



SAARTHI - सारथी

करियर मार्गदर्शन पोर्टल · Career Guidance Portal

"सही मार्गदर्शन, उज्ज्वल भविष्य।"

करियर शीट · CAREER SHEET

सिरेमिक टेक्नोलॉजिस्ट/इंजीनियर

Ceramic engineers develop tiles, insulators, electronic and medical materials from clay, glass and advanced ceramics.

With ceramic-glass units in Bikaner and across Rajasthan, the field has special importance in the state.



Scan for everything on this career

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

career.gsssjethantri.in/#/career/eng-4686

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

Ceramic engineers develop tiles, insulators, electronic and medical materials from clay, glass and advanced ceramics. With ceramic-glass units in Bikaner and across Rajasthan, the field has special importance in the state.

2 At a glance

Minimum qualification	Diploma or B.Tech/BE (Ceramic)
Work mode	Factory + laboratory
Demand	Steady — growing with construction and electronics
Top earning	₹1,80,000+ per month (research head)

3 What you need

INTERESTS

- Making and shaping things
- Experimenting and exploring new materials
- Interest in science and maths

ABILITIES

- Understanding of chemistry and materials science
- Focus on precision and quality
- Ability to work independently

KEY SKILLS

- Ceramic processing and kiln technology
- Knowledge of glazes, glass and refractories
- Lab instruments and data analysis
- Material testing and quality control
- Improving production processes
- Team and plant coordination

4 How to get there

- 1 Choose Science (PCM) after Class 10
- 2 Pass Class 12 with Physics, Chemistry, Maths
- 3 Do B.Tech in Ceramic Engineering via JEE/REAP, or take a diploma
- 4 Intern at ceramic/glass units
- 5 Take GATE for M.Tech or research

MAIN EXAMS

- JEE Main / JEE Advanced
- REAP (Rajasthan engineering admission)
- GATE (M.Tech/PSUs)

5 Where to study

GOVERNMENT INSTITUTES

- CET Bikaner (Ceramic Engineering) — Bikaner, Rajasthan (<https://btu.ac.in>)
- Bikaner Technical University — Bikaner, Rajasthan (<https://btu.ac.in>)
- Rajasthan Technical University (RTU) — Kota, Rajasthan (<https://rtu.ac.in>)
- IIT (BHU) Varanasi — Varanasi, Uttar Pradesh (<https://www.iitsystem.ac.in>)
- NIT Rourkela — Rourkela, Odisha
- Government College of Engineering & Ceramic Technology — Kolkata, West Bengal

PRIVATE INSTITUTES

- PDA College of Engineering — Kalaburagi, Karnataka
- AKS University — Satna, Madhya Pradesh

ONLINE

- NPTEL (Materials/Ceramics) — Online (<https://nptel.ac.in>)
- IGNOU — Distance education (<https://www.ignou.ac.in>)

FEES

Fees are about ₹31,000-1,00,000 per year in government institutes; up to ₹1,00,000-2,50,000 per year in private ones.

SCHOLARSHIPS

- National Scholarship Portal (NSP) (<https://scholarships.gov.in>)
- Vidya Lakshmi Education Loan (<https://www.vidyalakshmi.co.in>)
- Buddy4Study (<https://www.buddy4study.com>)
- AICTE Student Schemes (<https://www.aicte-india.org/schemes/students-development-schemes>)

6 What the work is like

WHERE YOU WORK

Ceramic and tile factories, glass and refractory units, government research labs (CGCRI), consulting firms.

WORK CULTURE

5-6 days a week, 8-9 hours daily; shift systems may apply in factories. Opportunities exist for persons with disabilities.

WHO HIRES

- Tile-ceramic companies like Kajaria and Somany
- Refractory and steel plants
- Labs like CSIR-CGCRI
- Glass companies (Saint-Gobain, Borosil)
- Electronics and insulator manufacturers
- Ceramic units of Bikaner-Jaipur

DEMAND (2026)

Advanced ceramics are increasingly needed in construction, electronics, EV batteries and biomedical implants; with few specialists, qualified engineers find good openings.

7 Career growth

- 1 Research Trainee
- 2 Ceramic Technologist/Engineer
- 3 Associate Manager (Research/Production)
- 4 Research/Plant Manager
- 5 Head of Research

EARNINGS

Starting	₹25,000-40,000
Mid level	₹50,000-90,000
Senior level	₹1,00,000-1,80,000+

Pay is higher in research and advanced ceramics (electronics/medical); figures are monthly and indicative.

8 The good parts · The challenges

The good parts

- Niche field with less competition
- Local industry and raw material in Rajasthan
- Diverse roles from research to production

The challenges

- Course available in only a few institutes
- Dusty, hot factory environments
- Lower starting pay than IT

9 Real-life journeys

Dr. Uma Chowdhry

Ceramic Scientist, former Chief Science Officer

Born in Mumbai, Uma Chowdhry studied physics at the University of Bombay and earned a PhD in materials science in the US. In 33 years at DuPont working on ceramics and superconductors, she rose to Chief Science and Technology Officer.

Science History Institute · <https://www.sciencehistory.org/education/scientific-biographies/uma-chowdhry/>

Prof. Bikramjit Basu

Ceramics and Biomaterials Scientist, IISc

Educated at NIT Durgapur, Bikramjit Basu earned a PhD in ceramics in Belgium and moved from IIT Kanpur to IISc Bangalore. His work on bone-implant ceramics won him the Shanti Swarup Bhatnagar Prize.

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

10 Sources & further reading

1. Rajasthan Career Guidance Portal — <https://cg.rajasthan.gov.in/careerguidance/hi/career/%e0%a4%b8%e0%a4%bf%e0%a4%b0%e0%a5%87%e0%a4%ae%e0%a4%bf%e0%a4%95-%e0%a4%9f%e0%a5%87%e0%a4%95%e0%a5%8d%e0%a4%a8%e0%a5%8b%e0%a4%b2%e0%a5%89%e0%a4%9c%e0%a4%bf%e0%a4%b8%e0%a5%8d%e0%a4%9f-%e0%a4%87%e0%a4%82/>
2. CSIR-Central Glass & Ceramic Research Institute — <https://www.cgcri.res.in>
3. National Career Service (NCS) — <https://www.ncs.gov.in>
4. National Scholarship Portal — <https://scholarships.gov.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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