

THE NASA ACADEMIES at NASA ARC, GRC, GSFC, and MSFC

The NASA Academies are intensive educational programs emphasizing group activities, teamwork, research, and creativity. The curriculum balances direct contact with science and engineering R&D with an awareness of the managerial, political, financial, social and human issues faced by aerospace professionals. Included are seminars, informal discussions, evening lectures, supervised research, visits to other NASA Centers and facilities, group project/s, tours, posters/presentations, and assessment. Additionally, most weekends are filled with group activities, team building and off-site trips. One free weekend is scheduled.

The Academy is not a 9-5 summer research internship program. It is a rigorous, immersive experience that will challenge you. The academy is a space-themed program of high learning about NASA, its projects and collaborations with aerospace industry and academia, with very little down time, but a busy, exciting summer that you will not forget.

The Academies have separate focus areas of leadership (NASA Academy), robotics, space and planetary science, and propulsion.

The deadline is January 18, 2010 at 5:00 p.m. EST.

You may access it at <http://AcademyApp.com>

This application serves the following programs

- The NASA Academy at Ames Research Center
- The NASA Academy at Glenn Research Center
- The NASA Lunar and Planetary Science Academy at Goddard Space Flight Center
- The NASA Academy at Marshall Space Flight Center
- The NASA Propulsion Academy at Marshall Space Flight Center
- The NASA Robotics Academy at Marshall Space Flight Center

NASA Academy (ARC, GRC, MSFC)

Eligibility: Rising junior, senior undergraduate or at the early graduate level in accredited U.S. college or university as of May of the program year; B average (minimum); major in engineering, science (physics, chemistry, biology, earth sciences, etc.), math, computer science or other areas of interest to the aerospace program; US citizen or permanent resident (as of May of the program year).

Description: The NASA Academy is a unique summer experience at the university level for developing future leaders of the U.S. Space Program. The program is an intensive, resident, ten-week summer experience with laboratory research work, a group project, lectures, meetings with experts and administrators, visits to NASA Centers and space-related industries, technical writing, and presentations. Students discover how NASA and

its Centers operate, gain experience in world-class laboratories, participate in a team environment and build professional bonds. On graduation, Academy participants are inducted into the NASA Academy Alumni Association (NAAA) whose goal is to promote NASA, the NASA Academy, research, and space education. The 52 state-based members of the National Space Grant College and Fellowship Program have co-sponsored the NASA Academy since its founding in 1993. Students with disabilities are provided reasonable accommodation services. Women, minorities, and individuals with disabilities are encouraged to apply.

GSCF NASA Lunar and Planetary Science Academy (NLPSA)

Sites: <http://nasascience.nasa.gov/planetary-science>, <http://lunar.gsfc.nasa.gov/>

Eligibility: GPA 3.3 minimum on a 4.0 scale, with experience in lunar and planetary science research; US citizen. **Research Associates:** Rising undergraduate freshmen, sophomores, or juniors in astrophysics, physics, or engineering; **Team Leads:** Undergraduate seniors or graduate students with a strong background in planetary science and/or engineering.

Description: The NASA Lunar Planetary Science Academy is a 10-week resident summer internship for students specifically interested in lunar and planetary science. The emphasis is on hands-on activities related to lunar and planetary science mission design and operation, instrument development, and data acquisition and analysis in a team environment. Students who have demonstrated experience in the relevant areas are given priority. Participants are assigned to a team project sponsored by mentors at NASA/GSFC, local industry, or academic institution (4 students per project). In addition to direct guidance from the Principal Investigator (PI) who sponsored the project, an advanced science/engineering student is assigned as team lead to guide interns and manage the project on a daily basis. The interns and team leads participate in enriching activities such as field work at a planetary analogue site, a group project, lectures, and meetings with leaders in the field. Students with disabilities are provided reasonable accommodation services.

MSFC NASA Robotics Academy

Research Associates' Eligibility: GPA 3.0 on a 4.0 scale, with experience in robotics; US citizens; rising undergraduate sophomores, juniors, or seniors,

Team Leads' Eligibility: GPA 3.0 on a 4.0 scale, with experience in robotics; US citizens; rising undergraduate juniors, seniors or graduate students with a curricular background in robotics.

Description: The NASA Robotics Internship Program is a 10-week resident summer internship for students specifically interested in robotics. Students who have previously participated in the FIRST Robotics Competition or Botball, or who have taken active interest in robotics in demonstrable ways are given priority. Participants are assigned to a team project sponsored by NASA/MSFC, local industry, or academic institution. Two to three students are assigned per project. In addition to direct guidance from the Principal

Investigator who sponsored the project, an advanced robotic student is assigned as team lead to guide interns and manage the project on a daily basis. The interns and team leads participate in enriching activities such as a group project, lectures, field trips, and meetings with leaders in the field of robotics. Students with disabilities are provided reasonable accommodation services.

MSFC NASA Propulsion Academy

Research Associates' Eligibility: GPA 3.0 on a 4.0 scale; US citizens; rising undergraduate sophomores, juniors, or seniors,

Team Leads' Eligibility: GPA 3.0 on a 4.0 scale, with a curricular background in propulsion; US citizens; rising undergraduate juniors, seniors or graduate students with a curricular background in robotics.

Description: The NASA Propulsion Academy, at the Marshall Space Flight Center, is a 10-week, residential summer research and educational experience for high achieving sophomores, juniors, seniors and graduate students interested in propulsion. The emphasis is on preparing young professionals for employment in aerospace positions. Propulsion is the critical element in NASA's exploration program. The new Ares propulsion elements are being designed and developed by engineers at the Marshall Space Flight Center (MSFC) and by its contractors. We are utilizing this development as a training ground for university students who are interested in careers in this exciting field. Research Associates (interns) will work in teams of four, guided by propulsion engineers at Marshall, local commercial entities and local universities. Each team is composed of a "team lead" and three research associates. The team lead is an advanced undergraduate or graduate student with a curricular background in courses relevant to propulsion. The research associates are sophomores, juniors and seniors who aspire to becoming graduate propulsion engineers. Site visits, tours and lectures will demonstrate the various opportunities for employment in the space propulsion field. These visits will expose the research associates to state-of-the-art propulsion development. Tours of local facilities and lectures by experts in propulsion will provide one-on-one interaction with practicing propulsion engineers.