparation of maps and atlases of different themes using aerial photographs, remote sensing data, GIS, Field surveys etc.

NATMO offers the following training programs in the various fields of map-making during the calendar year 2011.

[Remote Sensing and GIS \(Two weeks\)](#)

[Application of Aerial Photography in Thematic Mapping \(Two weeks\)](#)

[Cartography and Map Reproduction \(Two weeks\)](#)

[Cartography \(Two weeks\)](#)

[Digital Mapping and Geographical Information System \(Four weeks\)](#)

[Digital Cartography \(Four weeks\)](#)

[Global Positioning System \(One week\)](#)

Address

B. Dey, Dy. Director & Head

Research Development & Training Division
National Atlas & Thematic Mapping Organization
CGO Complex, 7th floor, DF Block, Salt Lake,
Kolkata- 700064
Mobile: +919830745684

Ms. Manisha Basu

Scientific Officer & Course Co-coordinator
Mobile: +919874114636

OFFICE CONTACT:Phone: 2334-
6341/6585/5349/6331/6459/5006 Ext. 348 / 347 / 350
Fax: (033) 23346460
E-Mail: natmordtd@gmail.com
Website: www.natmo.gov.in

56. [Mahatma Gandhi University Kottayam](#)

<http://mgu.ac.in/>

School of Environmental Sciences / Remote Sensing and GIS

PG. Diploma Course

The School has designed a PG diploma course in Ecotourism (now being held at High Range Environmental Research Centre, an outreach centre of the School at Nedumkandam) is conducted under the distance education stream of the University.

Short-term Courses

Geoinformation Science and Technology (Remote Sensing, GIS and GPS)

Digital Photogrammetry and Digital image processing

http://mgu.ac.in/index.php?option=com_content&view=article&id=190&Itemid=184

Address

Mahatma Gandhi University
Priyadarsini Hills P.O
Kottayam Kerala, India
Pin - 686 560
Tele : +91 481 2731050 to 68
Fax : +91 481 2731002, 9, 11
E-mail : mgu@mgu.ac.in

57. All India Institute of Local Self-Government

<http://www.aiilsg.org/Courses/SpecialCourses.aspx?id=27>

CERTIFICATE COURSE IN GIS

Duration: 3 Months / Eligibility: Not Required

Course Modules

Theory:- 2 hours a day for every alternate day,

Practical:- 2 hours a day for every alternate day,

Introduction to GIS, GIS application software modules :
Autodesk, ESRI, MAP INFO.

Venue: Nashik

<http://www.aiilsg.org/Courses/SpecialCourses.aspx?id=27>

Address

All India Institute of Local Self-Government

M.N. Roy Human Development Campus,
Plot No.6, F-Block, Bandra Kurla Complex,
T.P.S. Road No. 12, Behind Government
Teachers Colony, Bandra (East),
Mumbai - 400 051
Maharashtra (India).

Tel.No.: +91-22-26571713, 26571714, 26571715

Fax: +91-22-2657 2286

Email : contact@aiilsg.org

58. Edgemap Softwares [P] Ltd

http://www.edgemapgis.com/GIS_Training.php

Basics of GIS

Advance Studies of GIS

3 month courses

For More Information,
Please Contact

The Training Coordinator

EDGEMAP SOFTWARES [P] LTD
#361, 1st Floor, 8th Main,
4th Block , Basaveshwaranagar,
Bangalore - 560 079, INDIA

T : +91-80-65972660
F : +91-80-41287612
E : training@edgemappgis.com
E : giscourse@edgemappgis.com

http://www.edgemappgis.com/GIS_Training.php

59. Indian Geoinformatics Centre

<http://www.indiangeo.in/Training.php>

Building Geodatabase

Duration : 24 Hours.

Standard Instructor Led Certificate Course

Audience : Spatial Data Creators and Managers - to understand Geodatabase design, relationships and connections to various Geodatabases.

Prerequisites : Completion of course on Introduction to ArcGIS 9 or equivalent experience

Address

iGIS Centre

W-12 (Old No. W-57), 3rd Main Road,
Anna Nagar, Chennai 600 040 India

Work Hours: 9.30 am to 6.30 pm Monday to Saturday

Phone: +91 44 30522020

Email: enquiry@indiangeo.in

60. GIS Square, Noida

<http://www.gissquare.com/services/gis-training>

We offer several training's on esri gis products on weekends only.

Course	Duration	Fees : INR
Basics of ArcGIS Server Advanced 9.3.1	2 Days	8,000/
Advance administration of ArcGIS Server 9.3.1	2 days	11,000/
Basics of ArcGIS ArcInfo 9.3.1	5 days	11,000/-
Basics of ArcIMS 9.3.1	2 days	7,000/-

Address

The training will be conducted at :
Sector -63, Noida.

Write to us for more details: admin@gissquare.com
<http://www.gissquare.com/services/gis-training>

61. National Centre for Human Settlement and Environment

ACADEMY OF GIS LEARNING

GIS TRAINING PROGRAMMES AT NCHSE

[A certificate programme in GIS Operations and Applications](#)

Duration 15 days,/ full time.

Course Fee: Rs. 6,000/- per head.

It is aimed at training the students, executives and field staff to manage all kinds of GIS operations and applications in different disciplines.

<http://mpgis.co.nr/>

Address

NCHSE

E-5/A, Girish Kunj, Arera Colony,

BHOPAL,
 Madhya Pradesh, 462016
 INDIA.
 Telephones: (091) - (0755) - 2463731, / (091) - (0755) - 4277074
 E-mail: mympgis@gmail.com _____ nchsebpl@gmail.com

62. National Remote Sensing Agency (NRSA)

<http://www.nrsc.gov.in/trainingindex.html>

RS & GIS TRAINING

Training at NRSC, Balanagar

NRSC offers regular courses to participants from Government, Private, NGO and Academic Institutions .

Remote Sensing & GIS - Technology and Applications

12 weeks twice a year

Introduction to GIS & Applications

4 weeks twice a year covering Basics of GIS, Data Models, Spatial Analysis, Concepts of web GIS and hands-on practicals.

Course Name	Period	Apply before	Fee *	
			Govt./ Academic	NGO/ Private
Remote Sensing & GIS – Technology and Applications (12 Weeks)	14 Nov.2011 – 3 Feb., 2012	14 Oct, 2011	Rs. 6,000/-	Rs. 10,000/-
Introduction to GIS & Applications (4 weeks)	13 Feb. – 9 Mar., 2012	13 Jan., 2012	Rs. 3,500/-	Rs. 4,500/-

* Fee does not include boarding & lodging expenditure

Address

National Remote Sensing Center

Indian Space Research Organisation
(Dept. of Space, Govt. of India),
Balanagar, Hyderabad - 500 625,
Andhra Pradesh
India

Telephone 23879572-76

Telex 0425-8039 NRSA IN

Telegram REMOSEN

Fax 040-23878648

Feedback feedback@nrsc.gov.in

Training Activities Related training@nrsc.gov.in

<http://www.nrsc.gov.in/trainingindex.html>

63. School of Oceanographic Studies, Jadavpur University, Kolkata

P.G. Diploma and certificate course on Remote Sensing and GIS

Well designed 6 months Certificate and 1 year Post Graduate Diploma programme covering relevant aspects of Remote Sensing and GIS, and their applications.

Short Courses

RS/GIS application of topical interests are conducted regularly

Address

School of Oceanographic Studies,

Jadavpur University,

Kolkata - 700 032

Phone: 91-33-2414 6242, 91-33-2867 1048

Fax: 91 33 2414 6242,

e-mail : iczom@vsnl.com
<http://www.ocean-ju.org/courses/courses.htm>

GSI online

64. American Sentinel

This online GIS degree helps students build a strong foundation in cartography, GIS software, and GIS concepts and techniques.

Address

General Information

Phone: 1.800.729.2427
Email: info@AmericanSentinel.edu

Admissions

Phone: 1.866.922.5690
Email: admissions@AmericanSentinel.edu
Fax: 1.866.505.2450
Fax (international): 1.303.991.1577

Student Success Advisors and Registrar

Phone: 1.800.729.2427
Email: services@AmericanSentinel.edu
Email: registrar@AmericanSentinel.edu
Fax: 1.866.505.2450
Fax (international): 1.303.991.1577

<http://www.americansentinel.edu/information-technology/a-s-geographic-information-systems>

65. The University of Southern California

<http://gis.usc.edu/>

GIS Degree and Graduate Certificate Career Opportunities

Students in the USC Dornsife GIST programs benefit from USC's membership in the UNIGIS International Association, a group of 20 universities around the world that share in the development and delivery of online GIS education programs

Address

GIS Distance Learning Programs Department of Geography

College of Letters, Arts and Sciences
University of Southern California
3616 Trousdale Parkway, Suite B55
Los Angeles, CA 90089-0374
Tel: 1-888-907-5029
Email: admission@uscgis.com

66. Birkbeck, University of London

http://www.bbk.ac.uk/gisc/index_html

MSc GISc (Distance Learning and Evening Taught modes)

Birkbeck has developed a specialist 2-year MSc GISc Part-time Distance Learning programmes for professionals working with geographical data. Even if you can't come to Birkbeck, we can come to you: the programme is delivered worldwide via the Internet.

Address

Department of Geography, Environment & Development Studies

Birkbeck, University of London
Malet Street
London, WC1E 7HX, UK
Tel: +44 (0) 20 7631 6473
Fax: +44 (0) 20 7631 6498
Email: enquiries-geds@bbk.ac.uk

67. GIS247.com

We provide a total e-learning solution for ArcGIS and MapInfo Professional users which is comprehensive, flexible and affordable.

Address

Sological Solutions (GIS247)

15 Whitehall Court
Upper Saxondale
Radcliffe-on-Trent
Nottinghamshire
NG12 2NJ
United Kingdom
Tel: +44 (0) 115 933 6633
Mon to Fri: 9am - 5pm GMT
<http://www.gis247.com/>

68. Northeastern University

<http://cps.neu.edu/degree-programs/graduate/masters-degrees/masters-geographic-information-technology.php>

Master of Professional Studies in Geographic Information Technology (GIT).

High-speed internet service is required for coursework in this program.

Address

Main Boston Campus:

50 Nightingale Hall,
360 Huntington Ave.,
Boston, MA 02115-9959
Call Toll Free: 877.668.7727
cpsadmissions@neu.edu < cpsadmissions@neu.edu >

69. Penn State

<http://www.worldcampus.psu.edu/degrees-and-certificates/geographic-information-systems-gis-masters/overview>

Geographic Information Systems - GIS (Master's Degree)

Tuition rates are for the 2011–12 academic year and are assessed every semester of enrollment. \$716 per credit, 35 credits required.

Address

Call or Email

U.S. Toll Free: 800-252-3592

Local/International: 814-865-5403

Fax: 814-865-3290

Email: pennstateonline@psu.edu

Penn State World Campus

The Pennsylvania State University

128 Outreach Building

University Park PA 16802

[Driving directions to the Outreach Building.](#)

70. GeoSpatial Training Services

E-Learning for GIS Professionals - Any Time, Any Place!

Free and paid classes.

<http://www.geospatialtraining.com/>

71. Professional Tutorials

<http://www.spatialhydrology.com/tutorial.html>

Several courses offered.

<http://www.spatialhydrology.com/tutorial.html>

72. GIS Learning CD

Lessons on a CD , price \$49.95

Buy from:

http://www.supergeotek.com/products_press_GISLearningCD.aspx

73. Environmental Systems Research Institute, Inc. (Esri),

<http://training.esri.com/gateway/index.cfm?fa=main.firsttime>

Esri offers instructor-led and self-paced courses that teach GIS technology skills and best practices to accomplish GIS workflows on the desktop, server, and mobile Web. Our range of training options is designed to fit a variety of budgets and learning styles.

Esri Self-Paced Training

Web Courses

Esri web courses teach concepts that underlie GIS technology and best practices for using Esri software to accomplish GIS workflows. Web courses are affordable and convenient—learn anytime from anywhere you have access to the Internet.

Training prices vary by length of course from FREE - \$224.

<http://training.esri.com/gateway/index.cfm?fa=catalog.web>
Courses

Instructional Series Podcasts

Recordings with tips to improve your workflow, optimize your geodatabase, use new software features, and more.

<http://www.esri.com/news/podcasts/instructional-series.html>

Esri instructor-led training can be delivered as:

Traditional classroom courses

Instructor-led traditional classroom courses are taught at [Esri learning centers](#) throughout the United States

<http://training.esri.com/gateway/index.cfm?fa=catalog.traditionalClassroom>

Online classroom courses

Esri Instructor-Led Online Classroom

Take an Esri instructor-led training course from the convenience of your own desktop. Using the Internet, Web conferencing software, and a telephone, we deliver an interactive online class led by a certified Esri instructor.

<http://training.esri.com/gateway/index.cfm?fa=trainingOptions.Instructored>

<http://training.esri.com/gateway/index.cfm?fa=main.firsttime>

74. Johns Hopkins

<http://advanced.jhu.edu/academic/environmental/gis/>

[Online Certificate Program in GIS is a graduate program](#) providing a strong foundational education that delves into the principles and real-world applications of GIS.

Address

Admissions

Phone: 202.452.1940

E-mail: aapadmissions@jhu.edu

Mail: The Johns Hopkins University
1717 Massachusetts Avenue, NW, Suite 101
Washington, DC, 20036
Registration

Registration**Phone:** 202.452.1940**E-mail:** aapregistration@jhu.edu**Mail:** The Johns Hopkins University
1717 Massachusetts Avenue, NW, Suite 101
Washington, DC, 20036<http://advanced.jhu.edu/academic/environmental/gis/>**75. Northwest Missouri State University****M.S. Geographic Information Science Program**

The Master's and certificate programs require that students have access to ArcGIS and its Spatial Analyst, 3D Analyst, Network Analyst and Geostatistical Analyst extensions. For more details on software and hardware requirements, please see: [Software Requirements](#)

Address**Graduate Office**

Northwest Missouri State University

800 University Drive

Maryville, MO 64468-6001

Email: gradsch@nwmissouri.edu

Phone: 660.562.1145

<http://www.nwmissouri.edu/dept/gis/progdesc.htm>**76. University of North Dakota**<http://distance.und.edu/degree/?id=geoinfoscience2>**GISc Graduate Certificate**

The 1-year online course is designed for working professionals.

12 Credits

Interact in a Virtual Classroom

Deadlines for Lessons/Exams

In-State Tuition Regardless of Residency

Address

Live Chat/Instant Messaging: Chat "live" with our staff to get immediate answers to your questions. If we are offline, please send us a message and we will respond as soon as possible.

Local Phone: 701.777.3000
Toll Free: 1.800.CALL.UND
E-mail: UND.info@email.UND.edu

77. [Birkbeck, University of London,](#)

[MSc GISc \(Distance Learning and Evening Taught modes\)](#)

This 2-year MSc GISc Part-time Distance Learning programmes is tailored for professionals working with geographical data. The programme is delivered worldwide via the Internet.

Short Courses in GISc

Apply now for courses starting in April 2011. Short courses currently available: [Basic Principles of GISc](#), [Map Production and Spatial Data](#), [Basic GIS Analysis](#), [Independent GIS Project](#).

Cert HE/ Cert CE GISc

New for 2011 are our [Geographic Information Science \(Certificate of Higher Education\)](#) and [Geographic Information Science \(Certificate of Continuing Education\)](#) programmes.

<http://www.bbk.ac.uk/gisc/>

Address

Main office: Department of Geography,
Environment and Development Studies,
Birkbeck, University of London,
Malet Street,
London, WC1E 7HX;

tel: 020 7631 6531; fax: +44 (0) 20 7631 6498;
email: geds@bbk.ac.uk

78. The University of Southern California

GIS Degree and Graduate Certificate Career Opportunities

<http://gis.usc.edu/>

GIST Master's Program

<http://gis.usc.edu/program-overview/masters-program.asp>

GIST Graduate Certificate Program

<http://gis.usc.edu/program-overview/certificate-program.asp>

Address

GIS Distance Learning Programs

Department of Geography

College of Letters, Arts and Sciences

University of Southern California

3616 Trousdale Parkway, Suite B55

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Tel: 1-888-907-5029

Email: admission@uscgis.com

Potential employers:

GIS jobs are varied and pervasive across many different fields.

Visit [Esri's Industries Gateway](#) to learn how GIS is used across government, commercial, and educational organizations.

View the [job listings](#) for a comprehensive overview of the types of organizations currently seeking GIS professionals.

Some premier Employers are :

Geoinformatics centres: Universities, Space Application Centres, Birla Institute of Technology, NRSA, etc.

Central Government organizations/agencies: NESAC, RRSAC, ISRO, ADRIN, IARI, ICAR, etc.

Schools, Colleges and Universities:

Overseas: USA, Canada, Netherlands, Switzerland, China, Malaysia, France, Germany, Australia, etc.

Private sector: Different companies and industries. Telecommunication companies, oil industry, transportation industry, etc.

Various government agencies and local authorities: Agriculture departments, geology departments, forest departments, townplanning department, etc.

New papers/magazines: Geoinformatics columnist

Educational content development firms: Conten

Companies providing job opportunities

ESRI India, New Delhi

CyberTech Systems and Software Ltd., Mumbai

Tata Consultancy Services Ltd.

Fugro Survey India Ltd, Mumbai.

Magnasoft Consutancy Services, Bangalore

INCA Informatics Pvt. Ltd, New Delhi

Lavasa Corporation Limited, Pune.

RMSI Private Ltd.

Reliance Communication Pvt. Ltd.

Reliance Industries Ltd.

Reliance Energy Ltd.

Speck Spatial Tech Ltd.

Lepton Software Export and Research(P) Ltd

Kalyani Net Ventures Ltd., Puned

Simplex Technologies Pvt. Ltd.

Geofiny Technologies Private Limited, Chennai

Geographis (India) Pvt. Ltd., Ahmedabad.

Fugro Survey (India) Pvt Ltd.

Find a job

You can learn about thousands of open positions around the world at the following geospatial career web sites.

[Careers at Esri](#)

[Directions Magazine Jobs Listing](#)

[GIS Lounge](#)

[GIS User](#)

[Earthworks-jobs.com](#)

[GeoSearch](#)

[GISCareers.com](#)

[GIS Connection.com](#)

[GIS Jobs Clearinghouse](#)

GISJobs.com

<http://www.gis.com/content/find-gis-job>

Self employment:

One can start own Geoinformatics solution enterprise, Geoinformatics services outsourcing unit, EIA consultant, etc.

All the Best!