

THE 24th LOS ALAMOS DYNAMICS SUMMER SCHOOL (LADSS)

June 5 – August 11, 2023
ladss.lanl.gov

Application portal opens: September 1, 2022

Early application deadline: November 6, 2022

Application portal closes: January 6, 2023*

** Applications will be reviewed and offers extended throughout the Fall. Please apply early!*

Questions / inquiries email: ladss@lanl.gov



We are currently soliciting applicants for the 24th Los Alamos Dynamics Summer School (LADSS). During the ten-week LADSS program, students complete research projects within the multi-disciplinary field of dynamics – spanning mechanical, electrical, and structural systems. The students' research will focus on creating solutions to Los Alamos National Laboratory (LANL) mission-relevant problems that are defined by LANL R&D engineers and scientists. In addition to this research component, LADSS also offers formal technical and career development lectures, hands-on research-related tutorials, tours of LANL's unique experimental facilities, and seminars on research at LANL and partnering universities. LADSS is a paid summer internship.

This program is limited to U.S. citizens.

HOW TO APPLY

Read more about the program and apply at ladss.lanl.gov

Applications must contain:

- Current resume (3 pages maximum)
- Cover letter describing your interest in LADSS and multi-disciplinary dynamic systems research as well as your near term (1-3 year) academic and professional goals
- Unofficial transcripts
- Letter of recommendation (multiple letters accepted)

PROJECTS

Students are placed into three-person multi-disciplinary teams, assigned a research project to be completed in an intense ten-week time frame, and mentored by LANL staff. The projects typically have a modeling, experimental, and analysis component. The goal is for the students to produce results and document their research in a manner suitable for reporting at professional conferences. Each team will prepare a paper for and present their research results at an international conference taking place the following winter.

All activities will be in person, on-site in Los Alamos, NM.†

TUTORIALS

Students participate in weekly lectures on various aspects of dynamic systems engineering such as signal processing, modeling dynamic systems, data acquisition, nonlinear systems, model validation, and machine learning. In most cases, the students will apply the material presented in these lectures to their respective projects. In addition to the research-focused lectures, students will be presented with professional development lectures that include applying to graduate school and applying for graduate fellowships. Over the past twenty-two years, eighty-one LADSS alumni have won highly competitive and prestigious National Science Foundation and National Defense graduate fellowships and forty-three past participants have returned to LANL as research staff.

STUDENTS

The program is designed for upper-division undergraduate students to first-year graduate students.‡ Twenty-one students are accepted into the program based on academic record, application, and letters of recommendation. As a general guideline, students should have sufficient academic achievement that they are, or will be, eligible for graduate school. A variety of academic disciplines are sought, including computer science, mechanical / aerospace / electrical / nuclear / civil engineering, and mathematics / statistics. In lieu of salaries, the students are provided with a fellowship that is intended to also cover relocation and housing expenses. Fellowship amounts range from \$10,000 - \$14,000, depending on academic status (see https://www.lanl.gov/careers/career-options/student-internships/_assets/docs/salary-structure.pdf) and the point of origin for the student's travel to LANL. Additionally, all travel costs for attending and presenting at the conference are covered.

† COVID-19 VACCINATION AND COMPLIANCE WITH RELATED LANL POLICY IS REQUIRED FOR PARTICIPATION

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