Earth and Space Exploration Team

St. Thomas More High School
Explore. Build. Communicate. Discover.

The Earth and Space Exploration Team (ESET) is a great opportunity for St. Thomas More students who are curious about space, technology, engineering, communications, and the world beyond our planet.

🌎 Why Now?

Governor Landry's recent announcement makes this an especially exciting time for our students to begin exploring space technology.

SpaceX has announced a major aerospace development in coastal Vermilion Parish, bringing a significant space-industry presence remarkably close to St. Thomas More. Space technology is no longer something happening somewhere else—it is becoming part of our own region's future.

That creates an exciting opportunity for our students.

Whether a student's future interest is **engineering a spacecraft, writing software, designing electronics, communicating with satellites, analyzing data, or working in one of the many industries that support space exploration**, the skills connected to the space industry are becoming increasingly relevant right here in South Louisiana.

ESET gives STM students a chance to start developing those skills now. Through hands-on projects, students can explore technology and space science, learn to work as part of a team, and discover interests that could eventually lead to careers in aerospace, engineering, computer science, communications, physics, data science, and other fields.

This year, ESET will have **two distinct areas of participation**, giving students different ways to explore their interests:

🚀 CAPE-Twiggs High School SlimSat Space Initiative (HSSSI) in coordination with UL Lafayette CAPE Satellite Program

The **High School SlimSat Space Initiative** will be the advanced, intensive component of ESET.

A selected team of students will work together to design, build, program, test, and ultimately launch a miniature satellite into orbit. Students will experience the challenges of a real aerospace mission, including systems engineering, electronics, programming, communications, data analysis, documentation, and project management.

HSSSI is not a casual club. It will require significant time, consistent attendance, technical work, teamwork, and a willingness to take responsibility for an important part of the mission.

Students interested in engineering, computer science, physics, mathematics, electronics, communications, or aerospace technology are especially encouraged to consider applying.

📻 Amateur Radio Group

The **Amateur Radio Group** will provide a more relaxed way for students to explore technology, communications, electronics, and space science.

Amateur radio is much more than talking to people on a radio. Students can learn how radio signals travel through the atmosphere and around the world, experiment with antennas and electronics, communicate with other radio operators, track satellites, participate in radio-based challenges and field activities, and explore how radio technology is used in space communications.

Students will also have opportunities to learn about **satellite communication and space science**, making amateur radio a natural companion to our SlimSat program.

The Amateur Radio Group will have a **more flexible schedule and a lower level of commitment than HSSSI**, making it an excellent entry point for students who are interested in space and technology but are not ready for an intensive engineering project.

Two Ways to Explore

HSSSI — For students ready for an intensive challenge

- Design and build an operational miniature satellite
- Work as part of a real mission team
- Develop engineering, programming, and technical skills
- Work toward an actual orbital mission
- Build a substantial technical portfolio
- Commit to a demanding, long-term project

Amateur Radio — For students who want to explore

- Learn about radio communications and electronics
- Explore antennas and radio technology
- Communicate with other amateur radio operators
- Learn about satellite communications
- Participate in hands-on activities and radio events
- Discover connections between radio, Earth science, and space exploration
- Enjoy a more flexible level of participation

Who Should Join?

You do **not** have to be an expert to join ESET. What matters most is **curiosity, willingness to learn, reliability, and genuine interest**.

Some students may eventually discover a passion for aerospace engineering. Others may become interested in computer science, electronics, communications, physics, data science, or another field they had never considered.

ESET is an opportunity to find out what interests you—and to begin developing skills that can take you there.

Click the link to receive notification of the informational session:
https://forms.gle/ip3QJoXaE1kEMzwUA