



SANDIA SUMMER INSTITUTE

When offered

August 5–10, 2012

Who can apply

Full-time graduate students

Application deadline

March 4, 2012

Location

Sandia National Laboratories in
Livermore, California

Learn more and apply online

www.sandia.gov/summer_institute

About Sandia National Laboratories

Sandia National Laboratories is the nation's premier science and engineering lab for national security and technology innovation. We focus on cutting-edge technology, ranging from homeland defense, global security, biotechnology, and environmental preservation to energy and combustion research, computer security, and nuclear defense. Whether it's writing software for the world's fastest computers, leading a national initiative in nanotechnology, or developing intelligent microsystems, Sandians are leading the way—and they are doing it with tools and facilities that rank among the world's best. For more info, visit: www.sandia.gov



The Sandia Summer Institute: Cyber Security Technology, Policy, Law, and Planning for an Uncertain Future is the second annual cross-disciplinary student program at Sandia National Laboratories in Livermore, California, for top graduate students from the nation's premier universities. Twenty select students will collaborate in small teams, working side-by-side with leading experts in the cyber, policy, and law arenas. Participants will develop new career skills by addressing challenging problems in a fast-paced, collegial work environment.

The Institute will address technical, policy, and legal topics of national interest and will include both technically focused work and a short strategic-planning exercise. Participants will be mentored by Sandia's top scientists and engineers, as well as preeminent outside experts.

Students will have the opportunity to select from the following technical seminars:

- ***Assured Sharing: Post-WikiLeaks Era Tensions in National-Security Information Sharing and Safeguarding***
Explore solutions for "assured sharing" (i.e., sharing national-security information across organizations and classification levels) through research, discussion, and strategic-planning sessions that span governance, policy, technology, culture, and economics.
- ***Information Analytics for Cyber Security***
Design and conduct an analysis of cyber security data to detect and characterize possible breaches and anomalies, and engage in an adversarial analysis of your methods.
- ***Public-Private Sector Responsibilities and Legal Issues in Our Nation's Cyber Defense***
Work through a series of real-life cyber-security scenarios to explore the layered and intertwined business, legal, criminal, and government-relation issues confronted by businesses, government, and individuals.
- ***Trusted Digital Systems Designed with Field-Programmable Gate Arrays***
Learn how to detect hardware Trojans via a complete overview of FPGA design flow, moving from a hardware design language to a programmed FPGA device analyzed for possible Trojan entry points.

All students will also participate in a strategic-planning exercise to discuss technical advances and capabilities that should be pursued to strengthen U.S. defenses against cyber attacks.

Interested in learning more or apply online? Visit www.sandia.gov/summer_institute.

Applications are due March 4, 2012. Housing, meals, and transportation will be provided by Sandia for Institute participants.

Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000. SAND 2011-9470P.