

California Space Grant Consortium Exploration Internship Opportunities—Summer 2011

INTERNSHIPS: The California Space Grant Consortium (CaSGC), in partnership with the NASA Exploration Systems Mission Directorate (ESMD) Space Grant Project, is offering two summer internships with space industry partner Boeing (Boeing Space Exploration, headquartered in Houston, Texas next to NASA Johnson Space Center – JSC). Students will be engaged in hands-on engineering projects with a strong and involved mentor. Internships are open to undergraduate juniors/seniors and first year graduate students and will be competitively awarded. **Stipends of \$5,000 will be awarded for these summer 2011 internships.**

REQUIREMENTS:

- Must be a U.S. Citizen to participate. Proof of citizenship will be required if selected;
- Enrolled full-time in an accredited CaSGC affiliate institution (see <http://casgc.ucsd.edu>);
- Minimum GPA of 3.5 on a 4.0 point scale;
- CaSGC encourages science and engineering students, particularly underrepresented ethnic or gender groups, to apply;
- Each intern application is reviewed by a CaSGC selection committee and awards are made on a competitive basis;
- Award recipients must provide a summary report at the end of the intern period (to be submitted electronically to spacegrant@ucsd.edu);
- All award recipients will be “longitudinally” tracked after graduation to assess the impact of the intern awards on career choices.

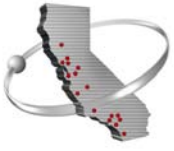
APPLICATION DEADLINE: May 15, 2011 (11:59 PM).

Your application should include:

- Resume
- Unofficial transcripts (official transcript will be requested if you are selected)
- Personal statement (stating why you want to intern at Boeing Space Exploration - JSC and what unique abilities and skills you can apply to your internship)
- Letter of Recommendation (to be sent directly by recommender)

APPROXIMATE INTERNSHIP DATES: June 13, 2011 – August 19, 2011 (10 weeks; dates to be confirmed)

BACKGROUND: The California Space Grant Consortium (CaSGC), with its 27 university affiliates, is a significant asset to California and NASA for aerospace-related education, workforce development, and outreach. The central CaSGC theme that links all of the CaSGC Program Elements is aerospace-related "Human Capital" development. Each CaSGC project task, whether relating to higher education curriculum, pre-college STEM education, student - mentor experiential learning, and NASA Center intern programs, is driven by the need to have positive outcomes which impact California and NASA "Human Capital" pipeline issues. The Exploration Internship Opportunities in this announcement relate to this central theme of “Human Capital” development.



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INTERNSHIP DESCRIPTIONS: Boeing Space Exploration, headquartered in Houston, Texas, is the leading global supplier of reusable and human space systems and services. Boeing designs, develops, builds, and operates human and robotic space vehicles as well as supporting hardware. The organization's current programs are Space Shuttle and International Space Station. These avionics engineering positions are designed to expose engineering students to real world experiences. Interns will work with an engineering mentor to participate in the requirements, analysis, design, and verification of engineering products and processes that require the application of basic engineering and scientific principles. Interns will work as a team member and interact with customers, partners, subcontractors, and suppliers.

Prospective interns should be able to think critically and creatively; knowledge of engineering fundamentals is required. This candidate will have the ability to work independently and in a team environment. Other qualities are the ability to adapt to rapid or major change and a desire for lifelong learning. The highest ethical standards and excellent communication skills are required. Competency in standard Microsoft Office applications is preferred. This position requires the ability to obtain access to a National Aeronautics and Space Administration (NASA) facility.

Applicants should be a Junior/Senior undergraduate or first year graduate student in an engineering curriculum that leads to an ABET accredited degree in Aerospace Engineering or Electrical Engineering.

POSITION: Intern - Student Engineer supporting Boeing Space Exploration Division's International Space Station Software Systems and Requirements team and the Software Development and Integration Laboratory's Support Systems team. Typical tasks may include, but are not limited to, the following under close supervision.:

- 1. Assists in the specification and maintenance of software requirements. Performs/documents requirements traceability. Supports algorithm development and provide inputs into technical solutions.*
- 2. Assist in the operations of the Software Development and Integration Laboratory; which supports integration testing and certification of flight-control software for the 50 computers used throughout the ISS. Also, the lab is used to test software and hardware together as a system to help resolve ISS on-orbit anomalies.*

There may be additional NASA engineering and space related tasks available, including avionics, commercial crew, payloads, reliability and mission assurance.

EMAIL YOUR APPLICATION TO: Tehseen Lazzouni at the California Space Grant Consortium: tlazzouni@ucsd.edu.