



# ROMANIAN SPACE INITIATIVE

## WHO ARE WE?

The Romanian Space Initiative (ROSPIN) is a Non-Governmental Organisation (NGO) with the vision to create a **united community** of individuals with **similar aspirations** regarding the space sector. For this, ROSPIN has the mission to develop the **Romanian Space Ecosystem** through various activities such as **educational programmes, hands-on projects and workshops**, as well as **community events**.

## THE ACADEMY EXPERIENCE

The central vision for the ROSPIN Academy educational programme is to continuously **make space attractive** to Romanian University students, to offer them a context to **understand the sector's complexity, depth and level of international collaboration**, as well as **to prepare them to join the sector**.

## ORGANISATION

Each Edition of ROSPIN Academy is spread across **3 Levels** that are coordinated with the least busy periods during a University calendar year. In the current Edition 2, these are:

### **LEVEL 1 – Intro to the Space Sector – Oct & Nov 2021**

Participants had the chance to discover the space sector from different high-level perspectives and to find out how to build a career steered towards space in the first Academy level.

### **LEVEL 2 – Lifecycle of a Space Mission – Mar & Apr 2022**

The second Academy level will unfold a tech overview for participants to grasp the different aspects and activities that are relevant in each mission phase, in order to successfully design, build, launch and operate a spacecraft.

### **LEVEL 3 – Further Hands-on Experiences with Industry – Summer 2022**

The most astute participants will gain an even more in-depth understanding of various aspects of spacecraft engineering, through a hands-on experience delivered in collaboration with industry professionals in the final Academy level.



## WHO IS THIS FOR?

This opportunity is **steered towards Romanian undergraduate, graduate and PhD students** from technical Universities that are eager to learn about spacecraft engineering. **Participants from Level 1** of ROSPIN Academy Edition 2 are **highly encouraged to apply**, as it will strengthen the knowledge gained already in Level 1. At the same time, **we welcome applications** from students who have **never participated** in our Academy thus far.

## WHAT IS IN IT FOR YOU?

**A modern, fresh and unique** learning experience, designed for those of you who want to **deepen your knowledge** about the space mission lifecycle, subsystem definition and the overall technical complexity of the space sector. You will also **interact with the other participants** in short exercises meant to practice your **interpersonal skills**. Based on your attendance, you will receive a **Level 2 Certificate** if you participated in a minimum of 6 Lessons.

## WHO IS TEACHING?

**European professionals** from the space **industry and academia** will deliver the Lessons. You will meet **both young graduates and experienced specialists** from the respective fields.



### LESSON 1

Academy Kick-Off &  
Space Mission Overview

March 15th

### LESSON 2

Orbital Mechanics &  
Mission Analysis

March 18th

### LESSON 3

Mission Lifecycle &  
Design Drivers

March 22nd

### LESSON 4

Payload & Power

March 24th

### LESSON 5

On-Board Data Handling (OBDH) &  
Telecommand, Telemetry  
and Ranging (TT&R)

March 29th

### LESSON 6

Attitude and Orbit  
Control System (AOCS)

March 31st

### LESSON 7

Spacecraft Propulsion

April 5th

### LESSON 8

Structure & Thermal Control

April 7th

### LESSON 9

Manufacture & Assembly  
Integration and Test (AIT)

April 12th

### LESSON 10

Rockets & Launch

April 14th

Ground Segment &  
Mission Control and Operations

April 19th

