

NASA Office of Education Scholarship and Research Opportunities

Applications Deadline: March 31, 2015

NASA Office of Education (OE) provides funds for the NASA Scholarship and Research Opportunities (SRO), which awards scholarships to individuals who are pursuing degrees in undergraduate studies specifically in areas of projected deficiencies in the NASA Science, Technology, Engineering, and Mathematics (STEM) workforce. Students interested in applying to the NASA Scholarship and Research Opportunities may apply to either the Minority University Research and Education Project (MUREP) Scholarships, the Aeronautics Scholarships, or both scholarships, provided the student meets the eligibility criteria. The MUREP Scholarship awards scholarships for individuals pursuing or planning to pursue undergraduate studies leading to Associate's or Bachelor's degree in one or more relevant NASA related, STEM disciplines. Students must currently attend or plan to attend an accredited Minority Serving Institution (MSI) in the United States. The NASA Scholarship and Research Opportunities for Aeronautics Undergraduate Scholarships (AUS) awards scholarships for individuals pursuing or planning to pursue undergraduate studies leading to Associate's or Bachelor's degree in areas related to aeronautics. These scholarships are directed toward enhancing the state of aeronautics for the nation, transforming the nation's air transportation system, and developing the knowledge, tools, and technologies to support future air and space vehicles. *(For a list of acceptable MUREP STEM and Aeronautic degrees or fields scroll down).*

Eligibility Requirements:

Citizenship: SRO is open only to applicants who are citizens or nationals of the United States. It does not refer to a citizen of another country who has applied for United States citizenship. United States citizenship must be obtained by the time that the scholarship award is accepted. Persons who hold permanent resident status are not eligible. Proof of citizenship will be required upon formal offer.

Educational Requirements:

- Scholarships are awarded to individuals within the early stages (freshman to junior year of college study) of their undergraduate study or have a minimum of 2 years of undergraduate college remaining.
- All applicants are expected to demonstrate college level preparation by having obtained a high school diploma (minimum 3.0 on a 4.0 GPA scale) or successful matriculation (minimum 3.0 on a 4.0 GPA scale) in degree program prior to the fall of 2015.
- **NASA SRO MUREP** scholarships awardees must be enrolled in a MSI of higher education accreditation and having a campus located in the United States that offers undergraduate level degrees in eligible STEM field.
- **NASA SRO AUS** scholarships awardees must be enrolled in an Associate's or Bachelor's degree in a field relevant to aeronautics at an institution of higher education accreditation

and having a campus located in the United States that offers undergraduate level degrees in eligible aeronautics related degrees.

Budgetary Information:

Selected undergraduate students' receive 75% of their tuition and education related cost up to \$9,000 per academic year via a NASA training grant. Students are required to participate in summer internship during the summer of scholarship award period. The scholars receive a \$6,000 stipend for their participation. This is contingent upon the student meeting academic criteria, scholarship responsibilities and the availability of funding.

Application Process NASA SRO MUREP:

1. Applicant must send an email of "Intent to Apply for the Undergraduate MUREP Scholarship" to **NASA.MUREP2015@nasaprs.com**. Please put the quotation in the subject of the email. In the body of the email include your name and phone number.
2. Applicant must register and complete the OSSI application at <https://intern.nasa.gov/ossi/web/public/main/>.
3. Applicant must upload the most recent unofficial transcript.
4. Applicant must have at least one letter of recommendation from a person who has observed the applicant in a STEM class or activity.
5. Applicants must complete the essay questions: Please answer the following questions in one well-written essay limited to 1000 words:
 - What are your professional goals and what attracted you to your intended STEM field of study?
 - What events and individuals have been critical in influencing your academic and career decisions, and how specifically have these events and individuals shaped your decisions?
 - How would receiving the NASA MUREP Scholarship and Research Opportunities help you accomplish your professional goals?

Application Process NASA SRO AUS:

1. Applicant must send an email of "Intent to Apply for the Aeronautics Undergraduate Scholarship" to **NASA.ASP2015@nasaprs.com**. Please put the quotation in the subject of the email. In the body of the email include your name and phone number.
2. Applicants must register and complete the OSSI application <https://intern.nasa.gov/ossi/web/public/main/>
3. Applicant must upload the most recent unofficial transcript.
4. Applicant must have at least one letter of recommendation from a person who has observed the applicant in a STEM class or activity.
5. Answers to the following two essay questions in the OSSI application:
 - ***Undergraduate Aeronautic Student Essay 1:*** In a concise statement, provide a summary of your current educational program objectives and your long-range professional goals. As part of this statement, we are interested in your ideas about the kinds of research in which you have engaged and in which you

would like to engage during your studies as well as during your expected tenure with the NASA Aeronautics Scholarship Program. Please address how you think your current program fits with the field of Aeronautics. You should discuss specific research questions that interest you and how you became interested in them. Please discuss these research interests in sufficient detail for an expert who is technically competent in your field to judge your understanding of the questions to be addressed (*Maximum 800 words*).

- ***Undergraduate Aeronautic Student Essay 2:*** Provide an essay describing what you consider to be the greatest technical challenges in aeronautics for the next 20-25 years and why. You can pick one challenge or several. You should address what types of research will be required to address the challenge(s), and what ideas or concepts you think might help to solve them. You will need to explain the challenge(s) and your proposed concepts in sufficient technical depth to demonstrate your technical understanding, and you will also need to clearly explain why the challenge(s) is/are so important (*Maximum: 500 words*).

Scholarship Application Assistance

One Stop Shopping Initiatives:

1. <https://intern.nasa.gov/oic/>
2. https://intern.nasa.gov/ossi/web/public/main/index.cfm?solarAction=view&subAction=content&contentCode=HOME_PAGE_STUDENT_ASSISTANCE

NASA Graduate Aeronautics Scholarship Program

1. https://intern.nasa.gov/ossi/web/public/main/index.cfm?solarAction=view&subAction=content&contentCode=HOME_PAGE_SCHOLARSHIPS

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NASA National Scholarship Deputy Program Manager

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Fax: (202) 479-0511 (Fax)

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MUREP STEM Disciplines Degrees or Fields of Study

CHEMISTRY:

- Chemical Catalysis
- Chemical Measurement and Imaging
- Chemical Structure, Dynamics, and Mechanism
- Chemical Synthesis
- Chemical Theory, Models and Computational Methods
- Chemistry of Life Processes
- Environmental Chemical Systems
- Macromolecular, Supramolecular, and Nanochemistry
- Sustainable Chemistry
- Chemistry, other (specify)

COMPUTER AND INFORMATION SCIENCE AND ENGINEERING (CISE)

- Algorithms and Theoretical Foundations
- Bioinformatics and other Informatics
- Communication and Information Theory
- Computational Science and Engineering
- Computer Architecture
- Computer Networks
- Computer Security and Privacy
- Computer Systems and Embedded Systems
- Databases
- Data Mining and Information Retrieval
- Formal Methods, Verification, and Programming Languages
- Graphics and Visualization
- Human Computer Interaction
- Machine Learning
- Natural Language Processing
- Robotics and Computer Vision
- Software Engineering
- CISE, other (specify)

ENGINEERING

- Aeronautical and Aerospace Bioengineering
- Biomedical
- Chemical Engineering

- Civil Engineering
- Computer Engineering
- Electrical and Electronic Energy
- Environmental Engineering
- Industrial Engineering & Operations Research
- Materials Engineering
- Mechanical Engineering
- Nuclear Engineering
- Ocean Engineering
- Optical Engineering
- Polymer Engineering
- Systems Engineering
- Engineering, other (specify)

GEOSCIENCES

- Atmospheric Chemistry
- Aeronomy
- Biogeochemistry
- Biological Oceanography
- Chemical Oceanography
- Climate and Large-Scale Atmospheric Dynamics
- Geobiology
- Geochemistry
- Geomorphology
- Geodynamics
- Geophysics
- Glaciology
- Hydrology
- Magnetospheric Physics
- Marine Biology
- Marine Geology and Geophysics
- Paleoclimate
- Paleontology and Paleobiology
- Petrology
- Physical and Dynamic Meteorology
- Physical Oceanography
- Planetary Science
- Sedimentary Geology
- Solar Physics
- Tectonics
- Geosciences, other (specify)

LIFE SCIENCES

- Biochemistry
- Bioinformatics and Computational Biology
- Biophysics
- Cell Biology
- Developmental Biology
- Ecology
- Environmental Biology
- Evolutionary Biology
- Genetics
- Genomics
- Microbial Biology
- Neurosciences
- Organismal Biology
- Physiology
- Proteomics
- Structural Biology
- Systematics and Biodiversity
- Systems and Molecular Biology
- Life Sciences, other (specify)

MATERIALS RESEARCH

- Biomaterials
- Ceramics
- Chemistry of materials
- Electronic materials
- Materials theory
- Metallic materials
- Photonic materials
- Physics of materials
- Polymers
- Materials Research, other (specify)

MATHEMATICAL SCIENCES

- Algebra, Number Theory, and Combinatorics
- Analysis
- Applied Mathematics
- Biostatistics
- Computational and Data-enabled Science
- Computational Mathematics

- Computational Statistics
- Geometric Analysis
- Logic or Foundations of Mathematics
- Mathematical Biology
- Probability
- Statistics
- Topology
- Mathematics, other (specify)

PHYSICS AND ASTRONOMY

- Astronomy and Astrophysics
- Atomic, Molecular and Optical Physics
- Condensed Matter Physics
- Nuclear
- Particle Physics
- Physics of Living Systems
- Plasma
- Solid State Theoretical Physics
- Physics, other (specify)

Aeronautics Disciplines Degree or Fields of Study

ENGINEERING

- Aeronautical and Aerospace
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical and Electronic
- Energy
- Engineering Mechanics
- Engineering Science
- Industrial Engineering
- Materials Engineering
- Mechanical Engineering
- Metallurgical
- Polymer
- Systems Engineering

Additional Supported Fields in:

- Mathematics
- Computer Science
- Physics

Note: Some funding mechanism will not accept all of these fields of study and may include some that are not listed.

Cancellation of Announcement: NASA reserves the right to make no awards under this NASA Office of Education Scholarship and Research Opportunities Announcement. NASA may cancel any or all aspects of this opportunity at any time. NASA assumes no liability (including any application preparation costs) for canceling this announcement in whole or in part or for any entity's failure to receive an actual notice of cancellation.