OVERVIEW TOPICS

This overview covers all the main activities of ESA. It is a broad introduction into the world of space technology, ESA space programmes and what we do at ESA ESTEC, the technical centre of the agency in Noordwijk.



What are the steps, principles, methods, processes and trade off's behind designing a new satellite? Learn why concurrent design is the best way to realise ESA's complex, multidisciplinary space missions.

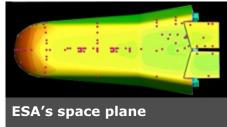


Explore how 3D printing is applied to space. Understand why it is essential for Moon and Mars missions. See and handle 3D printed tools, items made from plastics, titanium and even lunar soil simulant.



www.spacetoursnoordwijk.com

Learn more about the most cutting edge experiments ESA does in preparation for robotic exploration of Moon and Mars. See a robot arm for the ISS and ESA's new ExoMars rover that will look for signs of life on Mars.



ESA's experimental atmospheric reentry space plane. Design, systems, experiments, testing, mission profile, recovery, post-flight results and the evolution to ESA's new autonomous space shuttle called the Space Rider.



Take a 360 degree panoramic walk through Europe's largest test facilities and see how spacecraft are tested under launch and space conditions. Plus a video of satellites being tested at FSTFC test centre.



How and what do astronauts eat in space? Learn more about space food, menus, nutritional requirements, differences in taste, smell and digestion, nutritional research and growing food for missions to Mars.



About the economic benefits and return on investment from European space technology. How ESA helps startups bring products to the market based on ESA space tech, all illustrated with many interesting examples.