

SPACE CAREER NAVIGATOR 2026-27

Your Guide to Careers Beyond Rocket Science

50+ Career Pathways
Degrees & Skills
Internships
Emerging Space Domains
India + Global Opportunities

SPACE IS NOT ONLY FOR ROCKET SCIENTISTS.

A practical orientation guide for students and professionals exploring technical, commercial, legal, policy, geospatial, security, scientific and entrepreneurial careers across the space ecosystem.

ACADEMIC ECOSYSTEM TO EXPLORE

IIST • IIT Kanpur SPASE • IIT Bombay • IISc • IIT Madras • IIT Delhi • IIM Ahmedabad / IIM Bangalore
CU Boulder • MIT • Stanford • GWU Space Policy Institute • International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

How to Use This Guide

This handbook expands the original Space Career Navigator into a structured career-orientation resource. Begin by understanding the ecosystem, identify two or three domains, map the skills required, build evidence of capability and then connect with relevant institutions, mentors or employers.

Do not read it merely as a list of job titles. Read it as a map of problems that the space ecosystem needs people to solve.

What to focus on

- Mark three domains that genuinely interest you.
- Compare your present degree or experience with the skill requirements.
- Choose one portfolio project and one experience-building opportunity.
- Revisit your shortlist every six months as the sector evolves.

Explore widely. Specialise deliberately. Build visible evidence of capability.

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ACADEMIC ECOSYSTEM TO EXPLORE

IIST • IIT Kanpur SPASE • IITs • IISc • IIMs • leading Indian universities • CU Boulder • MIT • Stanford International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

The Space Ecosystem: Upstream, Midstream & Downstream

Space careers exist across a value chain. Upstream creates and launches infrastructure. Midstream operates assets and transforms raw data into usable services. Downstream applies those services to real-world problems.

Segment	Typical activities
Upstream	Launch vehicles, satellites, payloads, components, ground systems
Midstream	Mission operations, data platforms, cloud, analytics, SSA/SDA
Downstream	EO/GEOINT, navigation, connectivity, climate, finance, defence applications

Your degree does not determine one segment. Many roles operate across all three.

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RELEVANT INSTITUTIONS

**IIST • IIT Kanpur SPASE • IIT Bombay Aerospace • IISc Aerospace • IIT Madras Aerospace • CU Boulder
MIT AeroAstro • TU Delft**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

The Strategic Space Domain

Strategic space examines how space capabilities influence national power, security, economic resilience, technology leadership and decision advantage. It is inherently interdisciplinary: engineering explains what is technically possible; economics and business determine what can scale; law and policy shape permissible activity; security studies examine risk and competition; data and intelligence convert systems into decision advantage.

What to focus on

- Space policy and governance
- Space security and resilience
- Military-space applications
- Space economy and industrial capacity
- Technology sovereignty and supply-chain resilience
- Space diplomacy and international cooperation

Strategic space rewards people who can connect disciplines, not merely master one vocabulary.

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STRATEGIC-SPACE ACADEMIC PATHWAYS

IIT Kanpur SPASE • IIST • selected IIT/IIM interdisciplinary centres • GWU Space Policy Institute
King's College London • Leiden University • International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Aerospace Engineering

Aerospace engineers contribute to vehicle structures, aerodynamics, thermal environments, systems integration and mission design. Space-sector work may involve launch vehicles, spacecraft structures or specialised subsystems.

What to focus on

- Mechanics and structures
- Thermal and fluid fundamentals
- CAD/CAE and simulation
- Systems engineering
- Testing and verification

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AEROSPACE ENGINEERING

**IIST • IIT Bombay • IIT Kanpur • IIT Madras • IISc • CU Boulder • MIT • Stanford • TU Delft
Cranfield University**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Satellite Systems Engineering

Satellite systems engineers connect payload, power, communications, attitude control, thermal, software and ground interfaces into one functioning mission.

What to focus on

- Systems architecture
- Requirements management
- Subsystem interfaces
- Verification and validation
- Mission lifecycle thinking

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SATELLITE SYSTEMS & MISSION ENGINEERING

IIST • IIT Kanpur SPASE • IIT Bombay • IISc • CU Boulder • MIT • University of Surrey • TU Delft

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Payload & Sensor Engineering

Payload engineers work on the instruments that give a satellite its mission value: cameras, radars, communication payloads and scientific sensors.

What to focus on

- Optics or RF fundamentals
- Sensor physics
- Calibration
- Signal processing
- Payload-data understanding

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PAYLOADS, OPTICS & SENSORS

**IIST • IISc • IIT Bombay • IIT Kanpur • IIT Delhi • CU Boulder / LASP • University of Arizona
University of Leicester**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Propulsion & Launch Systems

Propulsion and launch careers cover engines, propellants, stages, launch operations and safety. They are specialised technical routes requiring strong engineering fundamentals.

What to focus on

- Thermodynamics
- Fluid mechanics
- Combustion/propulsion
- Testing and safety
- Launch operations

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PROPULSION & LAUNCH SYSTEMS

IIST • IIT Bombay • IIT Kanpur • IIT Madras • IISc • MIT • Purdue University • Cranfield University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Avionics, RF & Communications

Avionics and communications specialists enable spacecraft command, telemetry, navigation and data transmission.

What to focus on

- Electronics
- Embedded systems
- RF and antenna basics
- Link budgets
- Telemetry and communications protocols

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AVIONICS, RF & COMMUNICATIONS

IIST • IIT Bombay • IIT Kanpur • IIT Madras • IISc • University of Surrey • TU Delft • Stanford

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Ground Segment & Mission Operations

Every spacecraft depends on ground infrastructure and trained mission teams. Careers include ground-station engineering, mission planning, telemetry monitoring and anomaly response.

What to focus on

- Mission planning
- Telemetry and command
- Ground networks
- Operational procedures
- Anomaly management

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MISSION OPERATIONS & GROUND SYSTEMS

IIST • IIT Kanpur SPASE • CU Boulder / LASP • University of Surrey • TU Delft
International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Remote Sensing & Earth Observation

Remote sensing converts satellite measurements into information about Earth for agriculture, disaster response, urban planning, infrastructure, climate and security.

What to focus on

- Image interpretation
- Spectral concepts
- EO sensors
- Change detection
- Application-domain knowledge

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REMOTE SENSING & EARTH OBSERVATION

IIST • IIT Bombay • IIT Kanpur • IIT Roorkee • IIT Kharagpur • University of Twente (ITC) • UCL
CU Boulder

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

GIS & Geospatial Analytics

GIS specialists organise, analyse and visualise location-based information, often bridging satellite data and the end user.

What to focus on

- Spatial data models
- Cartography
- Spatial analysis
- Databases
- Decision-oriented visualisation

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GIS & GEOSPATIAL ANALYTICS

**IIT Roorkee • IIT Bombay • IIT Kharagpur • IIRS-linked academic pathways
University of Twente (ITC) • UCL • University of Edinburgh**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

GEOINT

Geospatial intelligence combines imagery, geospatial information, context and analytical reasoning to answer questions about places, activities and change.

What to focus on

- Imagery analysis
- Geospatial reasoning
- Multi-source fusion
- Analytical writing
- Context and uncertainty

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GEOINT PATHWAYS

**IIT Roorkee • IIT Bombay • IIT Kanpur • selected geospatial universities • George Mason University
University of Maryland • UCL**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

GeoAI

GeoAI combines machine learning with geospatial data for object detection, classification, segmentation, change detection and prediction.

What to focus on

- Python
- Machine learning
- Computer vision
- Geospatial data handling
- Model validation

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GEOAI PATHWAYS

IIT Bombay • IIT Delhi • IIT Kanpur • IIT Roorkee • IIITs • Stanford • University of Edinburgh • UCL

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Data Science

Space missions generate large, complex datasets. Data scientists help clean, structure, model and interpret them for scientific, operational or commercial decisions.

What to focus on

- Python/R
- Statistics
- Data engineering
- Visualisation
- Domain-specific modelling

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SPACE DATA SCIENCE

IIST • IIT Kanpur SPASE • IIT Bombay • IIT Delhi • IISc • CU Boulder • Stanford • MIT

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

AI & ML for Space Applications

AI can support autonomous operations, anomaly detection, mission planning, resource optimisation and interpretation of satellite data.

What to focus on

- ML fundamentals
- Model evaluation
- Edge AI awareness
- Time-series/anomaly detection
- Responsible AI

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AI/ML FOR SPACE

IIST • IIT Kanpur • IIT Bombay • IIT Delhi • IISc • IIITs • MIT • Stanford • Carnegie Mellon University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Cloud & Digital Platforms for Space

Cloud platforms increasingly ingest, process and distribute large volumes of geospatial and mission data, creating roles for architects, engineers and product teams.

What to focus on

- Cloud fundamentals
- APIs
- Data pipelines
- Security
- Scalable geospatial processing

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CLOUD & DIGITAL SPACE PLATFORMS

IITs • IIITs • IISc • IIMs for digital strategy • MIT • Stanford • Carnegie Mellon
University of Edinburgh

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Cybersecurity

Space cybersecurity protects spacecraft, ground stations, mission networks, software supply chains and data.

What to focus on

- Network security
- Secure software
- Threat modelling
- Identity/access management
- Space-system architecture

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SPACE CYBERSECURITY

**IIT Kanpur • IIT Delhi • IIT Madras • IIITs • selected cyber-security universities • Purdue
Carnegie Mellon • Royal Holloway**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Policy

Space policy professionals study how governments set priorities, regulate activity, allocate resources and shape national space ecosystems.

What to focus on

- Policy analysis
- Government processes
- Research methods
- Stakeholder mapping
- Concise policy writing

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SPACE POLICY

IIT Kanpur SPASE • IIST • NLSIU / policy schools • IIMs for public systems
GWU Space Policy Institute • MIT • Leiden University • International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Law & Regulation

Space law sits at the intersection of international law, national regulation, licensing, liability, spectrum and commercial contracts.

What to focus on

- International space law
- National regulation
- Contracts
- Licensing/compliance
- Technology literacy

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SPACE LAW & REGULATION

**NLSIU • NALSAR • Faculty of Law, University of Delhi • IIST interdisciplinary studies
Leiden University • University of Nebraska-Lincoln • McGill University**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Diplomacy & International Relations

Space diplomacy concerns international cooperation, norms, agreements, multilateral institutions and strategic competition.

What to focus on

- International relations
- Negotiation
- Multilateral institutions
- Strategic writing
- Cross-cultural communication

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SPACE DIPLOMACY & INTERNATIONAL RELATIONS

**JNU • University of Delhi • policy schools • GWU • Leiden University • King's College London
Sciences Po • International Space University**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Security

Space security focuses on threats, resilience, strategic stability and the consequences of dependence on orbital infrastructure.

What to focus on

- Security studies
- Threat assessment
- Resilience concepts
- Strategic analysis
- Policy communication

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SPACE SECURITY

**IIT Kanpur SPASE • strategic studies programmes in Indian universities • King's College London
GWU • Georgetown University • University of Colorado Boulder**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Domain Awareness / SSA

SDA/SSA involves detecting, tracking, characterising and understanding objects and activities in orbit.

What to focus on

- Orbital fundamentals
- Tracking data
- Sensor concepts
- Data fusion
- Operational awareness

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SDA / SSA

**IIST • IIT Kanpur SPASE • IIT Bombay • IISc • CU Boulder / CCAR • University of Arizona
University of Bern**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Military-Space Strategy

Military-space strategy examines how SATCOM, PNT, ISR, warning, weather and other space-enabled services contribute to military effectiveness and deterrence.

What to focus on

- Military strategy
- Space capabilities
- Joint operations awareness
- Risk and resilience
- Strategic assessment

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MILITARY-SPACE STRATEGY

IIT Kanpur SPASE • strategic studies departments in Indian universities • GWU
King's College London • Georgetown • International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Strategic Technology Analysis

Strategic technology analysts assess emerging capabilities, maturity, competitive advantage, dependencies and national implications.

What to focus on

- Technology assessment
- Horizon scanning
- Competitive intelligence
- Policy analysis
- Scenario thinking

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STRATEGIC TECHNOLOGY ANALYSIS

IITs • IISc • IIMs • public-policy schools • MIT • Stanford • Georgia Tech • King's College London

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Government Relations & Public Affairs

Space companies need professionals who understand government stakeholders, regulation, public policy and institutional partnerships.

What to focus on

- Stakeholder engagement
- Policy monitoring
- Regulatory literacy
- Communication
- Institutional relationship management

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GOVERNMENT RELATIONS & PUBLIC AFFAIRS

IIMs • public-policy schools • University of Delhi • JNU • GWU • Georgetown • Sciences Po

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

The Space Economy

The space economy includes production of space infrastructure and the value created when space-enabled services support other sectors.

What to focus on

- Market sizing
- Value-chain mapping
- Economic reasoning
- Sector research
- Commercial awareness

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SPACE ECONOMY

IIM Ahmedabad • IIM Bangalore • IIM Calcutta • IITs with management/policy centres • GWU • MIT
International Space University • Bocconi

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Finance & Investment

Space finance professionals evaluate capital needs, business models, growth assumptions, technology risk and investment returns.

What to focus on

- Financial modelling
- Venture economics
- Technology diligence
- Market analysis
- Risk assessment

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SPACE FINANCE & INVESTMENT

IIM Ahmedabad • IIM Bangalore • IIM Calcutta • ISB • MIT Sloan • Stanford GSB • Oxford Saïd Bocconi

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

VC & Angel Investment in Space

Space investors must distinguish a compelling technology demonstration from a scalable company by examining technology readiness, customer demand, regulation and capital intensity.

What to focus on

- TRL and technology maturity
- Founder and team assessment
- Market and customer validation
- Unit economics
- Portfolio and exit thinking

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VC & ANGEL INVESTMENT IN SPACE

IIM Ahmedabad • IIM Bangalore • ISB • IIT entrepreneurship ecosystems • Stanford GSB • MIT Sloan
Oxford Saïd • International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Entrepreneurship

Founders identify a real problem, build a differentiated solution and create a repeatable business model across hardware, software, data or downstream applications.

What to focus on

- Problem discovery
- Customer interviews
- MVP thinking
- Fundraising basics
- Go-to-market strategy

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SPACE ENTREPRENEURSHIP

IITs • IIMs • IIST • IISc • ISB • Stanford • MIT • TU Delft • International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Commercial Strategy & Business Development

Commercial teams translate technical capability into customer value, markets, partnerships, pricing and procurement pathways.

What to focus on

- Customer segmentation
- Value propositions
- Partnerships
- Proposal development
- Commercial negotiation

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COMMERCIAL STRATEGY & BUSINESS DEVELOPMENT

IIM Ahmedabad • IIM Bangalore • IIM Calcutta • ISB • MIT Sloan • Stanford GSB • INSEAD
International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Product Management for Space Applications

Product managers sit between users, engineers, data teams and business leaders, turning technical capability into usable products.

What to focus on

- User research
- Roadmapping
- Technical literacy
- Metrics
- Cross-functional leadership

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PRODUCT MANAGEMENT FOR SPACE

IITs + IIMs interdisciplinary pathways • ISB • Stanford • MIT • Carnegie Mellon • TU Delft

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Insurance & Risk

Insurance and risk professionals evaluate launch, in-orbit, operational, cyber and liability exposures.

What to focus on

- Risk modelling
- Insurance concepts
- Mission lifecycle
- Loss scenarios
- Regulatory awareness

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SPACE INSURANCE & RISK

**IIMs • actuarial / risk programmes in Indian universities • Bayes Business School • University of Kent
MIT • International Space University**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Supply Chains & Space Manufacturing

Space manufacturing depends on reliable components, quality systems, specialist suppliers and resilient supply chains.

What to focus on

- Supply-chain management
- Quality assurance
- Supplier evaluation
- Production systems
- Critical-component risk

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SUPPLY CHAINS & SPACE MANUFACTURING

IIT Bombay • IIT Kanpur • IIT Madras • IISc • IIM Mumbai • MIT • Purdue • TU Delft

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Planetary Science & Astronomy

Scientific careers use observations, models and missions to understand planets, stars, galaxies and the wider universe.

What to focus on

- Physics and mathematics
- Scientific programming
- Research methods
- Data analysis
- Academic communication

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PLANETARY SCIENCE & ASTRONOMY

IIST • IISc • IIT Kanpur SPASE • IUCAA-linked universities • TIFR-linked research pathways • Caltech University of Arizona • Cambridge

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Weather

Space weather studies solar and geospace phenomena that can affect satellites, communications, navigation and power systems.

What to focus on

- Solar-terrestrial physics
- Data analysis
- Forecasting
- Instrumentation
- Operational impacts

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SPACE WEATHER

IIST • IISc • IIT Kanpur SPASE • PRL-linked research pathways • CU Boulder / LASP
University of Michigan • University of Helsinki

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Medicine

Space medicine addresses how microgravity, radiation, isolation and mission demands affect human health and performance.

What to focus on

- Physiology
- Aerospace/space medicine
- Human performance
- Research
- Operational medicine

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SPACE MEDICINE

**AIIMS-linked research pathways • IISc bioengineering • IIST interdisciplinary research • CU Boulder
Baylor College of Medicine • King's College London**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Astrobiology & Life Sciences

Astrobiology asks how life originates, survives and may be detected beyond Earth, while related life sciences support human exploration.

What to focus on

- Biology
- Chemistry
- Planetary environments
- Laboratory research
- Scientific writing

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ASTROBIOLOGY & LIFE SCIENCES

IISc • IITs with biosciences • IIST • University of Edinburgh • University of Washington • Penn State Open University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Human Factors & Space Psychology

Human factors specialists design systems and procedures around human capabilities and limitations in demanding mission environments.

What to focus on

- Ergonomics
- Cognitive psychology
- Human-machine interaction
- Experiment design
- Team performance

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HUMAN FACTORS & SPACE PSYCHOLOGY

**IITs design/human factors • IISc • NIMHANS-linked research pathways • CU Boulder • MIT
University College London**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Space Sustainability & Debris

Space sustainability addresses debris, congestion, responsible operations and long-term access to orbital environments.

What to focus on

- Orbital environment
- Debris mitigation
- Policy and standards
- Risk analysis
- Sustainability frameworks

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SPACE SUSTAINABILITY & DEBRIS

IIST • IIT Kanpur SPASE • IITs • GWU • CU Boulder • University of Southampton
University of Strathclyde • International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Degrees: More Than One Entry Route

Engineering is only one route into space. Keep the depth of your home discipline while adding enough space literacy to work across disciplinary boundaries.

Background	Space-facing directions
Engineering / Physics	Systems, satellites, payloads, launch, robotics
Computer Science / AI	GeoAI, mission software, autonomy, cyber
Geography / GIS	EO, remote sensing, GEOINT
Economics / Finance / MBA	Markets, investment, commercial strategy
Law / Policy / IR	Regulation, diplomacy, governance, security
Biology / Medicine	Space medicine, life sciences, human performance
Design / Humanities	Communication, education, ethics, user experience

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DEGREE PATHWAYS

**IIST • IITs • IISc • IIMs • leading central/private universities • CU Boulder • MIT • Stanford • GWU
TU Delft • International Space University**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Skills That Travel Across the Space Sector

Portable skills are valuable because the ecosystem changes quickly. They allow professionals to move between missions, technologies and organisations.

What to focus on

- Systems thinking and interdisciplinary problem-solving
- Data literacy and basic geospatial awareness
- Research, writing and strategic communication
- Commercial awareness and business-model literacy
- Policy, regulatory, cyber and responsible-use awareness
- Project management and stakeholder engagement

Build a T-shaped profile: depth in one discipline, working literacy across several adjacent domains.

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CROSS-DISCIPLINARY SKILL BUILDING

IITs • IIMs • IIST • IISc • IIITs • universities with law/policy/geospatial programmes
International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Build a Space Portfolio

A portfolio demonstrates capability before a recruiter or mentor has to take your claims on trust. It is particularly valuable for students, career switchers and non-engineers entering the sector.

What to focus on

- EO change-detection project
- Space-market map or investment memo
- Policy brief on a regulatory issue
- Satellite mission concept note
- GIS dashboard
- Space-cyber threat model
- Research article or conference poster
- Business model for a downstream application

One strong, explainable project is more useful than a long list of certificates with no applied output.

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PORTFOLIO & PROJECT ECOSYSTEMS

**Student satellite teams • IIT/IIST technical clubs • university research labs • incubators • hackathons
CubeSat programmes • international student competitions**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Internships: Build Evidence, Not Just Certificates

Prioritise internships and projects that produce visible evidence of capability: a research note, geospatial dashboard, policy brief, market map, code repository, design study, satellite-data analysis, startup project or conference presentation.

What to focus on

- Space agencies, research laboratories and observatories
- NewSpace startups and established aerospace companies
- Geospatial, EO, GIS and data-analytics firms
- Defence-tech and dual-use technology companies
- Think tanks, policy centres and university research groups
- VC funds, accelerators and incubators
- Consulting, legal, regulatory, finance and insurance organisations

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INTERNSHIP ECOSYSTEMS

**Academic labs • ISRO/space-agency opportunities where eligible • NewSpace companies
geospatial firms • think tanks • incubators • university research centres**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Research, Competitions & Communities

Formal internships are not the only way to build credibility. Research assistantships, hackathons, ideation challenges, student satellite teams, policy competitions, conferences and professional communities can all provide evidence of initiative.

What to focus on

- Choose activities that create an output you can show.
- Seek interdisciplinary teams.
- Document your contribution clearly.
- Build relationships with mentors and peers, not just certificates.

Your network should grow from contribution, curiosity and repeated engagement.

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RESEARCH, COMPETITIONS & COMMUNITIES

**IIST • IITs • IISc • IIMs • university research centres • Space Generation Advisory Council
Students for the Exploration and Development of Space (SEDS)**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Emerging Space Domains to Watch

Several domains are expanding the definition of a space career beyond traditional spacecraft engineering.

What to focus on

- Space Domain Awareness / SSA
- EO + GEOINT + GeoAI
- AI for Space
- Space Cybersecurity
- In-orbit servicing and logistics
- Space sustainability
- Space economy and finance
- Space policy, law and diplomacy
- PNT and resilient navigation
- Human spaceflight and space medicine

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EMERGING-DOMAIN LEARNING HUBS

IIST • IIT Kanpur SPASE • IITs • IISc • IIMs • CU Boulder • MIT • Stanford • GWU
International Space University

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

India: Where to Look for Opportunities

Do not search only for vacancies carrying the word 'space'. Space-enabled work can sit inside aerospace, geospatial, defence technology, telecommunications, cloud, AI, climate, mobility, consulting, finance and public policy.

What to focus on

- Public institutions and research organisations
- NewSpace startups and established aerospace firms
- Defence-tech and geospatial companies
- Universities, laboratories and think tanks
- VCs, accelerators and incubators
- Consulting, legal, policy, finance and insurance ecosystems

Search by capability and problem area - not only by industry label.

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INDIA ACADEMIC ECOSYSTEM

**IIST • IIT Kanpur SPASE • IIT Bombay • IIT Madras • IIT Delhi • IISc • IIT Roorkee • IIM Ahmedabad
IIM Bangalore • leading Indian universities**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Global Opportunities & Mobility

The global ecosystem includes national agencies, commercial companies, research centres, universities, international organisations, consultancies, investors and downstream businesses. International careers can also be affected by citizenship, security clearance, export-control and work-authorisation requirements.

What to focus on

- Build globally recognisable technical or analytical skills.
- Follow international conferences and professional associations.
- Understand work-authorisation and export-control constraints early.
- Use research collaborations and higher education as legitimate mobility pathways.
- Develop a portfolio that communicates clearly across national contexts.

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GLOBAL ACADEMIC ECOSYSTEM

**CU Boulder • MIT • Stanford • GWU Space Policy Institute • TU Delft • Cranfield • University of Surrey
Leiden University • International Space University**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Your Space Career Decision Framework

When comparing career options, score each pathway against five questions: Does the work genuinely interest me? Can I build the required competence? Is there visible demand? Can I demonstrate evidence of capability? Does the pathway fit the kind of impact and lifestyle I want?

Question	Ask yourself
Interest	Would I still study this topic if no one asked me to?
Capability	What can I already do, and what must I learn?
Demand	Who pays for this capability and why?
Evidence	What project, internship or publication can prove my competence?
Fit	Does the role match my preferred technical, commercial, policy or strategic orientation?

Choose a direction credible for your present profile but expansive enough to grow with the space economy.

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USE INSTITUTIONS TO TEST YOUR CAREER CHOICE

**Compare curricula • faculty research • laboratories • student projects • internships
industry partnerships • alumni outcomes • entry requirements**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Connect for a Curated Action Plan

Connect with us for a personalised, curated action plan aligned with your education, skills, interests and career aspirations in the space ecosystem.

OUR SUBJECT MATTER EXPERTS

Our Subject Matter Experts will provide professional guidance and help shape your journey towards a meaningful and future-ready career in the space domain.

Happy Orbiting!

JOIN THE SPACE CAREER COMMUNITY

Receive future career maps, internship updates, emerging-domain explainers and learning opportunities.

Name + Email + Student / Professional

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Note: This is a career-orientation resource. Admission criteria, internships, employer requirements, regulatory conditions and international mobility rules should be verified from current official sources before decisions are made.

CONTINUE LEARNING THROUGH ACADEMIC NETWORKS

**IIST • IITs • IIMs • IISc • Indian universities • global universities • research centres
professional associations • conferences**

Illustrative institutions/pathways to explore; verify current programmes, eligibility and admissions on official websites.

Conferences by Career & Knowledge Cluster

Use conferences strategically: learn • publish • network • identify mentors • understand markets • build visibility

1. SPACE ECONOMY & INDUSTRY

Best for: business • investment • startups • commercial space

- India Space Congress
- Bengaluru Space Expo
- ISpA industry forums & India International Space Conclave
- International Astronautical Congress (IAC)
- Small Satellite Conference
- SmallSat Symposium

2. DEFENCE SPACE & SDA

Best for: military space • SSA/SDA • ISR • resilient PNT/SATCOM

- Indian DefSpace Symposium
- DSA-ISpA DefSpace Capability Dialogue
- DefSAT / Indian defence-space forums
- AMOS Conference / AMOS Policy Forum
- MilSat Symposium / Silicon Valley Space Week
- Strategic Electronics Summit

3. GEOINT & EARTH OBSERVATION

Best for: GEOINT • EO • GeoAI • remote sensing • geospatial policy

- Indo-Pacific GeoIntelligence Forum
- GeoSmart India
- Geospatial World Forum
- GEOINT Symposium
- EO, remote-sensing and GeoAI specialist forums

4. SPACE POLICY & DIPLOMACY

Best for: policy • law • governance • diplomacy • sustainability

- International Astronautical Congress (IAC)
- AMOS Policy Forum
- Secure World Foundation events
- European Space Policy Institute events
- ISpA policy forums / India International Space Conclave

5. SCIENCE, TECHNOLOGY & ACADEMIA

Best for: students • researchers • engineers • publications • academic networks

- International Astronautical Congress (IAC)
- Small Satellite Conference
- AMSAT Space Symposium
- University-led CubeSat, astronomy, planetary science, remote-sensing and aerospace conferences
- IIST / IIT / IISc / global university seminars, workshops and research symposia

CHOOSE CONFERENCES FOR YOUR CAREER OBJECTIVE — NOT JUST FOR ATTENDANCE

Student: learn + network | Researcher: publish + collaborate | Professional: partnerships + visibility | Investor: markets + deal flow

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Conference editions, venues and programmes may change. Verify current information on official organiser websites.