







# Student Opportunities at Lawrence Livermore National Laboratory

LLNL offers paid internships and sponsors fellowships for undergraduate and graduate students

#### **UNDERGRADUATE**

**HPC Cluster Engineer Academy:** Undergraduate interns spend nine weeks learning the basics of cluster engineering and system installation under the guidance of LLNL experts and gaining direct experience with running and maintaining high-performance computing systems.

https://computation.llnl.gov/hpc-cluster-engineer-academy

#### **UNDERGRADUATE and GRADUATE**

Atmospheric, Earth, and Energy Science Internship:

Undergraduate and graduate students earn practical research experience by working with mentors on projects in geoscience and atmospheric science. https://pls.llnl.gov/aeed

Center for Global Security Research Student Intern: Engages undergraduate and graduate students in practical research experience to support United States policy and decision makers in developing strategies for national and international security. https://cgsr.llnl.gov/research-internships

**Computation Scholars Program:** Computation offers undergraduate and graduate students the opportunity to gain research experience and work with Laboratory science and engineering mentors through our internship program. https://computing.llnl.gov/careers/internships

**Data Science Summer Institute:** This program offers data science advanced undergraduate and graduate students the opportunity for a 12-week summer internship working on real problems that matter to the nation. https://data-science.llnl.gov/dssi

## **High-Energy-Density Physics Summer**

**Student Program:** Opportunities for students perform experimental, theoretical, and computational research in disciplines such as astrophysics, hydrodynamics, turbulence, plasma physics, inertial confinement physics, and radiation/particle transport. https://wci.llnl.gov/careers/students

National Ignition Facility and Photon Science Student Internship Program: Opportunities for undergraduate and graduate-level students to engage in cutting-edge scientific research in lasers, plasma physics, electro-optics, software development, and optical, x-ray, and nuclear instrument development and testing.

https://lasers.llnl.gov/education/opportunities/student-internship

### Materials and Chemistry Institute (MaCI) Summer Program:

Undergraduate and graduate students spend 10–12 weeks gaining hands-on experience in materials synthesis, materials characterization, materials processing, analytical chemistry, actinide materials science, optical materials science, electrochemistry, materials chemistry, and physics. https://pls.llnl.gov/maci

#### **GRADUATE**

Computational Chemistry and Materials Science Summer Institute: Graduate students gain experience in the development and application of methods in computational materials science, computational chemistry, and other related areas of computational science. https://pls.llnl.gov/ccms

**Graduate Research Scholar Program:** Top Ph.D. students are granted appointments of up to four years to conduct research of interest to the Laboratory while completing their thesis. https://lgsp.llnl.gov/

The Nondestructive Characterization Institute (NCI): Faculty and graduate students can help NCI solve a wide range of multidisciplinary problems using X-ray & neutron computed tomography, ultrasonics, microwaves, eddy current, inverse problems, signal & image processing, machine learning, data science, modeling & simulations. Faculty & students have the opportunity to acquire & analyze data, and interact with experts. https://nci.llnl.gov

**Seaborg Nuclear Forensics Summer Internship Program:** This 8-week summer program o ers graduate students the opportunity to work directly with leading LLNL researchers on projects in the areas of nuclear forensics, nuclear chemistry, and environmental radiochemistry. https://seaborg.llnl.gov/career-opportunities









# Externally Sponsored Student Programs

#### **UNDERGRADUATE**

## Student Undergraduate Laboratory Internships (SULI):

Encourages undergraduate students to pursue STEM careers by providing research experiences at DOE laboratories.

https://science.osti.gov/wdts/suli

**Community College Internships (CCI):** Encourages community college students to enter technical careers relevant to the DOE mission by providing technical training experiences at DOE laboratories.

https://science.energy.gov/wdts/cci/

## **UNDERGRADUATE and GRADUATE**

# Minority Serving Institution Internship Program (MSIIP):

Provides undergraduate or graduate students attending a participating Minority Serving Institution the opportunity to spend 10 weeks in summer working at an NNSA laboratory.

https://www.energy.gov/nnsa/nnsa-minority-serving-institution-partnership-program

Homeland Security-STEM: The Department of Homeland Security sponsors a 10-week summer internship program for students majoring in homeland security-related STEM disciplines at federal research facilities around the country. https://www.orau.gov/dhseducation/internships/application.html

# Mickey Leland Energy Fellowship (MLEF) Program:

Provides students with educational opportunities to gain real-world, hands-on research experience with the Department of Energy's (DOE) Office of Fossil Energy. http://www.energy.gov/fe/mlef

#### **GRADUATE**

**DOE Scholars Program:** Introduces students to DOE's mission and operations.

https://orise.orau.gov/doescholars/

#### **DOE office of Science Graduate Student Researcher**

**Program:** Provides graduate thesis research opportunities at DOE laboratories in areas that address scientific challenges central to the Office of Science mission. https://science.energy.gov/wdts/scgsr/

# **DOE NNSA Stewardship Science Graduate Fellowship:**

Students planning to conduct research in a science or engineering discipline related to high-energy-density physics, nuclear science, or materials under extreme conditions and hydrodynamics are eligible for this fellowship.

https://www.krellinst.org/ssgf/

### **DOE Computational Science Graduate Fellowship:**

Students participating in this fellowship employ highperformance computing for discovery in disparate disciplines.

https://www.krellinst.org/csgf/

# **DOE NNSA Laboratory Residency Graduate Fellowship:**

Financial support is provided to talented individuals whose study and research is accompanied by extended, practical work experience at one or more of four DOE NNSA facilities. https://www.krellinst.org/lrgf/



