



Experiment Increment Engineer



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**Experiment Increment
Engineer**

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Bioengineering studies the mechanics of how the human body works. My job at NASA is to develop biomedical hardware for use in space. Since I became an experiment increment engineer, I help develop hardware for the Human Research Facility of the International Space Station. Because I want to share my experiences with others, I plan to work in promoting the importance of education to youth, by combining my background in engineering, my own personal experiences, and what I've learned with my masters in counseling.

Areas of expertise:

- Bioengineering and math
- Communication, organizational, and people skills
- Education

How I first became interested in this profession:

I learned about medicine and engineering by talking to members of my family who had backgrounds in these fields. With this information, I became interested in bioengineering, which combined both disciplines. I originally had the idea of working on developing artificial organs, but in my sophomore year of college, a mentor encouraged me to join the cooperative education program, which led me to several internships at NASA. At the time, delaying my graduation seemed like a hard decision, but joining the co-op program opened many doors for me.

What helped prepare me for this job:

In high school I was involved in gifted and talented programs, and I took advanced classes, getting a good background in math and science. I also visited local medical research facilities and schools. Later, I went to work on four NASA internships doing hardware development in various areas, including medical equipment and life support systems, which greatly helped prepare me for my full-time job at NASA.

My role models or inspirations:

I am the youngest of ten siblings, and my role models are my parents, who always stressed the importance of education. They helped and encouraged us to do well in school. I was also fortunate to have helpful mentors in college who pointed me in the direction of great opportunities.

My education and training:

- B.S., Bioengineering, Texas A & M University
- M.S., Counseling, University of Houston, Clear Lake

My career path:

- Seven years as a bioengineer at NASA Johnson Space Center (JSC)
- One year as an experiment increment engineer, NASA/JSC

What I like about my job:

I enjoy being part of a team and ensuring that hardware is developed properly. I also enjoy the development process, which involves constant communication via e-mail, tag-up meetings, design, and hardware reviews.

What I don't like about my job:

Because I am goal-oriented, I dislike paperwork, which slows down my work and progress.

My advice to anyone interested in this occupation:

If you are curious about how things work, and like solving problems, then engineering is a field you may want to explore. Try to research careers in this area, and to talk with people who work in the field. Remember, the first step to achieving your dreams is believing that you can succeed.

Additional Resources:

- American Institute of Biological Sciences
<http://www.aibs.org>
- American Physiological Society
<http://www.faseb.org/aps>
- American Society for Biochemistry and Molecular Biology
<http://www.biophysics.org/biophys/society/biohome.htm>
- American Society for Microbiology
<http://www.asmsusa.org>
- Astrobiology Summer Academy
<http://academy.arc.nasa.gov/>
- Biotechnology Industry Organization
<http://www.bio.org/welcome.html>
- Education Pays Calculator
<http://www.educationpays.org/calc.asp>
- Earth to Orbit: Engineering Design Challenges
<http://eto.nasa.gov/>
- Graduate Student Researchers Program
<http://spacelink.nasa.gov/Instructional.Materials/NASA.Educational.Products/Graduate.Student.Researchers.Program.Brochure/.index.html>
- MATHCOUNTS Competition
<http://mathcounts.org/>
- Minority University Research and Education Programs
<http://mured.nasaprs.com/>
- NASA Cooperative Education Program for college students
<http://spacelink.nasa.gov/Educational.Services/NASA.Education.Programs/Student.Support/NASA.Cooperative.Education.Program/.index.html>
- NASA Jobs
<http://nasajobs.nasa.gov/>
- NASA Office of Life and Microgravity Sciences and Applications
<http://www.hq.nasa.gov/office/olmsa/>
- NASA SHARP Internship Program for high-schoolers
<http://www.mtsibase.com/sharp/>
- NASA Student Employment
http://nasajobs.nasa.gov/stud_opps/employment/index.htm
- NASA Student Involvement Program student contests
<http://www.nsip.net/index.cfm>
- Order NASA career videos such as "Engineers: Turning Ideas into Reality," "Careers: Aerospace Engineer" or "Reaching for the Stars" from NASA CORE.
<http://core.nasa.gov>
- Revolutionary Vehicle Concepts and Systems student competition
<http://avst.larc.nasa.gov/competitions.html>
- Student's Guide to Astrobiology
<http://www.astrobiology.com/student.html>
- Tech-Interns.com
<http://www.tech-interns.com/>

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http://ehb2.gsfc.nasa.gov/edcats/educational_topic

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Thank you.

