

## ATTENTION: Co-op opportunities

You may apply on [CDSlink](http://www.njit.edu/cds/cdmlink.php) <http://www.njit.edu/cds/cdmlink.php> (job ad is 5761)

**NASA, the world's leader in space and aeronautics is always seeking outstanding scientists, engineers, and other talented professionals to carry forward the great discovery process that its mission demands. Creativity - Ambition - Teamwork - A sense of Daring - and a Probing Mind - That's what it takes to join NASA, one of the best places to work in the Federal Government.**

\*\*\*GR13P0040 Engineer CLOSING 4/22/13 \*\*\*\*

As a undergraduate student in the Pathways Employment Program (IEP), the Intern will work with more experienced engineers in the Energy Systems Branch which provides discipline engineering for electrical power generation and storage systems including solar arrays, fuel cells, batteries, flywheels, and thermo-mechanical conversion systems.

Typical knowledge areas used in this position are: Energy System Design, Power Electronics, Power Systems Analysis, Motor Drives and Controls, Energy Conversion, Electric Machinery, Power Systems Instrumentation and Measurement, Energy Development and Power Generation, Power System Stability and Control

Activities will span concept to completion energy system development including: architecture and requirements development, design, implementation, testing and documentation. Typical tasks are the development of circuit designs, programming and simulation work, microprocessor control implementation, dynamic power measurements, stability analysis, electromagnetic analysis, cable and connector selection, and wiring diagram development. The student will work in both an office and a laboratory setting with processors, signal conditioning, inverters, sensors, and connectors.

\*\*\*GR13P0039 Engineer CLOSING 4/22/13 \*\*\*\*

As a graduate student in the Pathways Employment Program (IEP), the Intern will work with more experienced engineers in the Energy Systems Branch which provides discipline engineering for electrical power generation and storage systems including solar arrays, fuel cells, batteries, flywheels, and thermo-mechanical conversion systems.

Typical knowledge areas used in this position are: Energy System Design, Power Electronics, Power Systems Analysis, Motor Drives and Controls, Energy Conversion, Electric Machinery, Power Systems Instrumentation and Measurement, Energy Development and Power Generation, Power System Stability and Control.

Activities will span concept to completion energy system development including: architecture and requirements development, design, implementation, testing and documentation. Typical tasks are the development of circuit designs, programming and simulation work, microprocessor control implementation, dynamic power measurements, stability analysis, electromagnetic analysis, cable and connector selection, and wiring diagram development. The student will work in both an office and a laboratory setting with processors, signal conditioning, inverters, sensors, and connectors.

\*\*\*GR13P0038 Engineer CLOSING 4/16/13 \*\*\*\*

As a graduate student in the Pathways Employment Program (IEP), the student performs engineering work with guidance and oversight from experienced personnel within the Research & Technology Directorate.

Intern will support research and technology development of advanced space power systems that use nuclear radioisotope or fission heat sources for future NASA missions. Duties will include performing computational analysis and conducting experimental tests of Stirling and/or Brayton thermal energy conversion devices to validate their technology readiness for space flight. Position requires knowledge of mechanical engineering, energy conversion, thermal systems, analytical modeling, and laboratory testing.