SOFIA SAT CLUB
Bulgaria, Sofia 1606, 37 Ivaylo str.
+359 2 9525966
www.sofiasat.club info@sofiasat.club

"Empowering the Next Generation of Space Innovators Through EU Collaboration"

Introduction

Sofia SAT Club is an international NGO dedicated to advancing space science and technology education across Europe. Building on our roots in Bulgaria, we foster cooperation with EU partners— universities, research centers, industries, and other partners —to create a vibrant, multicultural learning environment. Together, we nurture young talent, promote STEM excellence, and drive impactful educational projects.

Mission and Vision

- **Mission:** To provide a sustainable, multilingual platform for hands-on satellite research, STEM training, and international exchanges that inspire and prepare students and enthusiasts for careers in space.
- **Vision:** A dynamic European network where diverse teams collaborate on small satellite missions, share resources, and develop innovative solutions to global challenges.

Core Objectives

1. **International Mentorship & Exchange**
   - Partner with ESERO and ESA offices for best-practice workshops and teacher training programs.
   - Host annual exchange visits for students and mentors.
2. **Multidisciplinary Research & Development**
   - Form mixed teams (professionals, university students, school pupils) to design and build autonomous systems and satellites for observation missions.
   - Share data openly within the EU network for joint scientific analysis.
3. **Sustainable STEM Education**
   - Deliver courses in person and online via e-learning platforms.
   - Develop Bulgarian-English curricula that can be localized across the EU.
4. **Community Outreach & Partnerships**
   - Establish Fab Labs in partner cities and companies.
   - Collaborate with schools to launch satellite-robotics competitions (e.g., RoboSAT)

Program Pillars

1. **Science**
    - Experiments in physics, mechanics, spectrometry, and telecommunications.
    - Hands-on projects: solar-powered demo devices, DIY science kits.
    - Satellite data analysis
2. **Technology**
    - AI & data processing workshops using open-source tools.
    - 3D design and printing of satellite components; autonomous robotics challenges.
    - Extension of the Satellite Ground Stations network SATNOGS, UniCLOGS etc.
3. **Engineering**
    - Engineering problem-solving workshops: from subsystem design to full autonomous systems assembly.
    - Professional mentorship from EU space industry partners.
4. **Mathematics**
    - Analytical methods, simulations, and measurement techniques applied to real-world projects.

Key Activities

- **Educational Simulations**
- **Online & Blended Learning**
- **Competitions & Challenges**
- **Fab Labs & Makerspaces**
- **Video Channel & Digital Resources**
- **Seminars, Hackathons & Outdoor Explorations**
- **Ground Station Infrastructure**
    - Building several SATNOGs (Satellite Networked Open Ground Stations) and a UniClOGS university class ground stations to empower club science projects and enable remote satellite communication and data analysis.

EU Cooperation & Mutual Benefits

- **For Partners:**
    - Access to a pan-European network of young innovators and expert mentors.
    - Shared IP and data from student satellite missions.
    - Joint funding opportunities via Erasmus+, Horizon Europe, and ESERO grants.

Get in Touch:
info@sofiasat.club
www.sofiasat.club

Together, let's explore space, advance science, and build lasting European partnerships!