

SPACE ACTIVITIES
PROGRAM





DO YOU WANT TO LIVE LIKE AN ASTRONAUT WITH YOUR CLASS?

COME TO PLANET EURO SPACE CENTER FOR A GALACTIC ADVENTURE

- Your students will come to the Euro Space Center and dream of space for 2 to 5 days. They'll become Space Heroes!
- They'll live fantastic space adventures.
- Your students will be supervised by a passionate and professional crew.
- They'll board a brand-new spaceship with new simulators, a personalised restaurant and new space quarters!
- The menus are adapted to your students' cultural habits and diets.



ARE YOU READY FOR LAUNCH?





FULL-TIME ACTIVITIES

SCHEDULE

	2 DAYS	3 DAYS	5 DAYS
Briefing	1 hour	1 hour	1 hour
Mission simulation	2 hours	2 hours	3 hours
Action-reaction		1 hour	1 hour
Water rocket			3 hours
Rocket workshop (Construction)	1 hour	2 hours	3 hours
Rocket launch	1 hour	1 hour	1 hour
Moonwalk XP	1 hour	1 hour	1 hour
Multi-axis Unit	1 hour	1 hour	1 hour
Rotating chair	1 hour	1 hour	1 hour
Space rotor	1 hour	1 hour	1 hour
Space Flight Unit		1 hour	1 hour
Freefall Slide			1 hour
EVA Theory Training/Clean room		1 hour	1 hour
EVA Training			1 hour
Clean room		1 hour	1 hour
Zero-gravity wall		1 hour	1 hour
Planetarium		1 hour	1/hour
Astronomy			1 hour
Programming			2 hours
Living in space	1 hour	1 hour	1 hour
Microgravity pool			1 hour
Experiments	1 hour	1 hour	1 hour
Quiz		1 hour	1 hour
Mars Village			1 hour
Space Tour	1 hour	1 hour	1 hour
Diplomas		1 hour	1 hour



SCHEDULE

FULL-TIME PROGRAMME

	DAY 1	
8:30 - 9:30	Welcome – unpacking - briefing	
9:30 - 12:30	Space activities	
12:30 - 13:30	Lunch	
13:30 - 15:30	Space activities	
15:30 - 16:00	Snack	
16:00 - 17:00	Space activities	
17:00 - 18:30	Free time	
18:30 - 19:30	Dinner	
Evening	Free	

INTERMEDIATE DAYS		
7:00 Wake-up		
7:30 - 8:30 Breakfast	7	
8:30 - 12:30 Space activities	T	
12:30 - 13:30 Lunch		
13:30 - 15:30 Space activities		
15:30 - 16:00 Snack		
16:00 - 17:00 Space activities		
17:00 - 18:30 Free time	Free time	
18:30 - 19:30 Dinner	Dinner	
Evening Free	Free	



	LAST DAY	
7:00	Wake-up	
7:30 - 8:30	Breakfast	
8:30 - 12:30	Space activities	
12:30 - 13:30	Lunch	
13:30 - 15:30	Space activities	
15:30 - 16:00	Snack	
16:00 - 17:00	Space activities	
17:00	End of activities and departure	





DESCRIPTION OF THE ACTIVITIES

MICROGRAVITY POOL I

Experience assisted breathing in a closed environment and walking on the Moon, two metres under water.

MARS VILLAGE

Travel to the Red Planet and discover the life of the next space pioneers. Exploration, daily life, rover: you'll be the commander of your Mars mission.

SPACE MISSION SIMULATION

Briefing on the American space shuttle, the phases of a mission and the various launch sites. Simulation in groups of maximum eight people. Two play the role of simulator pilot and commander and six have ground control roles (flight director, weather, launch director, etc.). Together they accomplish all of the real steps involved in a mission, from launch to landing to releasing a satellite and rendezvousing with the Space Station.

• ASTRONAUT TRAINING SIMULATORS

Moonwalk XP: This chair on springs makes you weigh 1/6th of what you do on Earth and simulates walking on the Moon.

Multi-axis Unit: A chair mounted to spin on three different axis to reproduce the feeling of disorientation felt inside a spaceship when the rotational axis are not under control.

Rotating chair: The chair spins on a single axis to reproduce feelings of disorientation and vertigo. Explanation of the balance coordination centre. Measurement of recovery abilities.

Space rotor: You'll test your ability to withstand gravity in our space centrifuge, the way astronauts do before leaving on a mission

Freefall slide: Jump and free fall to experience weightlessness for a few moments.

Zero-gravity wall: The feeling of weightlessness is reproduced thanks to a hydraulic counterweight system on a metal structure 8m high x 10m long. Trainees can move up and down and from right to left to repair a satellite.

EVA training: The EVA team has to repair a satellite with the help of a team on Earth (specialised scientists) and a communicator. Will you be able to communicate with the others and successfully complete your mission?

Space Flight Unit: Discover the Red Planet on board our spaceship.

MICROROCKET WORKSHOP |

Water rocket and/or microrocket building and launch workshop (body, nose cone, fins, motor installation, braking and recovery system, etc.). The basics of propulsion theory and of the stability of rockets in flight.



• ASTRONOMY

How did we evolve from a geocentric to a heliocentric model? Interactive presentation. Discovery of the software of the Stellarium planetarium through small challenges and research on a tablet.

• FXPFRIMENTS

Experiments with vacuums and zero pressure: sound doesn't propagate, liquids boil, air volumes expand, etc.

● SATELLITE ASSEMBLY IN THE CLEAN ROOM

The purpose of the mission is to build a telecommunications satellite per team. The mission is a success when the two satellites can communicate with each other and send data to the space base. The approach is both educational and fun. A series of components (sensors, actuators, etc.) will be provided. Trainees discover the mechanism and basic principles of data capture.

SPACE TOUR

Interactive discovery of the great moments of space exploration.

DAILY LIFE IN SPACE

Astronauts now travel to the Space Station for periods of six months. How do they live? What are the effects on the human body?

• ACTION-REACTION

Trainees discover Newton's Law through hands-on experiments. Each group designs and builds an air-propelled car with balsa wood. Mini car races.

PROGRAMMING I

An astronaut has just realised that the International Space Station's docking sensors are defective. And a ship is on its way to the Station. It's a potential disaster! Your mission: reprogram the ISS' distance sensors to ensure successful docking.

PLANETARIUM I

What can you see in the sky today? Discover the Moon, its phases, the Sun, the planets of our Solar System and the stars during a session commented by our astronaut instructor.

QUIZ

Get a tablet and test your knowledge!