We are currently soliciting applicants for the 25th 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)
RESEARCH PROJECTS

Students are placed into three-person multi-disciplinary teams, assigned a research project to 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. To date, the LADSS program has produced 149 conference papers and 21 refereed journal articles.

EDUCATIONAL ENRICHMENT

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, student will participate in professional development seminars that include applying to graduate school and graduate fellowships. Tours and seminars highlighting research in LANL’s core mission areas provide students with exposure to the broad scope of work performed across LANL’s more than 40 sq. mi. campus.

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

APPLICANT INFORMATION

The program is designed for upper-division undergraduate student to first-year graduate students† from a variety of academic disciplines, including computer science, physics, mechanical / aerospace / electrical / nuclear / civil engineering, and mathematics / statistics. 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. 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/Student Salary Structure 2023.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.

† THIS PROGRAM IS LIMITED TO U.S. CITIZENS