



STUDENT AND FACULTY OPPORTUNITIES NASA- Dryden Flight Research Center Spring and Summer 2007



The Dryden Flight Research Center (DFRC) is NASA's center for aeronautical flight research and atmospheric flight operations. DFRC is chartered to research, develop, verify, and transfer advanced aeronautics, space and related technologies. It also serves as a backup landing site for the Space Shuttle and a facility to test and validate design concepts and systems used in development and operation of the Orbiters.

NASA plays a unique role in advancing the technical education agenda of our nation. Dryden Flight Research Center (DFRC) knows that in order to accomplish its aeronautic research and test mission and for NASA to reach its new exploration goals, it is critical that NASA partners with the Academic and Industry community in the development of the “right” skillful workforce that will be able to lead NASA and its Centers in accomplishing these challenging goals.

The Following are the Student and Faculty Program Opportunities Available at DFRC for Spring/Summer 2007:

Pre-College Programs:

- **INSPIRE – Middle School and High School Program** – This program will consist of three tiers. Tier 1 for 7-10 grade students. Tier 2 for high school students interested in an internship. Tier 3 for Collegiate Internship Experience. For more information, contact Michelle.Davis@dfrc.nasa.gov
- **NES – NASA Explorer Schools** - Each spring, a three-year partnership is established between NASA and 50 new NASA Explorer School teams, consisting of teachers and education administrators from diverse communities across the country. <http://explorerschools.nasa.gov/portal/site/nes/>
- **Robotics** - The FIRST Robotics Competition is an exciting, multinational competition that teams professionals and young people to solve an engineering design problem in an intense and competitive way. <http://www.usfirst.org/>

Undergraduate Student Programs:

Students with Disabilities:

- **ACCESS – Achieving Competency in Careers in Engineering and Space Science** - A 10-week summer work program at DFRC for undergraduate and graduate students with disabilities majoring in engineering, science, and mathematics or computer science. <http://www.education.nasa.gov>
- **WRP** – Workforce recruitment Program is a recruitment resource for identifying job candidates with disabilities skilled in a wide variety of fields. WRP@dol.gov

Minority Students Opportunities:

- **MUST – Minority University Student in Technology Program** - A scholarship program covering half of tuition up to \$10,000 for undergraduate students in engineering and technology. <http://scholarships.hispanicfund.org/applications/subsectionid.1.page1>
- **MAES - The Society of Mexican American Engineers and Scientists** - NASA-DFRC is one of MAES member organizations. Every year NASA sponsors a few students to come on Center and work side by side with our engineers. <http://www.maes-natl.org/>

- **MUREP – Minority University Research and Education Program** - Fosters the research and development of capability of Minority Institutions (MI). Scholarship and internship opportunities are available through individual MI grant awards. <http://mured.nasaprs.com>

Student Opportunities:

- **NASA DFRC AERO Associates Program** – On-site work program for undergraduate and graduate students from Community Colleges, Colleges and Universities as well as post-doctoral and faculty. This program is in partnership with the Aerospace Education Research and Operations Institute (AERO). <http://www.AEROInstitute.org>
- **COOP Program – The Student Career Experience Program** – This program integrates college-level academic study with meaningful work experience at a NASA Center. Students are eligible for permanent employment after successfully completing their education and meeting work requirements. This program also includes opportunities for business majors. http://nasajobs.nasa.gov/stu_opps/employment/coop_edu_program.htm
- **USRP - Undergraduate Student Researchers Program** - This program provides challenging, hands-on, mentored, 10-15 week research experiences at NASA Centers or mission installations. http://www.vsgc.odu.edu/Menu3_1_3.htm
- **National Space Grant Colleges and Fellowship Program** – This program offers fellowships/scholarships and other research opportunities to undergraduate and graduate students attending Universities from the Consortium. <http://www.education.nasa.gov/spacegrant>
- **STEP - Student Temporary Employment Program** -This program is also referred to as the “Stay-in-School Program”. It offers temporary employment that can range from summer jobs to positions that can last for as long as the student is a student. http://www.nasajobs.nasa.gov/jobs/student_opportunities/temporary_stay.htm

Graduate Student Programs:

On-Site Research Opportunities:

- **COOP Program – The Student Career Experience Program** – This program integrates college-level academic study with meaningful work experience at a NASA Center. Students are eligible for permanent employment after successfully completing their education and meeting work requirements. This program also includes opportunities for business majors. http://nasajobs.nasa.gov/stu_opps/employment/coop_edu_program.htm
- **STEP - Student Temporary Employment Program** -This program is also referred to as the “Stay-in-School program”. It offers temporary employment that can range from summer jobs to positions that can last for as long as the student is a student. http://www.nasajobs.nasa.gov/jobs/student_opportunities/temporary_stay.htm
- **Resident Research Associates Program** - Doctoral and post-doctoral level students are selected in a national competition to become guest investigators at a NASA Field Center. Scholarly research is conducted on a problem of the associates’ own choosing. <http://education.nasa.gov/resident.research/index.html>

Fellowships/Scholarships:

- **GSRP – Graduate Student Research Program** - The GSRP is a program that offers competitive fellowships to US citizens who are pursuing graduate degrees at the masters and doctoral levels in areas of science and engineering, at US accredited colleges and universities that support the NASA research and development mission. <http://www.fellowships.hq.nasa.gov/gsrp>.
- **JFPF – Harriet G, Jenkins Pre-Doctoral Fellowship Program** - The JFPF program provides support for full-time graduate students belonging to groups that have been historically underrepresented in science, technology, and engineering. <https://www.uncfsp.org/nasa/jenkins/welcome.aspx>

- **GEM - National Consortium for Graduate Degree for Minorities in Engineering and Science, Inc. Fellowship** - This program is a unique network of universities, companies, government agencies, alumni and faculty. NASA is one of the agency participants. GEM assists underrepresented minority students in obtaining MS degrees in engineering and Ph.D. degrees in engineering and the natural and physical sciences. <http://www.gemfellowship.org/>

Faculty Programs:

- **FAR – Faculty Awards for Research** - This is a solicitation open for minority institutions. Projects must emphasize research areas relevant to the NASA Mission Directorates. <http://www.education.ksc.nasa.gov/farhtm>
- **NASA Research Opportunities Online** - This is an electronic source for various NASA offices to publish their research announcements, broadening the opportunity to researchers to apply for funding. The web-site provides access to all current research announcements along with specific due dates. <http://www.nasa.gov/about/research>
- **NASA DFRC AERO Associates Program**. This program is in partnership with the Aerospace Education Research and Operations Institute (AERO) in support of faculty research at their Universities or on-site at the Center. <http://www.AEROInstitute.org>

WE SEEK STUDENTS INTERESTED IN:

- Aerodynamics
- Advanced Structure Concepts
- Airborne UAV Science Missions
- Aircraft Simulation
- Unmanned Aerial Vehicles (UAVs)
- Advanced Digital Flight Controls
- Flight Instrumentations
- Flight Systems
- Propulsion and Performance
- Western Aeronautical Test Range
- Mission Controls

FIELDS OF STUDY/COMPETENCIES

Mechanical Engineers
 Electrical/Electronics Engineers
 Aerospace Engineers
 Systems Engineers
 ** Civil Engineers (occasionally)
 Computer Engineers
 Computer Science
 Business Management
 Test Engineering
 Design & Development Engineering
 Integration Engineering

For the Coop Program we are also looking for: Accounting, Finance, Marketing, Journalism, English and Design.

www1.dfrc.nasa.gov/education

Point of Contact at NASA-DFRC

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