

# **High School Involvement Partnership (HIP) Mentoring Program**

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Mentoring the Future

# Northrop Grumman Today

Leading global security company

\$33.8 billion sales in 2019

– 85% U.S. / 15% International

**\$64.8 billion total backlog**

*(as of December 31, 2019)*

~90,000 employees

Leading capabilities in:

- Autonomous Systems
- Space
- Cyber
- Strike
- C4ISR
- Logistics and Modernization

Focus on Growth and Performance



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# Four Operating Sectors at a Glance

## Aeronautics Systems



Autonomous Systems  
Aerospace Structures  
Advanced Technologies and Concepts  
Aircraft Design, Integration and Manufacturing  
Long-range Strike  
Multi-Domain Integration and Operations  
Intelligence, Surveillance and Reconnaissance  
Battle Management

## Defense Systems



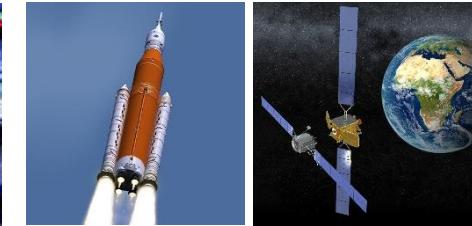
Integrated Air & Missile Defense  
Defensive Cyber and Information Operations  
Platform Modernization and Fleet Operations Support  
Advanced Weapons  
Precision Munitions  
Software Systems Modernization and Sustainment  
Training and Simulation  
Propulsion Systems

## Mission Systems



Airborne Sensors and Networks  
Artificial Intelligence/Machine Learning  
Cyber and Intelligence Mission Solutions  
Navigation, Targeting and Survivability  
Maritime/Land Systems and Sensors  
Engineering & Sciences  
Emerging Concepts Development  
Multi-domain C2  
Agile/DevSecOps Systems

## Space Systems



Launch Vehicles  
Propulsion Systems  
Commercial Satellites  
Military and Civil Space Systems  
Science and National Security Satellites  
Human Space and Advanced Systems  
Space Components  
Missile Defense  
Space Exploration  
Space ISR Systems

How can Northrop Grumman remain on the cutting edge of technology and innovation?

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By inspiring the next generation of big thinkers!

**HIP**

*Mentoring the Future*

## What is the HIP mentoring program?

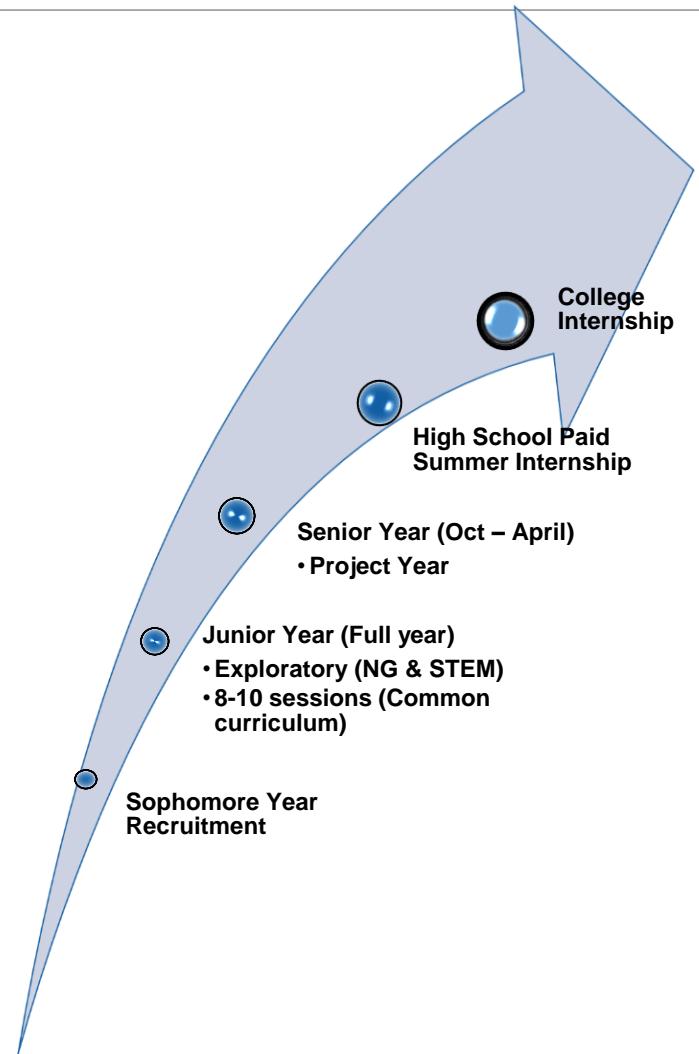
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- HIP = High School Involvement Partnership
- Historical program began in 1971 as an ROP program (Regional Occupational Program) in Los Angeles, CA
- One of the longest running educational partnership in the nation
- HIP creates a pipeline of diverse talent, by exposing students to career opportunities at Northrop Grumman. It encourages them to seek high school internships, college internships and, in some cases, employment at Northrop Grumman

# HIP Program Overview

**Vision:** Inspire and prepare high school students for STEM pathways to fill the future workforce need for diverse innovative leaders.

**Mission:** We focus on exposing high school students to Northrop Grumman's core capabilities, technology, missions and business priorities by contributing to their development and enhancement of critical skills necessary for success in career pathways leading to vocation, college and beyond. We aim to create a pipeline from high school through college to employment at Northrop Grumman.



Successful completion of the junior year program qualifies students to interview for the senior year program, however, selection for the senior year program is not guaranteed

# Why HIP?

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## What can the program offer you?

- Mentoring by Northrop Grumman employees
- Exposure to Northrop Grumman products and programs
- Development for workforce skills
  - ✓ Guidance and encouragement throughout the year to complete a senior year project
  - ✓ Opportunity for competitive high school internships and competitive early college/vocational programming internships

## What does it take to participate in HIP?

- Interest in STEM, particularly engineering, physics, math, cyber, computer science, manufacturing
- 3.25 or greater unweighted cumulative GPA
- Attend a public high school in a Northrop Grumman community
- U.S. citizenship

# How is the program structured?

- HIP is a competitive program comprised of two separate years
- If you successfully complete your junior year in the HIP program you may apply to participate your senior year as well\*

## Junior Year (Sept. - May):

- Exploratory year focused on products, technologies, and workforce skills
- Includes eight to ten 2-hour virtual or onsite sessions, ~ 1/month
- Site specific activities at your local Northrop Grumman facility ~2-3 times/year

## Senior Year (Oct.– April):

- 1:1 mentoring with a Northrop Grumman employee
- Focus on completing a hands-on project, schedule dependent on project

**\*Participation in the HIP program in your junior year does not automatically guarantee you a spot in the program your senior year**

# Sample Virtual Seminar Schedule (Junior Year)

	Virtual Seminar Topic	Description
September	Seminar #1: Welcome and Our History	Students will be greeted with remarks from Sandra Evers-Manly, vice president, global corporate responsibility, and will learn about our extensive history from one of our Northrop Grumman historians.
October	Seminar #2: Manufacturing at Northrop Grumman	Introduction to the world of manufacturing at Northrop Grumman and discuss various vocational opportunities as they relate to manufacturing.
November	Seminar #3: Human Resources and Our Culture	Focus on resume building, the importance of leadership roles and extracurricular activities. We will also explore Northrop Grumman's inclusive culture and answer the question, "Why is Northrop Grumman a great place to work?"
November	Seminar #4: Technologies and Campaigns	Discuss data science and artificial intelligence with experts.
December	Seminar #5: Cyber Security	Learn about cyber security/computer science and what it is like to work for a leading global security company.
January	Seminar #6: Pilot Talk	Discussion panel with pilots who fly for Northrop Grumman products.
February	Seminar #7: Innovation at Northrop Grumman: Operation PolarEye	Meet the Northrop Grumman team that partnered with the San Diego Zoo and developed an autonomous system that helped with efforts to protect polar bears in the Arctic.
March	Seminar #8: <i>Into the Unknown</i> with the James Webb Space Telescope	Learn about the James Webb Space Telescope and its mission to look back 13.5 billion years to the beginnings of the first galaxies and stars.
April	Seminar #9: Systems Engineering	What is Systems Engineering?
May	Seminar #10: Interview Skills	The do's and don'ts of job interviews

## Things to think about...

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HIP is a commitment, so before you apply you should consider:

- Your current school schedule
- The commute/transportation
- After school activities, sports or other jobs
- During junior year, all virtual seminars are scheduled between 4 p.m.- 6 p.m. ET and 4 p.m.- 6 p.m. PT



# Interested? What your school review committee needs from you:

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## Required:

- A completed application
- High school transcripts

Relevant coursework in one of the following:

- ✓ CyberPatriot (extracurricular activity)
- ✓ Robotics (extracurricular activity)
- ✓ Project Lead the Way
- ✓ Computer Science
- ✓ AP Calculus AB or BC
- ✓ AP Chemistry
- ✓ AP Computer Science A
- ✓ AP Computer Science Principles
- ✓ AP Physics 1, 2 or C

## Optional/supplemental items:

- ✓ Personal statement
- ✓ Resume and cover letter
- ✓ Letter of recommendation
- Interview with the Northrop Grumman HIP program team for acceptance into the junior year program.
- ***Please note, not all participating HIP sites require an interview for junior year acceptance.***

## Think you have what it takes?

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To apply, visit [NorthropGrumman.com/HIP](http://NorthropGrumman.com/HIP)

For more information about Northrop Grumman STEM initiatives,  
visit [NorthropGrumman.com/STEM](http://NorthropGrumman.com/STEM)

Questions? Contact us at [STEMEducation@NGC.com](mailto:STEMEducation@NGC.com)

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