




Students in Space!

Resources I have found most helpful in astronomy, aerospace, and policy

 [@katiemel25](#)
 [katiemel25](#)
 [katiemelbourne.me](#)

\$ Scholarships and Grants

Women in Aerospace Foundation Scholarships ★

3rd+ year female undergraduate students

Due: Mid-June

National Space Club and Foundation Scholarships ★

Scholarships for students interested in STEM

Due: Late-November

NASA State Space Grant Consortia ★

Grants and Scholarships available for undergraduate and graduate students

Varied spring/fall cycles

🚀 Conferences

Commercial Space Transportation Conference

Annual industry discussion on commercial space flight

Washington, DC in Mid-February

Women in Space Conference ★

High school, undergraduate, or graduate students

Due: Late-November

SEDS USA Space Vision ★

Annual conference for Students in the Exploration and Development of Space

Mid-November

Future Space Leaders ★

Annual conference focused on career development of future industry leaders

July

SGx (within annual Satellite show) ★

A day of TEDx-style talks from aerospace industry leaders

Spring

⇄ Internships

Summer Science Program ★

High school science and math collaborative research program

Applications open December

Research Internship in Science and Engineering ★

High School research opportunity to work with a professor at Boston University

Fall application

Yale Summer Program in Astrophysics ★

High school experience for students interested in STEM

Winter application

NASA internships ★

STEM, policy, business opportunities and more at centers across the country

Seasonal cycles

Brooke Owens Fellowship ★

Undergraduate women get matched to paid internships in the aerospace industry

Due: November

Matthew Isakowitz Fellowship ★

Undergrads and Grad students get matched to aerospace internships

Due: November

Yale Summer Program in Astrophysics ★

High school experience for students interested in STEM

Space Telescope Science Institute ★

Summer internships in astrophysics, engineering, instrumentation, and outreach

Due: February

Lloyd V. Berkner Science Policy Internship at National Academies ★

Undergrads or Grad students work on research projects that support NAS

Summer and Fall cycles

Organizations

Women in Physics ★

Chapters at individual universities, national organization that hosts annual regional conferences

Society for Women in Space Exploration ★

Growing international organization including chapters for colleges and professionals

Space Generation Advisory Council ★

Conference, leadership, and scholarship opportunities for young professionals (ages 18-35) worldwide

Astronomy

Astronomy Camp ★

Beginning/Advanced Teen and Adult sessions

Rolling admission through fall/winter

American Astronomical Society ★

Professional astronomer organization with conferences and other opportunities

Astronomical League ★

Become a member by joining one of their nation-wide amateur astronomy clubs

- › Scholarships are available via club nomination for students who participate in outreach
- › Awards given by completing observing programs and taking on leadership roles

News and Education

Books

Intended for variety of audiences

- › Space Warfare in the 21st Century by John Johnson-Freese
- › Crowded Orbits by James Clay Moltz
- › The Physics of Space Security by David Wright, Laura Grego, and Lisbeth Gronlund
- › Roger Launius's and John Logsdon's various books on the history of space exploration

Newsletters

To stay up-to-date on space policy news

- › [Space Policy Online](#) sends updates on space-related news along with a weekly calendar of events in the industry
- › [Politico](#) has a space dedicated news site with free email subscriptions available
- › [SpaceNews](#) has a daily morning news email curated by Jeff Foust (on Twitter: @Jeff_Foust)
- › [CSIS Aerospace Project](#) distributes notifications about new articles and upcoming broadcasts
- › [The Aerospace Corporation](#) has a mailing list for their Center for Space Policy Strategy

Podcasts

Just for fun!

- › [NASA](#) has a series of podcasts on a variety of topics in aerospace
- › [BBC](#) has a podcast detailing the history of the Apollo program called "13 Minutes to the Moon"
- › [Astro, Esq.](#) is a podcast dedicated to exploring space law through interviews with experts

FOR KIDS

It's never too early to encourage a young person to explore!

- > [Math Doesn't Suck](#) series by Danica McKellar
- > [George's Secret Key to the Universe](#) series by Lucy and Stephen Hawking
- > [Ada Lace](#) series by Emily Calandrelli

Tips, Tricks, and Thoughts

Communication Knowing how to communicate is the key to success in any field, including STEM. People cannot get excited about your work without it! Learn how to professionally interact with your classmates and professors and seek out opportunities to practice speaking and presenting. Outreach is a fantastic way to learn how to convey complex topics in STEM to a broad audience!

Networking Building your personal network can seem like a daunting task but is rewarding. Think of the people you meet as mentors. Keep track of their contact information, where you met, interesting information about them, when you last talked, and what their job or background is in a spreadsheet, and make sure to follow up regularly. Networking is largely about authenticity; even as a student you have things to offer to them through volunteering your time on projects they may need help with and sharing your enthusiasm for what you do. To get started on some quick tips and tricks, watch this [video series](#) by networking guru Keith Ferrazzi.

Funding Going to conferences is a great way to network, but they can be expensive! Applying to the scholarships and grants listed above is a good place to start. In addition, you may be able to get in contact with the conference organizers and ask to apply for funding, or to volunteer in exchange for being able to sit in on the event. Your institution may also have internal grant application databases, or if you speak with your professors, your department may be willing and able to spare funding for you to attend different professional and academic development events.

Twitter In the age of social media, Twitter is a useful tool for staying up-to-date in the space industry and for meeting other people enthusiastic about space. Twitter has its disadvantages, but nevertheless when used professionally can be a useful networking tool.

Coursework Start taking classes in your major as early as possible, but take advantage of general education requirements if you have them! These are the classes that offer opportunities to make cross-disciplinary connections from STEM to humanities and may expose you to niches within the aerospace industry you didn't know you were interested in before.

Clearance Jobs Some jobs in space policy or national defense within the government and commercial sectors will require security clearances. [The process is lengthy](#), so if you want to pursue one of these positions it is good to consider it early in your college career.

Other Resources Dr. Therese Jones (Satellite Industries Association) has a [Guide to the Space Life](#) document with a more exhaustive list that includes grad schools.