



EU SPACE

Education & Skills in the Space Sector

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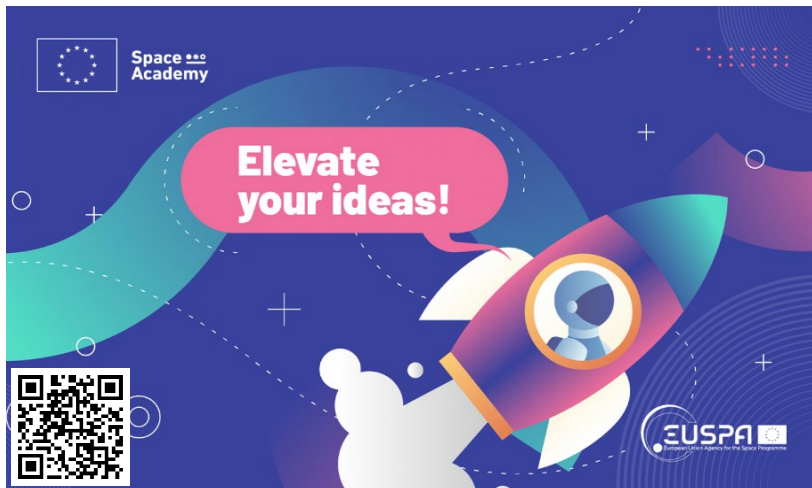
Challenges

- Europe is suffering from **skills gaps** across the economy, reinforced by a **declining labour force**.
- Skills shortages are acting as a **barrier to innovation and technology adoption**.
- The **decline in education and training systems** failing to prepare the workforce for technological change.
- Europe faces an urgent imperative to **prioritise the establishment of technological foundations** that foster knowledge and innovation, by equipping individuals, businesses, and Member States with the necessary skills, infrastructures, and investments, to enable widespread **prosperity** and **industrial leadership**.
- Studies and mapping exercises show that the **European space sector** faces important competence-based challenges linked to:
 - An aging and not diverse workforce;
 - Limited business-academia collaboration;
 - Limited attractiveness of the space sector (salary, flexibility);
 - The need for highly specialised workforce.
 - We also see a growing tension between New Space actors – that attract a lot – and legacy industry – that has some difficulties to retain talents.

Considerations

- As highlighted in the Draghi and Niinisto reports, skills and competences are at the core of a **more prepared and competitive Union**.
- EU needs to **overhaul its approach to skills** and make it more **strategic** and focused on **emerging shortages**: make better use of data; act on existing skills gaps; make education and training systems more responsive to gaps and changing needs; revise curricula; create common system of certification for skills acquired through training programmes; redesign EU programmes for more impact.
- Considering the growing competition for talents across high-tech industries, it is crucial to **increase the pool of available talents** as this affects the overall competitiveness of the European space sector.
- On 29/11, **Council Conclusions** adopted on Reinforcing European competencies in the space sector highlighting:
 - The need for a long term and continuous effort.
 - The need for a holistic approach from upskilling of kids and students to reskilling of professionals.
 - The need for a collective effort, mobilizing all actors from public authorities both at regional and national levels, as well as in close collaboration with academia and industry.

Ongoing Initiatives



EU Space Academy Learning Platform

Free online training open to all individuals, start-ups, entrepreneurs and SMEs who want to learn the ins and outs of building a space application business.



SpaceSUITE

ERASMUS+ Blueprint project (2024 – 2027) for the development of innovative resources for education and training to bridge the gap between the supply and demand of skills in the downstream space sector.

Large Scale Partnership on space data, services and applications

Adopt a wider sectoral coverage to embrace the **entire downstream segment of the space economy** that includes Earth Observation, geoinformation, positioning, navigation and secure connectivity.



Ongoing Initiatives



STARS*EU

Supports DEFIS in analysis of EU-funded projects, creation and dissemination of scientific knowledge, consultation, communication.



ASTRAIOS

Overview of current space curricula to identify space-related education and training to improve future career pathways.



UNIVERSEH

Project bringing together European students, academics, researchers, businesses, regional and civil society stakeholders with focus on space.



CASSINI Hackathons & Mentoring

CASSINI Hackathons & Mentoring

8th Edition on Defence & Security to be organised on 22-24 November 2024.

CASSINI Job placement scheme – NEW



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- ❑ Aimed at **university students and young graduates** to give them experience through internships with particular focus on **new space** companies.
- ❑ **Space Career Launchpad**: a matchmaking **platform** where supply meets demand.
- ❑ **Incentive scheme** for students to carry out internship in space companies across EU.
- ❑ **Pilot phase** as a part of the STARS*EU project, featuring industry associations such as SME4SPACE and Eurospace.



**Space Career
Launchpad**



CASSINI Space Camp – NEW



- ❑ Targeting **teenagers** (age group 14-18), to **spark interest to pursue a vocation in the space sector** by:
 - Offering an exciting **camp for cooperation, learning and sharing experiences**,
 - Providing a comprehensive curriculum where participants will learn about the **space industry**, the **use of space on Earth**, and the European space programmes.
 - Creating **international networks among young people**,
 - Organising a **hands-on competition** allowing the participants to test their new skills, create ideas for new solutions, and cooperate in teams.
- ❑ **Locally organized** with the support of local ecosystem, from companies to educational/ training entities and other relevant actors, as it is the case with CASSINI Hackathons.

Tentative date for first Space Camp – mid-2025.



Von Der Leyen
Commission
2024 – 2029

Since December
1st, 2024

Political Guidelines for Next Commission 2024 – 2029



Tackling the skills and labour gap:

- Developing **Union of Skills**, focusing on investment, adult and lifelong learning, skill retention and the recognition of different types of training to enable people to work across our Union.
- Embedding **lifelong learning** into education and careers and supporting the training and the career prospects of teachers.
- Help **tackle skills and labour gaps** that hold back our productivity and competitiveness.
- Focus on **training and education** and the impact/ opportunities of technology and innovation at work.
- Prepare a **Skills Portability Initiative** to ensure that skills and qualifications are recognised across countries.
- Develop a **European Strategy for VET**, an **Action plan on Basic Skills** and a **STEM Education Strategic Plan**.
- Build on **Pact for Skills and LSPs** to upskill/reskill more workers in key industrial ecosystems.
- Develop **EU Teachers Agenda** to help improve their working conditions, training and career prospects.
- Launch **European Schools Alliance** to encourage cross-border cooperation and mobility between schools across Europe.



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Thank you

