High School Internship Program

Spring 2027 Projects

Los Alamos
NATIONAL LABORATORY

Introduction:

Thank you for your interest in a high school internship at Los Alamos National Laboratory (LANL). LANL's internship programs are mentor driven. This project description book provides a list of all project options to begin a High School Internship in Spring 2027.

Applicants should read through the project descriptions to find up to three projects that seem like a good fit for their skills and interests, then specify those projects on the internship application. External websites are linked (if available) and are a great resource for you to learn about the work done in these areas.

Application Period:

- Opens: November 25, 2026
- Closes: January 29, 2027

Eligibility Requirements:

- Senior status at the time of internship
- 16 years of age
- 2.75 GPA
- Attend a New Mexico High School
- Pass a new employment drug test

Required Materials:

- Current Transcript
- Resume
- Personal Statement
- Letter(s) of Recommendation (optional)

For more information about the high school internship program, application guidance and FAQs, please visit the Student Programs High School webpage.

If you have any questions, feel free to email Student Programs at studentprograms@lanl.gov.

CENTER FOR INTEGRATED NANOTECHNOLOGIES (MPA-CINT)

Mentor:
Eric Bowes, bowes@lanl.gov

Project Description:
We are creating nano-scale semiconductors for applications in electronic, photonic, and quantum devices. We generate data (images, videos, spectral) during the characterization of these materials, and the student will assist in the analysis and interpretation of these data.

Length of Internship:
12+ Weeks

Internship Location:
Onsite

Expected Start Date:
Spring 2027

Internship Period:
Year-round

Age Requirement:
16 years old

Other Information:
N/A

LAGRANGIAN CODES (XCP-1)

Mentor:
Timothy Waters, waters@lanl.gov

Project Description:
The project is centered on expanding the realm of 3D visualization tools available to code developers, with an optional focus on either black hole astrophysics or inertial confinement fusion modeling. AI coding agents are rapidly changing the landscape of what tools are readily available to code builders, who often rely on 'canned' software packages such Paraview or Visit for the important task of visualizing and analyzing their 3D datasets. This reliance becomes increasingly frustrating when those datasets become very large. This project will therefore explore the use of the open source meshing C++ software Polyscope (https://github.com/nmwsharp/polyscope) that will allow tailoring the visualization needs to a given scientific codebase. The student will learn the basics of working with hydrocodes on supercomputers, how to effectively utilize the latest AI coding tools, and how to properly develop software on gitlab.

Length of Internship:
4-6 months

Internship Location:
Onsite

Expected Start Date:
February or March 2027

Internship Period:
Spring 2027

Age Requirement:
16 years old

Other Information:
Proficiency with python or C++ is desired. Datasets will typically utilize my astrophysics projects at https://trwaters.github.io/projects.