



# High School Internship Resource Guide

## What are the benefits of an internship?

Internships are a great opportunity to gain industry experience and bolster your resume. If you are unsure about a certain career path, doing an internship allows you to try it out. Even if you end up finding that you are no longer interested in the specific field of your internship, you will have developed valuable skills and expanded your professional network. We recommend checking out the following list of STEM-based internship opportunities for high school students.

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## Army Educational Outreach Program

High School students work one-on-one with a university researcher or Department of Defense scientist mentor during this authentic science and engineering research apprenticeship.

### Engineering Disciplines

- Biomedical engineering
- Chemical engineering
- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

- U.S. citizen or permanent resident
- Varies by location

### Location

- Remote
- Various

### Internship Dates

- Application open December 15 - February 28

### Compensation

- Paid

Learn More: <https://www.usaeop.com/program/high-school-apprenticeships/>

## Air Force Research Lab Scholars Program

The Air Force Research Laboratory (AFRL) Scholars Program offers internship opportunities for students to contribute to unique, cutting-edge, research-based projects while gaining valuable hands-on experiences working with full-time AFRL scientists and engineers.

### Engineering Disciplines

- Aerospace engineering
- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

- Upper-level high school student

### Location

- Various

### Internship Dates

- Application due January

### Compensation

- Paid

Learn More: <https://afrlscholars.usra.edu/>

## Code2College Software Engineering Leadership Program

The Code2College program includes after-school coding sessions, technical portfolio development, monthly professional development workshops, and a summer internship/consultancy.

### Engineering Disciplines

- Software engineering

### Eligibility

- High school student

### Location

- Austin, TX

### Internship Dates

- Training during the academic year, summer internship

### Compensation

- Paid

Learn More: <https://code2college.org/>

## Dept. of Navy Science & Engineering Apprenticeship Program (SEAP)

The Science and Engineering Apprenticeship Program (SEAP) places high school students in Department of Navy (DoN) laboratories where they take part in real Naval research.

### Engineering Disciplines

- Aerospace engineering
- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

Some exceptions are made by individual labs.

- U.S. citizen
- At least a high school sophomore
- 16 years of age or older by start date

### Location

- Arizona
- California
- Connecticut
- Florida
- Hawaii
- Indiana
- Maryland
- Mississippi
- New Jersey
- Pennsylvania
- South Carolina
- Virginia
- Washington
- Washington, D.C

### Internship Dates

- Application open August 1
- 8 week program

### Compensation

- \$4,000

Learn More: <https://navalsteminterns.us/seap/>

## J. Craig Venter Institute Internship Program

JCVI provides students opportunities to be a part of groundbreaking science. During the course of the program, there are also numerous workshops designed to help develop scientific and professional skills. These include journal clubs, career development sessions and multi-disciplinary scientific seminars.

### Engineering Disciplines

- Biomedical engineering
- Electrical/computer engineering
- Software engineering

### Eligibility

- 18 years of age or older

### Location

- La Jolla, CA
- Rockville, MD

### Internship Dates

- 10-15 week program
- Summer, some opportunities during the academic year

### Compensation

- \$15 per hour

Learn More: <https://www.jcvi.org/education/internship-program>

## Johns Hopkins Applied Physics Lab ASPIRE Program

ASPIRE interns are paired with APL staff mentors to complete projects, solve problems, and learn and apply crucial technical and interpersonal skills in a hands-on, professional environment.

### Engineering Disciplines

- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

- U.S. citizen
- High school junior or senior by start date
- 15 years of age or older by start date
- Unweighted GPA of 2.8 or greater

### Location

- Laurel, MD

### Internship Dates

- Summer application open January 1
- Academic year and/or summer

### Compensation

- Unpaid

Learn More: <https://secwww.jhuapl.edu/stem/aspire/>

## Maine Space Grant Consortium MERITS Program

The Maine Research Internships for Teachers and Students (MERITS) Program provides opportunities to conduct research and technology development and experience “real-time” applications of science, technology, engineering and math.

### Engineering Disciplines

- Aerospace engineering

### Eligibility

- High school junior

### Location

- Remote
- Maine

### Internship Dates

- Application due January
- 6 week program

### Compensation

- Varies by host organization

Learn More: <https://www.msgc.org/students/internships/highschool/>



## MITRE Internships

MITRE is a not-for-profit company that tackles complex challenges for the public good. These challenges include countering cyber threats, advancing robotics capabilities, and making healthcare more equitable. Students can explore a particular field of interest, work in a world-class lab, get hands-on experience, and connect with mentors and peers.

### Engineering Disciplines

- Electrical/computer engineering
- Software engineering

### Eligibility

- 14 years of age or older
- High school freshman or sophomore at time of application
- 3.0 GPA or greater

### Location

- Bedford, MA
- McLean, VA
- Other

### Internship Dates

- Application open January

### Compensation

- Paid

Learn More: <https://careers.mitre.org/us/en/student-programs>

## National Aeronautics and Space Administration (NASA) Internships

NASA Office of STEM Engagement (OSTEM) offers a variety of paid internships that allow high school students to contribute to agency projects under the guidance of a NASA mentor.

### Engineering Disciplines

- Aerospace engineering
- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

- U.S. citizen
- At least 16 years of age at time of application
- 3.0 GPA or greater on a 4.0 scale

### Location

- NASA offers internships at locations throughout the U.S. and internationally.

### Internship Dates

- Fall internships: late August/early September to mid-December, 16 weeks
- Spring internships: mid-January to early May, 16
- Summer internships: late May/early June to August, 10 weeks

### Compensation

- Most interns receive a stipend award.

Learn More: <https://intern.nasa.gov/index.html>

## National Cancer Institute Werner H. Kirsten Student Intern Program

The Werner H. Kirsten Student Intern Program is a unique internship opportunity designed to expose high school seniors to research and administrative management in a health care environment.

### Engineering Disciplines

- Biomedical engineering

### Eligibility

- U.S. citizen or permanent resident
- High school junior at time of application
- 17 years of age or older by start date
- Has taken or is planning to take both a science and mathematics course or has the equivalent of three math/science years of credits
- 3.0 GPA or greater on a 4.0 scale or 2.5-3.0 GPA with third teacher recommendation

### Location

- Frederick, MD

### Internship Dates

- Application open October 15 - December 15
- 1 year program

### Compensation

- Unpaid

Learn More: [https://ncifrederick.cancer.gov/careers/student\\_programs/internships/SIP/](https://ncifrederick.cancer.gov/careers/student_programs/internships/SIP/)

## National Institutes of Health Biomedical Research Internships

The High School Summer Internship Program (HS-SIP) gives students an opportunity to spend a summer working alongside leading NIH scientists on biomedical research projects.

### Engineering Disciplines

- Biomedical engineering

### Eligibility

- U.S. citizen or permanent resident
- High school junior or senior at time of application
- At least 17 years of age
- Must live within 40 miles of internship site

### Location

- Bethesda, MD
- Baltimore, MD
- Frederick, MD
- Research Triangle Park, NC
- Hamilton, MT
- Framingham, MA
- Phoenix, AZ
- Detroit, MI

### Internship Dates

- Application due February 1
- Typically an eight-week program with three orientation dates in June

### Compensation

- \$2,000 per month

Learn More: <https://www.training.nih.gov/programs/sip>

## National Institute of Standards and Technology Intern Program

The Summer High School Intern Program (SHIP) provides students with the opportunity to work closely with NIST staff scientists and engineers on a specific, cutting-edge research problem.

### Engineering Disciplines

- Chemical engineering
- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

- Completed junior or senior year of high school by start date

### Location

- Gaithersburg, MD

### Internship Dates

- June - August

### Compensation

- Unpaid

### Learn More:

<https://www.nist.gov/careers/student-opportunities/summer-high-school-intern-program>

## National Security Agency Work-Study

NSA offers high school students the opportunity to earn a paycheck while gaining real-world experience in the career of their choice.

### Engineering Disciplines

- Electrical/computer engineering
- Software engineering

### Eligibility

- Software engineering
- U.S. citizen
- High school junior at local high school
- 16 years old by December 31 of high school junior year
- Enrolled in at least two courses pertaining to desired position

### Location

- Ft. Meade, MD (headquarters)
- Aurora, CO
- Augusta, GA
- San Antonio, TX
- Oahu, HI

### Internship Dates

- Minimum 4 hours per day / 5 days a week (Monday-Friday)

### Compensation

- Paid

Learn More: <https://www.intelligencecareers.gov/nsa/nsastudents.html>

## Princeton Plasma Physics Laboratory Internships

Princeton Plasma Physics Laboratory offers students the chance to work on a project with a member of their research or engineering staff.

### Engineering Disciplines

- Electrical/computer engineering (plasma engineering)

### Eligibility

- At least 16 years of age by start date
- Graduating senior in high school by start date
- U.S. citizen or permanent resident

### Location

- Princeton, NJ

### Internship Dates

- Summer deadline: February 28
- Fall deadline: April 30
- Spring deadline: November 30

### Compensation

- Unpaid

### Learn More:

<https://www.pppl.gov/high-school-semester-long-internship-high-school-summer-internship>

## Saturday Academy Apprenticeships in Science & Engineering

The Apprenticeships in Science & Engineering (ASE) program connects motivated high school students with mentors in science, technology, engineering and math (STEM) pre-professional internships. Mentor organizations include universities, hospitals and research institutions and private companies.

### Engineering Disciplines

- Chemical engineering
- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

- Rising high school sophomore, junior, or senior

### Location

- Oregon
- Southwest Washington

### Internship Dates

- Application due March
- 8 week program

### Compensation

- Unpaid

Learn More: <https://www.saturdayacademy.org/ase>



## Spark Summer Intern Program

The Spark Summer Intern Program connects high school students with industry experts, educators and mentors.

### Engineering Disciplines

- Chemical engineering
- Electrical/computer engineering
- Mechanical engineering
- Software engineering

### Eligibility

- Varies by host organization

### Location

- Seattle, WA

### Internship Dates

- Varies by host organization

### Compensation

- Varies by host organization

Learn More: <https://www.sparksip.org/>

## Texas Department of Transportation Internships

TxDOT's Summer Internship Program is designed for students who are seeking to gain practical work experience in engineering jobs.

### Engineering Disciplines

- Civil engineering

### Eligibility

- 17 years of age or older

### Location

- Texas

### Internship Dates

- May 1 - August 15

### Compensation

- Hourly wage, varies by position

Learn More: <https://www.txdot.gov/careers/students.html>