



SAARTHI - सारथी

करियर मार्गदर्शन पोर्टल · Career Guidance Portal

"सही मार्गदर्शन, उज्ज्वल भविष्य।"

करियर शीट · CAREER SHEET

रोबोटिक्स इंजीनियर

Robotics engineers design, build and program robots and automated machines used in factories, agriculture, healthcare and space. Blending mechanical, electronics and AI, it is a fast-growing 2026 field.



Scan for everything on this career

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

career.gsssjethantri.in/#/career/robotics-engineer

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

Robotics engineers design, build and program robots and automated machines used in factories, agriculture, healthcare and space. Blending mechanical, electronics and AI, it is a fast-growing 2026 field.

2 At a glance

Minimum qualification	B.Tech (Mechanical/ECE/CSE/Robotics) or diploma + strong maths
Work mode	Lab and office, some field work to test robots
Demand	High and rising (automation, drones)
Top earning	₹20–40 lakh/year or more

3 What you need

INTERESTS

- Building things by hand and tinkering with machines
- Maths and how machines work
- Solving problems

ABILITIES

- Logical and spatial thinking
- Patience to test and debug
- Integrating hardware and software

KEY SKILLS

- Programming (Python, C++)
- Electronics and sensors
- CAD design
- Maths: linear algebra, calculus
- ROS (Robot Operating System)
- Control systems and mechanics
- AI and machine vision

4 How to get there

- 1 Complete 10+2 Science (Physics, Chemistry, Maths)
- 2 Crack JEE and do B.Tech in Robotics/Mechanical/ECE/CSE
- 3 Alternative: mechatronics diploma then B.Tech
- 4 Learn ROS, Arduino and Python online
- 5 Build robot projects and a portfolio
- 6 Do M.Tech in robotics for advanced roles

MAIN EXAMS

- JEE Main / JEE Advanced for B.Tech
- GATE (ME/EC/CS) for M.Tech / PSU

5 Where to study

GOVERNMENT INSTITUTES

- MNIT Jaipur — Jaipur, Rajasthan (<https://www.careers360.com/university/malaviya-national-institute-of-technology-jaipur>)
- IIT Jodhpur — Jodhpur, Rajasthan (<https://www.iitj.ac.in>)
- IIIT Kota — Kota, Rajasthan (<https://www.collegepravesh.com/engineering-colleges/iiit-kota/>)
- IIT Delhi / IIT Bombay — Delhi / Mumbai

PRIVATE INSTITUTES

- BITS Pilani — Pilani, Rajasthan
- Manipal University Jaipur — Jaipur, Rajasthan
- LNMIIT Jaipur — Jaipur, Rajasthan
- JECRC University Jaipur — Jaipur, Rajasthan

ONLINE

- Coursera (Robotics Specialization) — Online (<https://www.coursera.org>)
- NPTEL (Robotics / Control) — Online (<https://nptel.ac.in>)
- edX / The Construct (ROS) — Online (<https://www.edx.org>)

FEES

About ₹1–2 lakh/year at government institutes; ₹2–4 lakh/year at private colleges. Online courses range from free to ₹50,000.

SCHOLARSHIPS

- National Scholarship Portal (NSP) (<https://scholarships.gov.in>)
- AICTE Pragati Scholarship (for girls) (<https://www.aicte-india.org/schemes/students-development-schemes>)
- Rajasthan SJE Scholarship Portal (<https://sje.rajasthan.gov.in/>)
- Vidya Lakshmi Education Loan Portal (<https://www.vidyalakshmi.co.in>)

6 What the work is like

WHERE YOU WORK

R&D labs, manufacturing and automation firms, aerospace/defence, IT and robotics startups

WORK CULTURE

A mix of desk design and field testing; teamwork; 6 days a week, 8–9 hours, occasional overtime; freelance and entrepreneurship possible

WHO HIRES

- | | |
|------------------------------|--|
| • ABB, KUKA, Boston Dynamics | • GreyOrange and Addverb (Indian robotics) |
| • DRDO, ISRO, Bharat Forge | • Tata and Mahindra (automation) |
| • Manufacturing companies | • Robotics startups |

DEMAND (2026)

In 2026 demand is rising with automation, drones and warehouse robotics; 'Make in India' is boosting opportunities in India.

7 Career growth

- 1 Junior Engineer
- 2 Senior Engineer
- 3 Team Lead / Project Manager

4 Robotics Consultant

5 Research Scientist

EARNINGS

Starting	₹4-8 लाख/वर्ष
Mid level	₹8-20 लाख/वर्ष
Senior level	₹20-40 लाख/वर्ष या अधिक

Combining hardware with AI and software skills, and product companies, pay more.

8 The good parts · The challenges

The good parts

- Hands-on, creative and exciting
- Growing demand with automation
- Opportunities across many industries

The challenges

- Must learn both hardware and software
- Hardware is costly and slow to iterate
- Requires strong maths

9 Real-life journeys

Radhika Nagpal

Robotics professor at Princeton University, swarm robotics expert

Of Indian origin, Radhika Nagpal is among the world's leading robotics researchers. She built 'Kilobot' swarm robots that cooperate like ants, and is a strong voice for women in robotics.

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

Diwakar Vaish

Roboticist, creator of 'Manav' – India's first 3D-printed humanoid robot

At a young age Diwakar Vaish built 'Manav', India's first 3D-printed humanoid robot, made for just ₹1.5 lakh. He shows that robotics innovation is possible in India even with limited resources.

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

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.

- Computer Hardware Engineer
- AI Product Manager
- NLP Engineer

11 Sources & further reading

1. Rajasthan Govt career guidance — <https://cg.rajasthan.gov.in/careerguidance/>
2. Robotics courses (Coursera) — <https://www.coursera.org>
3. NPTEL robotics courses — <https://nptel.ac.in>
4. IIT Jodhpur — <https://www.iitj.ac.in>



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