

## European Space Agency Fly Your Satellite!

*Link:*

[https://www.esa.int/Education/CubeSats - Fly Your Satellite](https://www.esa.int/Education/CubeSats_-_Fly_Your_Satellite)

*Purpose:*

The aim of the programme is to support university student teams throughout the design, assembly, integration, testing, and verification process of their educational CubeSats. By participating in the programme, students will implement standard practices for spacecraft development; receive support from experienced ESA specialists; attend tailored training courses; and will be offered access to state-of-the-art test facilities.

*Mission Constraints:*

- For the current call, launch opportunities to Low Earth Orbit (LEO) are envisioned.
- Teams should indicate in their CubeSat Proposal the range of orbits to which they are compatible in terms of mission objectives, ground coverage, system performance, etc.
- Launches from the International Space Station may be offered within the programme.
- Compatibility with the International Space Station (ISS) safety requirements and orbit is strongly recommended.

*Design Program:*

Teams accepted into the programme will work on different stages of the final design, assembly, integration, and verification of their CubeSat and ground station, in preparation for the launch and mission operations. ESA specialists will guide them through the necessary processes and preparation of requested documentation packages and will evaluate the student team's work.

The programme is structured in multiple phases, following the typical development cycle of a space mission, and student teams will need to pass project reviews to advance to each subsequent phase. The launch will be offered by ESA to those teams that demonstrate the readiness of their spacecraft and ground segment and compatibility with the technical and safety requirements. Once in orbit, teams are supported in the operational phase and will share mission data and technical or scientific results.

*When:*

The submission deadline for proposals is 13 October 2019 at 23:59 CEST. (AKA we have missed the opportunity)

*Past Fly Your Satellite! Programs:*

1. 2016, 6 teams
2. 2017 (still ongoing), Unclear
3. 2019, 7 teams got into the selection workshop

### *Fly Your Satellite! Selection Workshop 2019:*

The students presented their projects to a panel of ESA experts and they were questioned on various aspects of their missions during a subsequent question and answer session. Students were required to justify design decisions to the panel, proving that they and their missions have what it takes to be successful. A set of lectures were offered by ESA specialists, dedicated to equipping potential teams with the knowledge and resources necessary to undertake the first milestones of the Fly Your Satellite! programme. The topics of the lectures included project level activities, such as Assembly, Integration and Verification, Product Assurance and CubeSat reliability or Space Debris Mitigation, as well as technical content on the subsystems of a satellite

### *Missions for the 2019 Round:*

1. Aalto-3, Aalto University, Finland: demonstrate complex signal analysis with a Software-Defined Radio payload.
2. AcubeSAT, Aristotle University of Thessaloniki, Greece: demonstrate lab-on-a-chip technology for biological experiments in Low Earth Orbit.
3. CLIMB, University of Applied Sciences Wiener Neustadt, Austria: use a propulsion system to reach the inner Van-Allen belt and measure the radiation environment.
4. MIST, KTH Royal Institute of Technology, Sweden: characterise the radiation environment and radiation effects in Low Earth Orbit.
5. SOURCE, University of Stuttgart, Germany: image meteors during entry into Earth's atmosphere, and characterise re-entry of the CubeSat.
6. UCAnFly, Universidad de Cadiz, Spain: measure magnetic fields with low noise using shielded magnetoresistive sensors.
7. WUSAT-3, University of Warwick, United Kingdom: demonstrate a signal direction finding payload to locate wildlife tracking tags.

### *How to Apply:*

Link: [https://www.esa.int/Education/CubeSats - Fly Your Satellite/How to apply](https://www.esa.int/Education/CubeSats_-_Fly_Your_Satellite/How_to_apply)

1. CubeSat Proposal
2. Endorsement letter
3. The university funding confirmation letter
4. Team leader's CV

Docs Included inside of folder!

Must comply with the rules stated in this link: [https://www.esa.int/Education/CubeSats - Fly Your Satellite/Conditions to apply](https://www.esa.int/Education/CubeSats_-_Fly_Your_Satellite/Conditions_to_apply)