



SAARTHI - सारथी

करियर मार्गदर्शन पोर्टल · Career Guidance Portal

"सही मार्गदर्शन, उज्ज्वल भविष्य।"

करियर शीट · CAREER SHEET

कार्टोग्राफर

Cartographers make maps - from paper maps to digital GIS, satellite imagery and navigation apps. The field blends art, science and technology, and demand is rising fast in the era of smart cities and drone surveys.



Scan for everything on this career

Salary, exams, colleges, the routes in and the steps after — all on the portal.

career.gsssjethantri.in/#/career/socst-4587

राजकीय उच्च माध्यमिक विद्यालय, जेठन्तरी

Govt. Sr. Sec. School, Jethantri · ब्लॉक समदड़ी · बालोतरा (Block Samdari · Balotra)

www.gsssjethantri.in · career.gsssjethantri.in



सुशील कुमार शर्मा

प्रधानाचार्य, रा.उ.मा.वि. जेठन्तरी · मास्टर ट्रेनर
Principal, GSSS Jethantri · Master Trainer



श्री चेनाराम चौधरी

प्रधानाचार्य, डाइट बाड़मेर
Principal, DIET Barmer



श्रीमती संघमित्रा

वरिष्ठ व्याख्याता, डाइट बाड़मेर (सहयोग)
Sr. Lecturer, DIET Barmer (Support)



भरत चौधरी

अभिकल्पना व विकास · व्याख्याता (इतिहास)
Designed & developed · Lecturer (History)

विशेष धन्यवाद · SPECIAL THANKS



सुरेन्द्र सिंह राठौड़

व्याख्याता (इतिहास) · रा.उ.मा.वि. कानाना



सुरेश कुमार सैन

व्याख्याता (भूगोल) · रा.उ.मा.वि. रामसीन मूंगड़ा



वनिता कुमारी

व्याख्याता (इतिहास) · रा.उ.मा.वि. रामसीन मूंगड़ा



कमलेश चौधरी

व्याख्याता (राजनीति विज्ञान) · रा.उ.मा.वि. टापरा

करियर मार्गदर्शन कार्यशाला, डाइट बाड़मेर (14-17 जुलाई 2026) में विकसित व लोकार्पित
Developed & unveiled at the Career Guidance Workshop, DIET Barmer (14-17 July 2026)

यह एक स्वतंत्र परियोजना है, जो सरकार की आधिकारिक करियर-मार्गदर्शन सामग्री पर आधारित है। · An independent project based on the Government's official career-guidance content.

1 About this career

Cartographers make maps - from paper maps to digital GIS, satellite imagery and navigation apps. The field blends art, science and technology, and demand is rising fast in the era of smart cities and drone surveys.

2 At a glance

Minimum qualification	Class 12 (with geography) + bachelor's in geography/cartography/geomatics
Work mode	Computer-based office work plus occasional field surveys
Demand	High - in GIS, drone mapping, smart cities and navigation companies
Top earning	Senior GIS specialists earn ₹1.5 lakh+/month

3 What you need

INTERESTS

- Deep interest in maps, geography and places
- Enthusiasm for computers and new technology
- Enjoy presenting information through data and visuals

ABILITIES

- Logical thinking and good analytical skills
- Very close attention to detail
- Good communication skills

KEY SKILLS

- GIS software - QGIS, ArcGIS
- Remote sensing and satellite image analysis
- Use of survey instruments and GPS
- Map design and understanding of symbology

- Data analysis and database basics
- Basic programming (Python) is helpful

4 How to get there

- 1 Complete Class 12 with geography as a subject.
- 2 Do a bachelor's in geography, cartography or geomatics.
- 3 Add a diploma or M.A./M.Sc. in GIS/remote sensing.
- 4 Practise on free software like QGIS and build a portfolio.
- 5 Intern with a survey or GIS company.
- 6 Apply to Survey of India, ISRO or private mapping firms.

MAIN EXAMS

- CUET UG/PG for university admission
- SSC and departmental recruitment exams for government survey posts
- UGC-NET (geography) for teaching and research

5 Where to study

GOVERNMENT INSTITUTES

- University of Rajasthan (Geography) — Jaipur, Rajasthan
- Jai Narain Vyas University (Geography) — Jodhpur, Rajasthan
- Indian Institute of Surveying & Mapping — Hyderabad, Telangana
- Jamia Millia Islamia (Geography) — New Delhi
- The Maharaja Sayajirao University of Baroda — Vadodara, Gujarat

PRIVATE INSTITUTES

- Apex University — Jaipur, Rajasthan
- Birla Institute of Technology, Mesra — Ranchi, Jharkhand

ONLINE

- IGNOU (distance programmes in geography) — Distance education

FEES

Course fees roughly ₹3,000 to ₹1,50,000; lower in government universities. Varies by institute.

SCHOLARSHIPS

- National Scholarship Portal (<https://scholarships.gov.in>)
- Vidya Lakshmi Education Loan Portal (<https://www.vidyalakshmi.co.in>)

6 What the work is like

WHERE YOU WORK

Survey agencies, engineering and architecture firms, government departments, map publishers and GIS/navigation companies.

WORK CULTURE

8-9 hours a day, 5-6 days a week; mostly computer work with project-based fieldwork. Opportunities exist for persons with disabilities.

WHO HIRES

- | | |
|--|--|
| • Survey of India | • ISRO and the National Remote Sensing Centre |
| • National Atlas and Thematic Mapping Organisation (NATMO) | • Revenue, town planning and water resources departments |
| • Mapping companies like Google and MapmyIndia | • GIS and drone-survey consulting firms |

DEMAND (2026)

Demand for GIS and mapping professionals is high in 2026, driven by the SVAMITVA scheme, smart cities, drone surveys and location-based apps.

7 Career growth

- 1 Intern
- 2 Cartographer/GIS analyst
- 3 Senior cartographer
- 4 GIS manager/Project head

EARNINGS

Starting	₹25,000-35,000
Mid level	₹45,000-70,000
Senior level	₹80,000-1,50,000

As per NCS, entry pay is about ₹29,000-30,000 and ₹43,000-44,000 per month with 6-10 years' experience; private GIS roles can pay more.

8 The good parts · The challenges

The good parts

- Fast-growing technical field with demand across industries
- Interesting blend of art, science and technology
- Opportunities in both government and private sectors

The challenges

- Long hours of detailed on-screen work
- Technology keeps changing - continuous learning is a must
- Field surveys may involve travel to difficult terrain

9 Real-life journeys

Radhanath Sikdar

Mathematician and Chief Computer, Great Trigonometrical Survey of India

From an ordinary Bengali family, Radhanath Sikdar computed survey data in 1852 to establish that Everest is the world's highest peak - one of the greatest feats in mapping history.

Wikipedia · https://en.wikipedia.org/wiki/Radhanath_Sikdar

Marie Tharp

Oceanographic cartographer who first mapped the ocean floor

Barred from research ships, American cartographer Marie Tharp mapped the Atlantic floor from raw data and changed science; the Library of Congress named her among the four greatest cartographers of the 20th century.

Wikipedia · https://en.wikipedia.org/wiki/Marie_Tharp

10 If this route does not work out

One exam or one attempt does not close the door. The same subjects also open these routes — entry is usually easier, and you can return to this field later.

- Geographer
- Curator

11 Sources & further reading

1. Rajasthan Career Guidance portal - official career page — <https://cg.rajasthan.gov.in/careerguidance/hi/career/cartographer-%e0%a4%95%e0%a4%be%e0%a4%b0%e0%a5%8d%e0%a4%9f%e0%a5%8b%e0%a4%97%e0%a5%8d%e0%a4%b0%e0%a4%be%e0%a4%ab%e0%a4%b0/>
2. National Career Service portal — <https://www.ncs.gov.in>
3. National Scholarship Portal — <https://scholarships.gov.in>
4. NIRF institute rankings — <https://www.nirfindia.org>
5. Vidya Lakshmi education loan portal — <https://www.vidyalakshmi.co.in>



And 770+ more careers — the whole portal

Interest and aptitude tests, government jobs, skill courses and a CV builder — free, no login, and it works offline.

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