

New Mexico Space Grant Consortium Education Enhancement Grant Application Guidelines

About the Education Enhancement Grant

The New Mexico Space Grant Consortium (NMSGC) Education Enhancement Grant is intended to support project-based course development, capstone courses, curriculum or course re-design. The grant can also be used to support student retention and achievement programs in science, engineering, and technology areas. Courses should be part of the regular academic program in higher education institutions. Funds may be used to support faculty or staff release time, or graduate and undergraduate student support. Course curriculum must be in the areas of space, aerospace, aeronautics, robotics, Earth-related science or any area of interest to NASA. As is true with all NMSGC programs, the participation of underrepresented minorities, women, and persons with disabilities is strongly encouraged. This opportunity is open year-round; however, it is contingent upon grant funding availability and period of performance.

Application Submission

Submit application and all required elements in one combined PDF to nmsgc@nmsu.edu

Note

Applications are accepted at any time and are contingent upon funding. Please note that if awarded, the award process can take up to six weeks to be completed. If you have any questions, contact NMSGC at nmsgc@nmsu.edu

Find more
information
about NASA's
Mission
Directorates

Aeronautics Research Mission Directorate (ARMD)
<https://www.nasa.gov/directorates/armd/>

Exploration Systems Development Mission Directorate (ESDMD)
<https://www.nasa.gov/exploration-systems-development-mission-directorate/>

Space Operations Mission Directorate (SOMD)
<https://www.nasa.gov/directorates/space-operations/>

Science Mission Directorate (SMD)
<https://www.nasa.gov/directorates/space-operations/>

Space Technology Mission Directorate (STMD)
<https://www.nasa.gov/space-technology-mission-directorate/>

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Objective

The goal of the Education Enhancement Grant is to support projects that assist NASA STEM Engagement to “enable unique opportunities for students to contribute to NASA’s work, build a diverse future STEM workforce by engaging students in authentic learning experiences and strengthen public understanding by enabling powerful connections to NASA’s mission and work” (<https://www.nasa.gov/stem/about.html>)

Eligibility

All full-time faculty at universities, colleges, and community colleges who are members of the New Mexico Space Grant Consortium are eligible to apply. The following list comprises current NMSGC higher education member institutions:

- Central New Mexico Community College
- Doña Ana Community College
- Eastern New Mexico University
- Navajo Technical University
- New Mexico Highlands University
- New Mexico Institute of Mining and Technology
- New Mexico State University
- Northern New Mexico University
- San Juan College
- Santa Fe Community College
- Southwestern Indian Polytechnic Institute
- University of New Mexico
- Western New Mexico University

Period of Performance and Award Amount

Awards will be made for up to \$15,000. Period of performance (POP) is one year. Renewals will not be considered. Projects are eligible for one-time funding only. Faculty must start spending funds within 3 months of the start date of the subaward. No-cost extension (NCE) requests will be considered for approval at the discretion of the NMSGC director, Dr. Paulo Oemig, and must be submitted in writing 60 days prior to the end of the POP. NCEs are contingent upon the NMSGC funding cycle.

Note: The start date of your project’s period of performance (POP) cannot start prior to the date that your proposal was submitted.

Assessment of Applications

Each application submitted under this program will be evaluated by the NMSGC Director.

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Applications will be competitively evaluated and selected for their scientific, technical, and management merit, including diversity and inclusion effort. Sufficient information must be provided to allow the director to make an informed decision. If any sections in the submitted application are left incomplete or more details are needed, NMSGC will return your application for revisions as many times as necessary. Failure to submit a completed application or meet requirements may result in non-award. Applications will be evaluated using the following criteria:

Review Criteria	Possible Points
Project Summary is concise, complete and clearly states the learning objectives of the class, the relationship to space science, engineering, Earth-related science, or technology programs that are of current interest to NASA.	25
The degree to which this application is relevant to NASA’s Mission and to the NASA STEM Engagement Goals.	20
The degree to which this application is relevant to the engineering, science, or mathematics curriculum.	15
Course description and objectives.	15
Potential of the project to increase retention and achievement, particularly for women, underrepresented minorities and students with disabilities.	15
Adequacy and appropriateness of the budget to carry out the project, including institutional contributions or other matching funds.	10
Total	100

Budget

Allowable Expenses

If a portion of the project’s budget is being used for the following, include the recommended items in the budget justification:

- a) Salary and Fringe: Faculty release time and summer support, support for undergraduate and graduate students, and hourly wages for staff and student employees are allowed. **All students who receive direct support must be U.S. citizens.**
- b) Domestic Travel: Must include name of persons who are traveling, purpose for travel, destination, dates of travel, per diem rate, and how the travel supports your research goal. Include all other costs in the budget justification: lodging, meals, transportation, etc. State and Federal government travel regulations apply to all travel. All travel supported by the project must be in the continental U.S.

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- c) Supplies and Materials: Include a list of the supplies, estimated cost per item, and a description of how the supplies will be used in your project. If materials or software will be purchased, list the item(s) and describe how it supports the project's goals.
- d) Equipment: Up to \$5,000 for equipment is allowed.

Non-allowable expenses:

- a) Foreign travel is not allowed.
- b) Civil service personnel travel is not allowed.
- c) Indirect Costs (IDC) or F&A (Financial and Administration) costs can be used to meet the matching funds requirements. **They may not be billed as direct costs to this grant.** It is recommended that waived IDCs be used to meet matching funds, otherwise your college or department will have to report voluntary cost-share.

Cost Share (Matching Funds)

Participants must provide 100% non-federal matching funds for this program.

Although the method of match is flexible (for instance industry or community partner cost-sharing is acceptable), NASA encourages researchers to consider methods that add value to New Mexico's existing research capabilities. In-kind cost share is allowed. In-kind cost share is non-cash cost share. There are several ways researchers can find in-kind cost share:

- a) Faculty salary can also be used as cost-share/matching funds. If a faculty member is donating time for cost-share contributions, in the budget justification provide the percentage of time (salary equivalent) that they will dedicate to the project. In addition, include fringe and IDC rates.
- b) Indirect Costs (IDC) or F&A (Financial and Administration) cannot be charged as direct costs to this program. However, it is recommended that IDCs or F&A be used to meet cost-share/matching fund requirements, otherwise the PI's college/department will have to report voluntary cost-share.

NMSU Applicants ONLY: When calculating F&A, please use a rate of 48% as this was the rate in place at NMSU when the grant was awarded. All other institutions such as NMT and UNM, use the F&A rate allowed on your campus.

Note: Your department/institution's fiscal agent can help provide this information. All cost-share contributions are non-cash.

Specific Application Requirements and Format

1. Cover Page and Certificate of Compliance

Please complete all items on the cover page form and Certificate of Compliance. The

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Certificate of Compliance must be signed by PI, college/department's dean and fiscal agent.

2. **Project Summary**

The project summary (also called 'abstract') must be 250 words or less. The summary should indicate the learning objectives of the class, the relationship to space science, engineering or technology programs that are of current interest to NASA. Your course should concisely describe the proposed learning objectives, key features, and proposed outcomes.

3. **Course Description and Objectives**

The course description can be up to five single-space or 10 double-spaced pages. Throughout the course description, please include examples of how NASA's engineering or scientific challenges are incorporated. Your course description should align with NASA's overall mission and goals and address at least one goal in NASA STEM Engagement Goals.

In your course description, also indicate materials/textbooks/e-books required for students. Use the SMART (Specific, Measurable, Assignable, Realistic, and Time-Related) guide for creating the objectives of the course. In your course description, address the following sections:

a) Expected Learning Outcomes, Assessment Criteria, Teaching Delivery, Course Calendar

Use the prompt "Each student will be able to..." to help you state the course Expected Learning Outcomes. The Assessment Criteria should describe the manner in which students will be assessed and the impact of each assignment in the student's overall grade. The criteria should include the type of activities anticipated in the course (e.g., discussions, projects, participation, attendance, etc.). Teaching delivery addresses the question: How will the course be taught? (e.g., face to face, online, blended delivery, laboratory, or any combination thereof). An approximate weekly Course Calendar/Timeline will describe anticipated topics to be covered, including preparation time leading to the course.

b) Course Benefits

Please write brief answers to the following questions. This will be included in your page count.

I. Will the course count for credits awarded toward degree program/s?

If yes, please include the course number. If it is an elective, explain departmental support for this course and sustainability beyond one semester.

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- II. What is the need for this course within your department and college? Describe the expected long-range benefits from the course to the engineering, science, or mathematics education at your institution, as well as to the student population & project personnel.
 - c) Key Personnel
Identify the key personnel and succinctly describe their qualifications and experiences as they relate to the successful execution, continuation, and expansion of the project. Attach a one-page Vitae for each Principal Investigator. (These vitae are not included in page totals listed above).
 - d) Timeline: Provide a timeline table of the tasks to be completed during the project's period of performance (POP).
4. **Budget and Budget Justification**
Use the budget template provided on the application. All NMSGC grant applications require a budget and budget justification. The budget table should include the requested funds and the cost-share funds. All RIG projects require cost-share at 1:1, 100% non-federal matching funds. The budget justification should be succinct but provide sufficient information to judge the need for and importance of the funding requested. It should also include an explanation on the proposed cost-share contributions. For details, go to the Budget section on pages 3-4 of these guidelines.

If applicable, NMSU affiliated proposers need to consider: Health insurance for graduate assistants should be listed in financial aid/tuition in budgets and budget justifications to accurately reflect how the expense will be processed through the NMSU's financial system. The NMSU Research Administration Services office suggest adding a brief explanation to the budget justification such as "Tuition and health insurance for the Graduate Assistant on this proposal will be processed in the university's financial system as a scholarship, therefore these costs are listed under tuition/financial aid." If you have questions regarding this matter, please contact Barbara Gonzales, Associate Director at NMSU Research Administration Services at barbarag@nmsu.edu

Award Expectations

1. **Award Letter**
If awarded, applicants will receive an email notification from NMSGC staff and award letter one to two weeks after the application was submitted.
2. **Project Expenses**
Please note that project funding may not be immediately available after receiving an

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award letter. NMSU internal processes can take up to six weeks to create an account for your project. Once your account has been created and your award is within NMSU, NMSGC will notify you and will request an onboarding meeting with you to review the Statement of Work (SOW), more details in the next sections. If your award is considered external, meaning at another university, your institution will inform you accordingly. As a reminder, once funding is available for expenses, you will be expected to start spending funds within the first three months of your POP.

3. Statement of Work (SOW)

A Statement of Work (SOW) is an agreement between the NMSGC and the awardee's institution/department to comply with award requirements. Reporting and budget details will be provided on the SOW. If awarded, applicants can expect to receive their SOW four to six weeks after receiving their award letter.

4. Onboarding Meeting

After an account at the awardee's institution has been created, awardees will be required to meet with NMSGC staff to review the SOW and discuss any questions. The onboarding meeting is expected to happen before expenses are charged to an index or invoices are processed.

5. Data Reporting and Surveys

Awardees will be expected to complete report(s) at the time that NASA requests it. NASA may request multiple reports throughout the award period. The data provided in these reports is related to the financial aspects of the project (how many students were hired or working on the project, how many hours have they worked on the project, etc.), list of student names and contact information, demographics of the participants including the PI (race, ethnicity, gender, etc.). You will also be asked about the progress on your project and to provide pictures about project activities. In addition, you will be asked about any publications or papers presented supported by the project and collaborations with NASA Centers. **All student and faculty participants will each be required to comply with reporting requirements.**

Post-Award Requirements

1. A final report will be required from you no more than one month after the project end date. This final report must include the following, a template will be provided:
 - a) Name and contact information of all participants in the project
 - b) Demographic information of each participant (race, ethnicity, gender, etc.)

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- c) Total hours involved in project
 - d) List of course URLs or applicable published materials or presentations
 - e) Project summary:
 - a. What was the specific problem or challenge you aimed to address with your course?
 - b. What key concepts did you apply in your course?
 - c. How many students enrolled in your course?
 - d. What were the overall demographics of the students?
 - e. What were the main activities or presentations offered?
 - f. What were your main findings or results, and how do they contribute to the understanding of the problem or challenge?
 - g. What were the main obstacles or difficulties you encountered during the project, and how did you overcome them?
 - h. How do your findings relate to and potentially impact real-world applications or future research in your field?
 - i. What are some potential next steps or areas for further exploration and development in relation to your project?
 - f) Pictures of the project. If a person is identifiable in your pictures, please provide a completed [NASA Media Release Form](#).
2. Final invoice (for external institutions) or Report of Final Expenses (RFE) for internal subawards (awards provided to New Mexico State University (NMSU)). Final invoices will be due to the NMSGC office no later than 30 days after the end date of the period of performance (POP). RFEs will be due to the NMSGC office and to NMSU Sponsored Projects Accounting (SPA) no later than 45 days after the end of the POP.