



फिटर – मैकेनिकल असेंबली

A Fitter – Mechanical Assembly builds machines and mechanical products by joining their separate parts and sub-assemblies into a finished whole. Reading drawings and specifications, they fit components in place using hand tools,...



Scan for everything on this career

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

career.gsssjethantri.in/#/career/voc-6281

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

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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

A Fitter – Mechanical Assembly builds machines and mechanical products by joining their separate parts and sub-assemblies into a finished whole. Reading drawings and specifications, they fit components in place using hand tools, power tools and manual machine tools, align them accurately, and then check and test the work with measuring instruments to make sure the finished product performs to the required quality. It is a backbone trade of the automobile, machine-tool and manufacturing industries — engines, pumps, gearboxes and machines all come together through these skilled hands.

2 At a glance

Minimum qualification	Class 10 pass + 1 yr as fitter/machinist (NSQF course)
Course duration	ITI Fitter 2 years / assembly module 6–12 months
Starting salary	₹12,000–16,000/month
Work mode	Full-time at manufacturing plant/assembly shop (shifts)

3 What you need

INTERESTS

- Enjoy assembling things and taking them apart to see how they work
- Interest in hands-on, practical work within a team
- Curiosity about how machines and parts function

ABILITIES

- Good hand-eye coordination and attention to detail
- Physical fitness, patience and teamwork
- Technical aptitude to read drawings and measurements

KEY SKILLS

- Reading and interpreting engineering drawings and assembly specifications
- Fitting, aligning and torque-setting of components
- Inspection, testing and quality control of finished assemblies
- Workplace safety, 5S and coordination with the team
- Safe use of hand tools, power tools and manual machine tools
- Precise measurement with vernier, micrometer and gauges
- Fault-finding and minor repair/adjustment

4 How to get there

- 1 Pass Class 10 with a strong grasp of basic maths and science.
- 2 Complete the Fitter (or Fitter Fabricator/Machinist) trade at an ITI/NSQF centre.
- 3 Gain about one year of practical experience as a fitter or machinist.
- 4 Enrol in the Fitter – Mechanical Assembly NSQF module/apprenticeship to specialise.
- 5 Join a manufacturing/auto plant as an assembly operator and keep upskilling.
- 6 In Rajasthan, also use RSLDC/PMKVY centres for training and placement support.

MAIN EXAMS

- AITT (All India Trade Test) and NCVT certification for ITI Fitter
- Apprenticeship registration and trade assessment via apprenticeshipindia.gov.in

5 Where to study**GOVERNMENT INSTITUTES**

- राजकीय औद्योगिक प्रशिक्षण संस्थान (ITI) – फिटर ट्रेड — Jaipur and across Rajasthan (<https://livelihoods.rajasthan.gov.in/rsldc/>)
- राजस्थान कौशल एवं आजीविका विकास निगम (RSLDC) — Jaipur, Rajasthan (<https://livelihoods.rajasthan.gov.in/rsldc/>)
- राष्ट्रीय कौशल विकास निगम (NSDC) – प्रशिक्षण केंद्र खोजें — All-India network (<https://www.nsdcindia.org/find-nsdc-training-centre>)
- एनआईओएस व्यावसायिक प्रशिक्षण केंद्र — Online / locate nearest centre (<https://voc.nios.ac.in/registration/locate-study-centre>)

PRIVATE INSTITUTES

- Automotive Skills Development Council (ASDC) — All-India / centres in Rajasthan (<https://www.asdc.org.in/>)
- Capital Goods & Strategic Skills Council (CGSSC) — All-India / New Delhi (<https://cgssc.org/>)
- Bhartiya Skill Development University (BSDU) — Jaipur, Rajasthan (<https://www.bsdu.in/>)

ONLINE

- स्किल इंडिया डिजिटल हब — Online (<https://www.skillindiadigital.gov.in/>)
- अप्रेंटिसशिप इंडिया पोर्टल (NATS/NAPS) — Online (<https://www.apprenticeshipindia.gov.in/>)

FEES

At government ITIs and most public skilling schemes (NSDC, RSLDC, PMKVY) the Fitter course is free or very low-cost. Private ITIs/training institutes may charge roughly ₹10,000–40,000 per year. During an apprenticeship you actually earn a stipend.

SCHOLARSHIPS

- राष्ट्रीय छात्रवृत्ति पोर्टल (NSP) (<https://scholarships.gov.in/>)
- Buddy4Study – ITI/Vocational Scholarships (<https://www.buddy4study.com/article/iti-scholarships>)
- SJE Rajasthan Scholarships (<https://sje.rajasthan.gov.in/>)

6 What the work is like

WHERE YOU WORK

Automobile and two-wheeler plants, machine-tool builders, pump/compressor and engine makers, capital-goods factories, machine distributors and PSU assembly shops.

WORK CULTURE

Typically 5–6 days a week, minimum 8 hours a day; shift systems and overtime are common. Work is mostly on the assembly shop/shopfloor, standing, with mandatory safety gear. Women's participation in this field is now rising fast, and there are opportunities abroad too.

WHO HIRES

- | | |
|---|--|
| • Automobile and two-wheeler makers (Maruti Suzuki, Tata Motors, Hero MotoCorp) | • Machine-tool and industrial equipment manufacturers and machine builders |
| • Auto-component and assembly suppliers (Bosch, Endurance, Motherson) | • Pump, compressor, engine and capital-goods companies (L&T, Kirloskar) |

- Public-sector units — BHEL, HAL, railway workshops
- Manufacturing units in Rajasthan's industrial belts (Neemrana, Bhiwadi, Khushkhera)

DEMAND (2026)

Driven by 'Make in India' and the fast-growing automobile, EV, capital-goods and machine-tool industries, demand for skilled assembly fitters stays strong. Every assembly line — in Rajasthan's Neemrana-Bhiwadi industrial corridors and in plants across the country — needs trained fitters. With experience the path opens to supervisor/quality roles and overseas opportunities, making it a stable career.

7 Career growth

- 1 Assembly Fitter / Trainee Operator
- 2 Senior Fitter – Mechanical Assembly
- 3 Assembly Supervisor / Team Leader
- 4 Manager – Manufacturing / Production

EARNINGS

Starting	₹12,000–16,000/माह
Mid level	₹18,000–28,000/माह
Senior level	₹32,000–50,000+/माह

Per Indeed (2026), a fitter in India earns on average about ₹19,000/month and an assembler about ₹19,500/month; in industrial cities like Hosur, Bengaluru and Gurgaon it can be considerably higher. With experience, moving into supervisor/manager roles raises income significantly; PSU and government jobs offer better pay scales and stability. Figures are indicative and vary by location/company.

8 The good parts · The challenges

The good parts

- Steady demand and stable jobs in the 'Make in India' and auto/EV industries
- Hands-on skill, earning during apprenticeship, and opportunities abroad
- A clear path to grow into supervisor and production manager

The challenges

- Shift duty, long hours on your feet, and shopfloor noise/heat
- Strict safety compliance needed; carelessness risks injury
- Entry-level pay is limited; continuous upskilling is needed to advance

9 Real-life journeys

Dhanashree Dipak Murbade

Super Team Leader, Tata Motors all-women assembly line (Pune)

Dhanashree Dipak Murbade, from Murbad in Thane district, earned a diploma in mechanical engineering but could not study further because of financial constraints. She joined Tata Motors' all-women assembly line at the Pune plant — which builds the Harrier and Safari SUVs — as an ordinary assembly operator, and on the strength of hard work and skill was promoted to 'Super Team Leader' in just 18 months. She is now pursuing a degree course supported by the company. Her story shows that a young woman on the mechanical-assembly shopfloor can rise quickly from operator to supervisor.

Tata Group Newsroom · <https://www.tata.com/newsroom/careers/all-women-car-assembly-line-tata-motors>

Ajay Kumar Kar

WorldSkills CNC Milling competitor turned supervisor, Central Tool Room & Training Centre, Bhubaneswar

Ajay Kumar Kar honed his machining and fitting skills on the shopfloor so thoroughly that he was chosen to represent India in the CNC Milling trade at the WorldSkills competition in São Paulo in 2015. Today he supervises a team of eighteen employees at the Central Tool Room & Training Centre in Bhubaneswar and makes precision hardware parts for the Indian Space Research Organisation (ISRO). His journey shows how a skilled technician on the manufacturing shopfloor can, through hard work, rise to a supervisor and specialist role.

WorldSkills India · <https://worldskillsindia.co.in/life-after-worldskill.php>

10 Sources & further reading

1. Rajasthan Career Guidance – Fitter – Mechanical Assembly — <https://cg.rajasthan.gov.in/careerguidance/hi/career/%e0%a4%a4%b0-%e0%a4%ae%e0%a5%88%e0%a4%95%e0%a5%87%e0%a4%a8%e0%a4%bf%e0%a4%95%e0%a4%b2-%e0%a4%85%e0%a4%b8%e0%a5%87%e0%a4%82%e0%a4%ac%e0%a4%b2%e0%a5%80/>
2. Indeed – Fitter Salary in India (2026) — <https://in.indeed.com/career/fitter/salaries>
3. Indeed – Assembler Salary in India (2026) — <https://in.indeed.com/career/assembler/salaries>
4. Automotive Skills Development Council (ASDC) — <https://www.asdc.org.in/>
5. Apprenticeship India Portal — <https://www.apprenticeshipindia.gov.in/>



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