



Università  
degli Studi dell'Aquila

© NASA



via Tiburtina, 965  
00156 Rome (Italy)  
[www.spaceacademy.it](http://www.spaceacademy.it)  
[info@spaceacademy.it](mailto:info@spaceacademy.it)

## Knowledge-sharing for innovation

To make available the core competencies of leading Italian industry and the scientific Community.

To share and develop knowledge, promote and disseminate the culture of Space.



## An integrated learning approach in each phase of the space systems life-cycle

For the purposes of sharing and increasing the knowledge and culture of space, a wide spectrum of disciplines is needed. Each one operates in conjunction with others to design, develop, produce, operate and maintain a space system, as well as to exploit it to provide the user's communities with a wide range of services able to satisfy their needs. These disciplines are often spread across different industrial and scientific institutions, and within the same environment, across several departments.

The increasing complexity of systems requires the adoption of an integrated approach at each phase of their life-cycle: facilitating close interaction among the different competencies and cultures is therefore a "must". Sharing knowledge and experience, linking institutions, universities and research centres, and adopting a structured learning and education process have therefore become the enabling factors for the continuous innovation of technology, product and process along the entire chain of space activity. The Space Academy Foundation is the knowledge network that makes this possible.



## Space Systems from A to Z

The Space Academy Foundation offers global coverage of space disciplines for all types of applications (e.g. telecommunications, Earth observation, navigation, scientific missions, space exploration, space infrastructure):

- Mission definition and analysis
- Overall Space and Ground System Architecture
- The Space Segment as a System
- The Bus: architecture, subsystems, equipment
- Telecommunications Payloads and Applications
- Earth observation Payloads and Applications
- Navigation Payloads and Applications
- Scientific Payloads and Data Processing/Archiving/Distribution
- Signal Processing
- Design Techniques and Tools
- The Space Infrastructure architecture, design and technologies
- The Ground Segment as a System
- Flight Dynamics
- The Telemetry and Command Station
- The Space Segment Control Centre
- The Mission Control Center
- The Control Center for Space Infrastructure Operations
- Management of Space Programs

### Basics of Space

Courses on the basic concepts, techniques and methods relating to the space disciplines required to work for the ground and space systems. Learning objectives geared both to experienced employees in the companies and to the new generations joining them. One-day seminars to one-year residential master's courses at the space centres.

### Knowledge Networks

Promoting the exchange of experiences among international experts of the different space disciplines. Linking industry, universities, research centres and institutions. Thematic Workshops, Conferences and Forums.

### Looking ahead

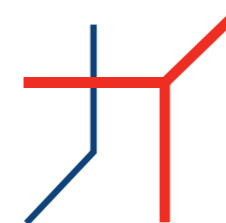
Exploring the frontiers of innovation, exploiting space competencies and maintaining them at the cutting-edge. Summer/winter schools led by internationally-renowned experts.

### Knowledge documents

Promoting space culture; providing reports, results and conference proceedings.

### Fostering innovation

Promoting R&D activities with the full involvement of the Foundation's members and the general public and/or private institutions. Facilitating the growth of SMEs in promising technology/product areas.



SPACE ACADEMY  
foundation

