# **GEO-INFORMATICS ENGINEER**

Geo-Informatics engineering entails the development and use of information science infrastructure to address problems of Geography, Cartography, Geosciences and related branches of Science and Engineering.

# PERSONAL COMPETENCIES \*

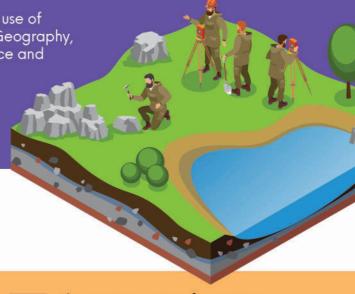
- You like working outdoors
- · You like to do experiments
- · You like science and maths
- You like to analyse problems/situations

# **SCHOLARSHIPS**

- Merit-cum-Means based Scholarship About 20,000 such engineering scholarships are awarded by the Ministry of Minority Affairs every year. The full course fees of awardees is directly paid to their institutions under this scheme. \*
- Indian Oil Educational Scholarship- The IOC Ltd offers 300 scholarships every year to eligible students. Students need to be enrolled in an undergraduate course. The scholarship particularly focuses on students with physical disabilities, women and students from North East and J&K.\*
- "Ishan Uday" Special Scholarship Scheme For promoting higher education and for encouraging children belonging to economically weaker section of the NE region, the UGC has launched "Ishan Uday" Special Scholarship Scheme for North Eastern Region students. Visit www.scholarships. gov.in the National Scholarship Portal. Under this portal there are other central government schemes offered by different departments, UGC/AICTE Schemes and State Schemes.\*
- Visit www.buddy4study.com a gateway to scholarships starting from Class XI.\*
- Scholarships are also made available in institutes based on merit
- \*(Availability of these scholarships vary from time to time)

#### LOANS

- VidyaLakshmi, www.vidyalakshmi.co.in, is a portal for students seeking education loan. This portal has been developed under the guidance of the Department of Financial Services, (Ministry of Finance), Department of Higher Education (Ministry of Human Resource Development) and Indian Banks Association (IBA). Students can view, apply and track the education loan applications on the website
- Some states have student credit cards with low interest rates, for instance, West Bengal, Odisha, Bihar, etc.
- · All banks give education loans





The approx. course fee ranges between **INR 15,000 - 14,51,000\*** for the full course.

\*(The above mentioned figures are approximate numbers. This will vary from Institute to Institute)

# ENTRY PATHWAY

1. Complete 10+2 in the Science stream (Physics, Chemistry and Mathematics)
2. Complete Bachelor's degree (B.Sc./B.E./B.Tech.) in Geo-Informatics Engineering

# OR

Complete Bachelor's degree, followed by a Master's degree (M.Sc./M.E./M.Tech.) in the same field.

# OR

Pursue a diploma in Geo-Informatics

For admissions, you must qualify entrance examination conducted at national level ( JEE Main, JEE Advanced etc.) or state level (WBJEE, AP EAMCET etc.) or institute level (VET, IP etc.)

Please check the duration of the course during enrolment



#### **EXPECTED INCOME**

The figures are indicative & subject to change

The approx. salary of a Geo-Informatics Engineer ranges between **INR 7,084** - **38,000\*** per month.

Source: https://www.payscale.com/rsearch/IN/-Job=Geographic\_Information\_Systems\_(GIS)\_Engineer/Salary



# WHERE WILL YOU WORK

Places of Work: Government or private space agency, Transport company, Civil engineering or Architectural firm, Intelligence firm, Earthquake monitoring centre, Weather-monitoring station, a Military command & control centre, a research laboratory, or even in a university.

Work Environment: Companies usually work for 5 to 6 days a week and 8 to 9 hours everyday. This may vary from company to company. Shift system might be applicable.

Opportunities for differently abled exist in this field

# WHERE WILL YOU STUDY?

The course is offered by the Department of Engineering. This list of institutes is indicative only

#### **GOVERNMENT INSTITUTES**

- 1. IIT Mumbai
- 2. Institute of Science & Technology
- 3. IIT Delhi
- 4. IIT Bangalore
- 5. IIT Kharagpur
- 6. IIT Kanpur
- 7. Andhra University College of Engineering, Visakhapatnam
- 8. College of Engineering, Guindy

# PRIVATE INSTITUTES

(Please check if institute is affiliated and accredited with UGC and AICTE before applying )

- 1. Birla Institute of Technology and Science
- 2. SRM Institute of Science and Technology Chennai
- 3. Symbiosis International University Pune
- 4. Manipal University, Jaipur
- 5. Park College of Engineering and Technology, Coimbatore
- 6. University of Petroleum and Energy Studies
- 7. Amrita School of Engineering, Kerala
- 8. Asian International University, Manipur

DISTANCE LEARNING INSTITUTE Indira Gandhi National Open University (IGNOU)

# **ONLINE COURSES**

- NPTEL\* Swayam https://nptel.ac.in/courses/ 105108073
- Udemy https://www.udemy.com/topic/gis/

\*NPTEL - National Programme on Technology Enhanced Learning. It is by the Government of India and offers a variety of courses in an audio-video form

# Search keywords...



geographic information system analyst, geo-informatics engineer, geographic information system engineer

## **EXPECTED GROWTH PATH**



Geo-Informatics Assistant → Geo-Informatics Engineer → Geo-Informatics Manager

GIS Trainee → GIS Technician → GIS Operator → GIS Executive → GIS Analyst → GIS Specialist → GIS Expert → GIS Manager → GIS Operations Manager

# **EXAMPLE FROM THE FIELD** 44



Anne Hale Miglarese's Radiant Earth Foundation provides geospatial analytics using imagery and mapping data to empower informed decision-making to help solve the developing world's greatest social, economic and environmental challenges. Prior to establishing Radiant Earth, she served as chief of the National Oceanic and Atmospheric Administration's Coastal Services Center, where she directed the remote sensing and GIS programs of the organization for 10 years. Miglarese has done both her Bachelor's and Master's in Geography from University of South Carolina.\* Source:

https://geospatialworldforum.org/2019/spea kers-bio.asp?id=gwf2019A31

\*The above information is for training purposes only and will not be used for any commercial gains.