



SAARTHI - सारथी

करियर मार्गदर्शन पोर्टल · Career Guidance Portal

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करियर शीट · CAREER SHEET

भारतीय रेलवे सेवा सिग्नल इंजीनियर्स

IRSSE officers plan, install and maintain the railways' signalling and telecom systems - interlocking, train control, Kavach (ATP) and communication networks - keeping trains safe and on time. This Group-A gazetted post is filled...



Scan for everything on this career

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

career.gsssjethantri.in/#/career/indian-railway-service-of-signal-engineers

राजकीय उच्च माध्यमिक विद्यालय, जेठन्तरी

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

IRSSE officers plan, install and maintain the railways' signalling and telecom systems - interlocking, train control, Kavach (ATP) and communication networks - keeping trains safe and on time. This Group-A gazetted post is filled through UPSC ESE (IES) and is now the S&T cadre of IRMS.

2 At a glance

Service class	Group-A gazetted officer
Selection exam	UPSC ESE (IES)
Minimum qualification	B.E./B.Tech (ECE/EEE)
Training institute	IRISET, Secunderabad

3 What you need

INTERESTS

- Science and electronics
- Leadership and systems management
- Mathematics and logic

ABILITIES

- Technical and analytical thinking
- Ability to lead a team
- Strong mathematical ability

KEY SKILLS

- Signalling and interlocking systems
- Kavach / train-control technology
- Project and expenditure management
- Leadership and coordination
- Telecom and networking
- Electronics and microprocessors
- Problem-solving and safety analysis

4 How to get there

- 1 Pass 10+2 with Physics, Chemistry, Maths.
- 2 Complete a B.E./B.Tech in Electronics/Telecom or Electrical Engineering.
- 3 Clear UPSC ESE (IES) - Prelims, Mains and Interview.
- 4 Get appointed as an IRMS (Signal & Telecom) Group-A officer.
- 5 Undergo training at IRISSET, Secunderabad and NAIR, Vadodara.

MAIN EXAMS

- UPSC Engineering Services Examination (ESE/IES)
- GATE (optional - for PSUs / M.Tech)

5 Where to study

GOVERNMENT INSTITUTES

- IIT Madras — Chennai, Tamil Nadu (<https://www.iitm.ac.in>)
- IIT Kanpur — Kanpur, Uttar Pradesh
- IIT Jodhpur — Jodhpur, Rajasthan
- MNIT Jaipur — Jaipur, Rajasthan (<https://mnit.ac.in>)
- Govt Engineering College Jabalpur — Jabalpur, Madhya Pradesh

PRIVATE INSTITUTES

- BITS Pilani — Pilani, Rajasthan
- Manipal University Jaipur — Jaipur, Rajasthan
- VIT Vellore — Vellore, Tamil Nadu

ONLINE

- NPTEL - Principles of Communication Systems — Online (<https://onlinecourses.nptel.ac.in>)
- NPTEL - Digital Signal Processing — Online (<https://onlinecourses.nptel.ac.in>)
- स्वयं (SWAYAM) — भारत सरकार के निःशुल्क ऑनलाइन कोर्स — Free (<https://swayam.gov.in/>)
- राष्ट्रीय डिजिटल पुस्तकालय (NDLI) — Free books and study material (<https://ndl.iitkgp.ac.in/>)
- एन.सी.ई.आर.टी. — निःशुल्क पाठ्यपुस्तकें — The foundation for general knowledge, maths and science (<https://ncert.nic.in/>)

FEES

B.E./B.Tech engineering fees roughly Rs 68,000 - 2,00,000 (varies by institute). Post-ESE training is free and paid.

SCHOLARSHIPS

- National Scholarship Portal (NSP) (<https://scholarships.gov.in>)
- Buddy4Study (<https://www.buddy4study.com>)
- Rajasthan SJE Scholarships (<https://sje.rajasthan.gov.in>)
- Vidya Lakshmi Education Loan (<https://www.vidyalakshmi.co.in>)

6 What the work is like

WHERE YOU WORK

Indian Railways zones and divisions, signal cabins, control rooms, relay rooms and trackside sites.

WORK CULTURE

Mix of office and field work; leading teams; local travel; 5-6 days a week, 8-9 hours. Opportunities available for persons with disabilities.

WHO HIRES

- | | |
|------------------------------|---------------------------------------|
| • Indian Railways (17 zones) | • Konkan Railway Corporation |
| • RailTel Corporation | • DFCCIL |
| • NHSRCL (Bullet Train) | • Metro Rail corporations (DMRC etc.) |

DEMAND (2026)

Rising demand - the Kavach safety system, automatic signalling and network modernisation are rapidly increasing the need for S&T engineers. One thing to be clear about — the "demand" described above counts posts, not your chance of getting one. Selection is by open competition and the number of applicants runs to many times the number of posts, so most candidates are not selected in any given recruitment. That is not an argument against this career; it is an argument against making it your only plan. Keep studying or building a skill alongside your preparation, so that the year is not lost whichever way the result goes.

7 Career growth

- 1 Assistant Signal & Telecom Engineer

- 2 Senior Signal & Telecom Engineer
- 3 Deputy Chief Signal & Telecom Engineer
- 4 Chief Signal Engineer / Chief Communication Engineer
- 5 Principal Chief Signal & Telecom Engineer
- 6 General Manager
- 7 Member, Railway Board

EARNINGS

Starting	₹56,100 (मूल, लेवल-10)
Mid level	₹1,31,100 – ₹1,51,100 (लेवल 12-13)
Senior level	₹2,25,000 (शीर्ष/अपेक्स)

The starting figure is BASIC PAY — the entry basic at pay matrix Level 10 — so that it can be compared directly against other careers. Dearness allowance (60% of basic since 1 January 2026) and house rent allowance are added on top of it, so take-home pay is appreciably higher. The mid-level and senior figures are approximate monthly income including allowances, not basic pay. Starts at Group-A Level 10 (7th CPC); DA, HRA, housing and medical benefits additional. The figures above rest on the 7th Central Pay Commission matrix, which is what applies as of 16 August 2026. The Union Cabinet approved the Terms of Reference of the 8th Central Pay Commission on 28 October 2025, and it must report within 18 months of its constitution. It has not reported yet, so no revised pay scale exists — but these figures will change. Dearness allowance has been 60% of basic pay since 1 January 2026.

8 The good parts · The challenges**The good parts**

- Job security, prestige and Group-A status
- Work on cutting-edge tech (Kavach, automatic signalling)
- Good pay, housing and railway perks

The challenges

- Frequent transfers and field postings
- High responsibility linked to safety
- On-call work during emergencies/nights

9 Real-life journeys

Gorantla Sai Charan

ESE 2023 All-India Rank 1 (E&T)

Sai Charan secured All-India Rank 1 in Electronics & Telecommunication in ESE 2023 - the very stream that leads into the railways' signal and telecom service.

MADE EASY · <https://www.youtube.com/watch?v=zYiFRaOD98k>

M. Kalavathy

First woman IRSSE officer; Chief Signal Engineer, Southern Railway

M. Kalavathy became the first woman to join the Indian Railway Service of Signal Engineers (IRSSE), in the 1981 batch, and rose to Chief Signal Engineer on the Southern Railway zone - showing that women can lead the railways' signalling and telecom systems.

Google Arts & Culture (Heritage Directorate, Indian Railways) · <https://artsandculture.google.com/asset/m-kalavathy/igHSskKf9Dde5Q?hl=en>

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.

- Indian Railway Service of Engineers
- Indian Railway Service of Mechanical Engineers
- Indian Railway Service of Electrical Engineers

11 Sources & further reading

1. Rajasthan Career Guidance Portal — <https://cg.rajasthan.gov.in/careerguidance/hi/career/%e0%a4%ad%e0%a4%be%e0%a4%b0%e0%a4%a4%e0%a5%80%e0%a4%af-%e0%a4%b0%e0%a5%87%e0%a4%b2%e0%a4%b5%e0%a5%87-%e0%a4%b8%e0%a5%87%e0%a4%b5%e0%a4%be-%e0%a4%b8%e0%a4%bf%e0%a4%97%e0%a5%8d%e0%a4%a8%e0%a4%b2/>
2. IRISSET, Secunderabad — <https://iriset.indianrailways.gov.in>

3. UPSC Engineering Services Examination — <https://upsc.gov.in>
4. Kavach - Indian Railways safety system — [https://en.wikipedia.org/wiki/Kavach_\(train_protection_system\)](https://en.wikipedia.org/wiki/Kavach_(train_protection_system))
5. Indian Railway Management Service (IRMS) — https://en.wikipedia.org/wiki/Indian_Railway_Management_Service
6. 8th Central Pay Commission — Cabinet approval of the Terms of Reference (PIB, 28 October 2025) — <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2183289>

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