

Texas High School Aerospace Scholars

High School Aerospace Scholars is an authentic learning experience for Texas high school juniors to engage with NASA's mission and become the next generation of explorers. Like-minded students will complete an online curriculum in exploration and discovery. During the school year, Texas High School Aerospace Scholars (HAS) students will complete an online course which includes five modules. Interactive online lessons and activities related to space exploration, Earth science, technology, and aeronautics familiarize scholars with NASA's six themes of: Humans in Space, Moon to Mars, Earth, Space Technology, Flight, and Solar System and Beyond. To discover the past, present, and future of exploration on and off the Earth, students will complete four modules inspired by the stages of a Moon and Mars' mission: Establishing the Foundation, Looking In, Looking Out, Extending Life, and Sustaining Life. Within each Module, students will participate in Science, Technology, Engineering, and Math (STEM) activities and lessons focusing on Earth, Aeronautics, the International Space Station, Moon to Mars, and the Solar System. Each topic culminates in a rubric-based activity. The curriculum is TEKS-aligned and may serve as a half science elective credit for the student at their school's discretion.

The highest achieving with a 70 percent or greater average from the online course students are invited to a five-day gamified virtual experience during the summer where they will be mentored by NASA scientists and engineers while working in teams to plan a mission to plan an Artemis-themed mission to the Moon and Mars. Students will engage with NASA engineers and scientists who guide and facilitate students as mentors through research, design challenges, and a preliminary design review presentation. Mentors also provide students guidance related to STEM careers. The summer curriculum is TEKS aligned and may serve as a half science elective credit for the student at their school's discretion. Upon completion of the summer experience, each participant will receive a certificate for completing the program. Top teams attend a four-day residential experience at NASA's Johnson Space Center in Houston, TX. Both online and onsite portions are free to participants.

Duration: One year

Eligibility:

- U.S. citizen
- Texas resident
- High school junior
- Interested in Science, Technology, Engineering or Mathematics
- Able to access the internet
- Committed to completing online lessons
- Nominated by state legislature