



## NASA CONNECTICUT SPACE GRANT CONSORTIUM

---

# REQUEST FOR PROPOSALS

## Faculty Programs

*Research Grant*

*Project Grant*

*STEM Education Research Grant*

*STEM Education Programming Grant*

*Curriculum Development Grant*

*Travel Grant*

*Undergraduate Student-Faculty Research*

*High-Altitude Ballooning / CubeSat Seed Grant*

**History:** In order to encourage broader participation in NASA research programs, Trinity College, University of Connecticut, University of Hartford, and the University of New Haven formed the Connecticut Space Grant College Consortium in 1991. The philosophical intent of this program was and continues to be, to build a research infrastructure in Connecticut which supports the aerospace, space science, engineering and technology related initiatives of federal and state government and private industry.

Each Consortium Member institution has a Campus Director (listed below). Questions should be directed to that person. If you are unable to contact the appropriate Campus Director, inquiries may be directed to the NASA CTSGC Office.

<b>4-Year Intuition Consortium Members</b>		
<b>Central Connecticut State University</b> Dr. Luz Amaya School of Engineering 860.832.1818 <a href="mailto:l.amaya@mail.ccsu.edu">l.amaya@mail.ccsu.edu</a>	<b>Connecticut College</b> Dr. Alex Gianninas Dept. of Physics, Astronomy & Geophysics 860.439.2345 <a href="mailto:agiannina@conncoll.edu">agiannina@conncoll.edu</a>	<b>Eastern Connecticut State University</b> Dr. Elizabeth A. Cowles Dept. of Biology 860.465.4385 <a href="mailto:cowlese@easternct.edu">cowlese@easternct.edu</a>
<b>Fairfield University</b> Dr. Harvey Hoffman School of Engineering 203.254.4000 x3080 <a href="mailto:hhoffman@fairfield.edu">hhoffman@fairfield.edu</a>	<b>Quinnipiac University</b> Dr. Lynn Byers Dept. of Mechanical Engineering 203.582.5028 <a href="mailto:Lynn.Byers@quinnipiac.edu">Lynn.Byers@quinnipiac.edu</a>	<b>Sacred Heart University</b> Dr. Tolga Kaya Dept. of Computer Science & Engineering 203.396.6589 <a href="mailto:Kayat@sacredheart.edu">Kayat@sacredheart.edu</a>
<b>Southern Connecticut State University</b> Dr. Dana Casetti Dept. of Physics 203.392.7191 <a href="mailto:casettid1@southernct.edu">casettid1@southernct.edu</a>	<b>Trinity College</b> Dr. Clayton Byers Dept. of Engineering 860.297.5239 <a href="mailto:clayton.byers@trincoll.edu">clayton.byers@trincoll.edu</a>	<b>University of Bridgeport</b> Dr. Jani Pallis Dept. of Mechanical Engineering 203.576.4579 <a href="mailto:jpallis@bridgeport.edu">jpallis@bridgeport.edu</a>
<b>University of Connecticut</b> Dr. Jason Lee School of Engineering 860.486.2239 <a href="mailto:Jason.Lee@uconn.edu">Jason.Lee@uconn.edu</a>	<b>University of Hartford</b> Dr. Daniel Martin College of Arts and Sciences 860.768.4406 <a href="mailto:dmartin@hartford.edu">dmartin@hartford.edu</a>	<b>University of New Haven</b> Dr. Chong Qiu Dept. of Chemistry 203.479.4888 <a href="mailto:CQiu@newhaven.edu">CQiu@newhaven.edu</a>
<b>University of St. Joseph</b> Dr. Raouf Boules School of Arts, Sciences, Business, & Education 860.231.5803 <a href="mailto:rboules@usj.edu">rboules@usj.edu</a>	<b>Wesleyan University</b> Dr. Seth Redfield Astronomy Dept. 860.685.3669 <a href="mailto:sredfield@wesleyan.edu">sredfield@wesleyan.edu</a>	<b>Yale University</b> Dr. Andrew Szymkowiak Dept. of Physics 203.432.9854 <a href="mailto:andrew.szymkowiak@yale.edu">andrew.szymkowiak@yale.edu</a>
<b>CT State Community College Consortium Members</b>		
<b>CT State Community College - Asnuntuck</b> Professor Amely Cross Dept. of Chemistry/Physics 860.253.3056 <a href="mailto:across@acc.commnet.edu">across@acc.commnet.edu</a>	<b>CT State Community College - Capital</b> Dr. Cleo Rolle Dept. of Science & Mathematics 860.906.5177 <a href="mailto:crolle@ccc.commnet.edu">crolle@ccc.commnet.edu</a>	<b>CT State Community College - Gateway</b> Professor Susan Spencer Dept. of Mathematics 203.285.2452 <a href="mailto:sspencer@gatewayct.edu">sspencer@gatewayct.edu</a>
<b>CT State Community College - Housatonic</b> TBD	<b>CT State Community College - Manchester</b> Dr. Fatma Salman Dept. of Physics 860.512.2743 <a href="mailto:fsalman@mcc.commnet.edu">fsalman@mcc.commnet.edu</a>	<b>CT State Community College - Middlesex</b> Dr. Lin Lin Dept. of Engineering, Computer Science & Technology 860.343.5763 <a href="mailto:llin@mxcc.edu">llin@mxcc.edu</a>
<b>CT State Community College - Naugatuck Valley</b> Dr. Peter Angelastro Dept. of Biology 203.596.8690 <a href="mailto:pangelastro@nv.edu">pangelastro@nv.edu</a>	<b>CT State Community College - Northwestern</b> Professor Douglas Hoffman Dept. of Mathematics 860.738.6332 <a href="mailto:dhoffman@nwcc.commnet.edu">dhoffman@nwcc.commnet.edu</a>	<b>CT State Community College - Norwalk</b> Dr. Mobin Rastgar Agah Dept. of Mathematics 203.857.3366 <a href="mailto:mrastgaragah@norwalk.edu">mrastgaragah@norwalk.edu</a>
<b>CT State Community College - Quinebaug Valley</b> Professor Jakob Spjut Dept. of Engineering 860.932.4156 <a href="mailto:jspjut@qvcc.commnet.edu">jspjut@qvcc.commnet.edu</a>	<b>CT State Community College - Three Rivers</b> Professor James Doran Interim Program Coordinator, Engineering Technology (860) 449-4498 <a href="mailto:jdoran@trcc.commnet.edu">jdoran@trcc.commnet.edu</a>	<b>CT State Community College - Tunxis</b> Dr. Karen Wosczyzna-Birch Dept. of Chemistry 860.490.4545 <a href="mailto:kwosczyzna-birch@commnet.edu">kwosczyzna-birch@commnet.edu</a>
<b>Leadership Team</b>		
<b>Dr. Hisham Alnajjar, Interim Director</b> <a href="mailto:alnajjar@hartford.edu">alnajjar@hartford.edu</a> 860.768.4681	<b>Janet Spatcher, Program Manager</b> <a href="mailto:ctspgrant@hartford.edu">ctspgrant@hartford.edu</a> 860.768.4813	<b>Dr. Brian Wells, Assistant Director</b> <a href="mailto:brwells@hartford.edu">brwells@hartford.edu</a> 860.768.4318
		<b>April Michaud, Program Coordinator</b> <a href="mailto:csgcinfo@hartford.edu">csgcinfo@hartford.edu</a> 860.768.4890

<b>ABOUT NASA CTSGC.....</b>	<b>4</b>
<b>PROPOSAL DEVELOPMENT CONSIDERATIONS .....</b>	<b>5</b>
Eligibility Requirements	5
Preparation of Proposals	5
Project Periods	5
Review of Proposals	5
Application Submission	6
Award Notification	6
Evaluation of Funded Projects and Reporting Requirements	6
Equipment and Supplies	6
Prior Award Recipients	6
Funds Distribution	6
<b>PROGRAM INFORMATION.....</b>	<b>8</b>
<b>Faculty Research Grant.....</b>	<b>8</b>
About this award	8
Post award responsibilities	9
Apply for this award	9
Evaluation rubric	11
<b>Faculty Project Grant .....</b>	<b>11</b>
About this award	11
Post award responsibilities	12
Apply for this award	13
Evaluation rubric	14
<b>STEM Education Research Grant (K-12 and Higher Education).....</b>	<b>14</b>
About this award	14
Post award responsibilities	15
Apply for this award	16
Evaluation rubric	17
<b>STEM Education Programming Grant.....</b>	<b>18</b>
About this award	18
Post award responsibilities	19
Apply for this award	19
Evaluation rubric	21
<b>Travel Grants.....</b>	<b>21</b>
About this award	21
Post award responsibilities	22
Apply for this award	23
Evaluation rubric	24
<b>Undergraduate Student – Faculty Research Grant .....</b>	<b>24</b>
About this award	27
Post award responsibilities	28
Apply for this award	29
Evaluation rubric	30
<b>Curriculum Development .....</b>	<b>31</b>
About this award	31
Award Details – Curriculum Development or Curriculum Revision/Enhancement Grant:	31
Post award responsibilities	32
Apply for this award	33
Evaluation rubric	34
<b>High-Altitude Ballooning / CubeSat (HAB/C) Seed Grant .....</b>	<b>35</b>
About this award	35
Post award responsibilities	35
Apply for this award	36
Evaluation rubric	37
<b>NATIONAL SPACE GRANT PROGRAM GOAL AND OBJECTIVES.....</b>	<b>38</b>
Goal	38
Objectives	38
Important Resources	38

# About NASA CTSGC

**History:** In order to encourage broader participation in NASA research programs, Trinity College, University of Connecticut, University of Hartford, and the University of New Haven formed the Connecticut Space Grant College Consortium in 1991. The philosophical intent of this program was, and continues to be, to build a research infrastructure in Connecticut which supports the aerospace, space science, engineering and technology related initiatives of federal and state government and private industry.

NASA Connecticut Space Grant Consortium (CTSGC) is one of 52 state-based, university-led Space Grant Consortia funded by NASA Office of STEM Engagement (OSTEM) to develop and implement student fellowship and scholarship programs, interdisciplinary space-related research infrastructure, education, and public service programs; and cooperative initiatives with industry, research laboratories, and state, local and other governments. Space Grant operates at the intersection of NASA's interest as implemented by alignment with the Mission Directorates and NASA CTSG's interests. Although it is primarily a higher education program, Space Grant programs should encompass the entire length of the education pipeline, including elementary/secondary and informal education.

# Proposal Development Considerations

A proposal must demonstrate a link between the proposal work and one of NASA's [Mission Directorates](#). They are: Aeronautics Research (ARMD), Exploration Systems Development (ESDMD), Mission Support (MSD), Science (SMD), Space Operations (SOMD), and Space Technology (STMD).

Faculty who respond must show a 1:1 Non-Federal cost match ratio within their budgets. For example, if you are responding to a \$10,000 research grant, your budget needs to show \$20,000 with a \$10,000 match (funds not supplied by the federal government) and \$10,000 supplied by the Consortium. Evidence of your institution's agreement to this match should be included within your proposal. **Please be sure to contact the appropriate grants office within your institution before submitting your proposal; institutional office approval is required on your application.**

For use of NASA facilities, University Affairs Offices at NASA Centers must be contacted. Contact information and NASA facility missions and statements may be found at each of the NASA facilities web sites. A directory of [NASA Centers and Facilities](#) is available online.

## Eligibility Requirements

Full-time Faculty at Consortium Member Institutions are eligible to apply. Post-doctoral fellows, full-time research staff and associates are also eligible to apply with support of full-time faculty. Part-time faculty and/or Adjunct faculty may be faculty advisors for student research, projects, or Community College Quadcopter teams with support of full-time faculty. A foreign national may receive payment through a NASA award while employed full-time at a U.S. institution of higher education. Students hired for a project must be a U.S. citizen.

## Preparation of Proposals

If you are considering applying for NASA CTSGC funding, you should contact your [Campus Director](#) as far in advance as possible to review the application process, and the steps that should be followed for a successful application submission.

## Project Periods

Awards may be for a single semester, full academic year, and/or summer-time periods, or up to one year. The applicant must include specific Period-of-Performance start and end dates (mm/dd/yyyy) on the Application Form. Costs may occur up to 90-days prior to Period-of-Performance start (at Institution's risk); no costs may occur after the Period-of-Performance end. Period of Performance: No Cost Extension (NCE) may be requested through your university Grant's Office no later than 30 days prior to the ending date. CTSGC leadership must approve any NCE request, and will notify the PI via email if granted or declined. PI may be eligible for only one NCE for each award.

## Review of Proposals

The proposal review committee is composed of NASA CTSGC academic Campus Directors. Reviews are performed after the submission of proposals. The reviewers may request additional information if needed. The request will be made through the NASA CTSGC Office. Decisions are anticipated within six weeks of the submission of proposals. Reviewers will evaluate proposals using the rubrics shown under each grant type.

## Application Submission

Submit the application and additional forms via the links at [ctspacegrant.org](https://ctspacegrant.org).

## Award Notification

Award/Decline Letters: Each application/applicant will receive an email notification of their application with an attached award or a decline letter. Decisions are typically made within six weeks following the application deadline.

Website and Social Media: Awards will be announced on the [NASA CTSGC website](https://www.nasa.gov/ctsgc). Announcements of the post will be included on our social media (Facebook, LinkedIn, Instagram, X; @CTSpaceGrant) accounts.

## Evaluation of Funded Projects and Reporting Requirements

The following are required at completion of the project: Project report, Student participant tracking, and participation in Grants Expo Poster Session. Details of post-award requirements are provided in an award letter.

Public Information: This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](https://www.nasa.gov/ctsgc) and will be kept there for an extended period of time.

## Equipment and Supplies

NASA CTSGC funds may not be used for equipment purchases. The definition for equipment is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. Items below \$5,000 are classified as supplies. NASA CTSGC funds may not be used to purchase computers or tablets. Request for a 3-D printer and/or supplies must be clearly justified and must be essential for the project.

## Prior Award Recipients

New applicants will be given priority over recent awardees with all grants.

## Funds Distribution

- For all awards the affiliate grants/financial offices will be required to send a detailed invoice at least quarterly. If there is no activity, a zero invoice will be required.
- Faculty Research, STEM Education Research, STEM Education Programming, Curriculum Development Grant, and HAB/C Grants: Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee's institution and the University of Hartford, and then will be paid to the grant awardee's institution to be distributed according to its policies related to faculty grants. A detailed, itemized invoice is required when sending any invoice to the consortium office. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

- Travel and Project Grants: Reimbursement will require the completion of a sub-award to the master agreement between the grant award recipient's institution and the University of Hartford. Reimbursement requires the submission of detailed, itemized receipts to the appropriate office at the affiliate Consortium campus. No travel advances will be allowed from Consortium funds. **International travel may not be supported by this grant.** Final payment will be made upon submission and approval of all post-award reporting.
- Community College Quadcopter Challenge (CCQC): Funds will be distributed by the participating affiliate to their team members upon completion of the Challenge, once the report is submitted to the consortium office and approved by the CTSGC leadership. A detailed invoice and match documentation must be sent to the NASA CTSGC Office to begin the reimbursement payment process. A separate RFP would be released for CCQC.
- Undergraduate Student-Faculty Research Grant: Funds will be distributed in two payments to the faculty advisor's institution; the institution will pay the student upon completion of an appropriate agreement between the faculty advisor's institution and the student's institution. The first payment will be 50% of the stipend at the beginning of research. The remaining balance will be paid upon submittal and approval of all required post-award documentation.

#### IMPORTANT NOTES

---

*All federal requirements pass through from the NASA CTSGC's lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the Office of Management and Budget Uniform Guidance link: <https://www.nssc.nasa.gov/grants>***

*\*Note to **University of Hartford faculty applicants**: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research*

# Program Information

## Faculty Research Grant

### About this award

**Award** – To encourage faculty participation in research in areas related to the mission of NASA at Connecticut Space Grant Consortium member institutions, the Consortium will award faculty research grants during the program year. Research grants are available to support faculty, staff, postdoctoral fellows, and students in research pursuits. Interdisciplinary collaboration is highly encouraged. Diverse applicants are highly encouraged to apply.

**Eligible Activities** – Research in any area related to the mission of NASA as illustrated by its [Mission Directorates](#)

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time research staff, research associates, including postdoctoral fellows are also eligible to apply.

Preference will be given to applicants who 1) are non-tenured and/or early career, including post-doctoral fellow, 2) who use these funds as seed money, 3) who collaborate with other Consortium members (within CT), and 4) whose research involves/supports students.

**Eligible Budget Items** – The budget may include items such as technician and support staff salaries, summer salaries, student stipends, fringe benefits, supplies, and materials. ***Faculty/staff salary and stipend (including fringe/benefits) may not exceed 50% of the award amount.*** No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions. To avoid duplication with other Consortium Grant programs, travel may not be charged to a Faculty Research Grant. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$10,000 research grant, your budget needs to show \$20,000 with a \$10,000 match and \$10,000 supplied by the Consortium. This is an example only, please refer to our website for [current award amount](#).*

**Equipment and Supplies** – NASA CTSGC funds may not be used for equipment purchases. The definition for equipment is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. General-purpose equipment approved by the NASA Grant Officer. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies. NASA CTSGC funds may not be used to purchase computers or tablets. Request for a 3-D printer and/or supplies must be clearly justified and must be essential for the project.

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee's institution and the University of Hartford, and then will be paid to the grant awardee's institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.



## Post award responsibilities

**Reporting** – A project report will be requested upon completion of the work. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported research is required. Please use the [Direct Participant form](#) for each student.

**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

**New Technology Reporting** – All NASA contractors, grantees and NASA partners, have an obligation to report new technologies to NASA as required by their agreement. NASA CTSG requires all applicants to comply with this New Technology Report. The detailed guidelines are available [online](#) and this information is included in the final report form. Communications and questions regarding New Technology Reporting should be directed to the-CTSGC office.

## Apply for this award

Submit the application and additional forms on the [CTSGC website](#)..

- **Applicant Contact/Demographic Information**  
*\* This information is utilized for NASA reporting only.*
- **Proposal Information**
  - a. **Proposal Abstract** (100-word maximum) – includes information relating the proposed project to NASA’s Mission Directorates.
  - b. **Narrative** – 6 pages maximum

- i. Project goals and objectives
- ii. Relevance to NASA's Mission Directorates
- iii. Methods and procedures
- iv. Timeline
- v. Budget narrative
- vi. Evidence of student involvement (Appendix may be included in a separate section, see d below).
- vii. Expected outcomes and Assessment Plan

*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*

- c. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. Reminder: Faculty must show a 1:1 cost match ratio.
- d. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For collaborative proposals please submit a one-page CV for each team member.
- e. Other supporting evidence can be combined and submitted as a single pdf.

#### **IMPORTANT REMINDERS:**

---

*All federal requirements pass through from the NASA CTSGC's lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the NASA [Office of Management and Budget Uniform Guidance](#).***

*\*Note to **University of Hartford faculty applicants**: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*

## Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the scope of the project.	5
<b>Goals and objectives</b>	The goals and objectives are clearly stated. There are compelling reasons offered to pursue the project.	10
<b>Relevance to NASA's Mission Directorates</b>	The proposed project is very relevant to one or more of NASA's Mission Directorates.	10
<b>Methods and procedures</b>	The proposal includes a detailed, well-written explanation of the proposed methods and procedures to achieve the project's goals and objectives. There is a strong link between the methodology and goals of the project.	15
<b>Timeline and feasibility</b>	The proposed timeline is clear, detailed, and closely aligned with the goals and objectives. The proposed timeline is feasible. Institutional support is strong. When applicable, equipment/resources are readily available.	10
<b>Expected outcomes &amp; assessment plan</b>	There is great potential for innovation, publications, or future funding. The proposal includes well-defined plan for disseminating findings. A clear, and well-defined assessment plan is included.	10
<b>Collaboration</b>	There is strong evidence of collaboration either across disciplines, across colleges/universities or with external partners.	10
<b>Student involvement</b>	Students play a significant role in the project and are included in the budget.	10
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	10
<b>Early Career</b>	The applicant is pre-tenure/early career, including post-doctoral fellow	5
<b>Recent award</b>	Using scale as Never 5, five years and above 4, three-four years 3, two years 2, one-year 1	5
		100

## Faculty Project Grant

### About this award

**Award Details** – The goal of a Faculty Project Grant is to support faculty research by supporting faculty with the cost of materials and supplies. This may be in purchasing consumables to enable more student participation in the research or supplies necessary to expand to new research areas. This funding may also be used to support undergraduate or graduate research in the PI's lab, for work that would not otherwise be funded.

**Information** – Refer to [NASA CTSGC website](#) for the amount and number of awards available each program year. Since this is an institutional award, a subcontract for each institution will be executed.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time research staff and associates are also eligible to apply.

**Budget** – Funds may be used for supplies and materials only. Funds may not be used for travel, equipment/computers, entertainment, entry fees, tuition, salaries, fringe benefits, or indirect costs. Materials and supplies may be funded up to a maximum of \$5,000 (the Consortium reserves the right to adjust funding requests based upon the number and quality of applications). Funds will be paid to the grant awardees' institution on a reimbursement basis after submission of receipts to the awardee's affiliate office. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$2,000 project grant, your budget needs to show \$4,000 with a \$2,000 match and \$2,000 supplied by the Consortium. This is an example only, please refer to our website for [current award amount](#).*

**Equipment and Supplies** – NASA CTSGC funds may not be used for equipment purchases. The definition for equipment is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. General-purpose equipment needs to be approved by the NASA Grant Officer. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies. NASA CTSGC funds may not be used to purchase computers or tablets. Request for a 3-D printer and/or supplies must be clearly justified and must be essential for the project.

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee's institution and the University of Hartford, and then will be paid to the grant awardee's institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

### Post award responsibilities

**Reporting** – A project report will be requested upon completion of the work. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported project is required. Please use the [Direct Participant Form](#) for each student.

**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

**New Technology Reporting** – All NASA contractors, grantees and NASA partners, have an obligation to report new technologies to NASA as required by their agreement. NASA CTSG requires all applicants to comply with this New Technology Report. The detailed guidelines are available [online](#) and this information is included in the final report form. Communications and questions regarding New Technology Reporting should be directed to the-CTSGC office.

### Apply for this award

Submit the application and additional forms [on the CTSGC website](#).

➤ **Applicant Contact/Demographic Information**

*\* This information is utilized for NASA reporting only.*

➤ **Proposal Information**

a. **Proposal Abstract** (100 words maximum) – includes information relating the proposed project to NASA’s [Mission Directorates](#).

b. **Narrative** – 4 pages maximum

i. Project goals and objectives

ii. Relevance to NASA’s Mission Directorates

iii. Methods and procedures

iv. Budget narrative

v. Evidence of student involvement (Appendix maybe added in a separate section, see e below)

vi. Expected outcomes and Assessment Plan

*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*

c. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. Reminder: Faculty must show a 1:1 cost match ratio.

d. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For collaborative proposals please submit a one-page CV for each team member.

e. Other supporting evidence can be combined and submitted as a single pdf.

### IMPORTANT REMINDERS:

---

All federal requirements pass through from the NASA CTSGC's lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).**

*\*Note to **University of Hartford faculty applicants**: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*

### Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the scope of the project.	5
<b>Goals and objectives</b>	The goals and objectives are clearly stated. There are compelling reasons offered to pursue the project.	10
<b>Relevance to NASA's Mission Directorates</b>	The proposed project is very relevant to one or more of NASA's Mission Directorates.	10
<b>Methods and procedures</b>	The proposal includes a detailed, well-written explanation of the proposed methods and procedures to achieve the project's goals and objectives. There is a strong link between the methodology and goals of the project.	20
<b>Expected timeline, outcomes &amp; assessment plan</b>	There is great potential for innovation, publications, or future funding. The proposal includes well-defined plan for disseminating findings. A clear, and well-defined assessment plan is included. The proposed timeline is feasible.	15
<b>Collaboration</b>	There is strong evidence of collaboration either across disciplines, across colleges/universities or with external partners.	5
<b>Student involvement</b>	Students play a significant role in the project and are included in the budget.	10
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
<b>Early Career</b>	The applicant is pre-tenure/early career.	5
<b>Recent award</b>	Using scale as Never 5, five years and above 4, three-four years 3, two years 2, one-year 1	5
		100

## STEM Education Research Grant (K-12 and Higher Education)

### About this award

**Award Details – STEM Education Research:** Successful applicants will show a plan to carry out research in the STEM Education field. This research may include but is not limited to: Scholarship of Teaching and Learning (SoTL), K-12 Curriculum Development, K-12 or Higher Education STEM Outcomes, STEM Education Outreach Programs, or Social/Psychological Influences on STEM Education (e.g., gender disparities, educational access, career trajectories, STEM identity, etc.).

**Award Information** – Refer to the [NASA CTSGC website](#) for the award amount and number of awards available each program year.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time staff and associates are also eligible to apply. Collaboration with K-12 or other informal education partners is appropriate; however, the PI must be an eligible faculty/staff member of an academic institution.

Preference will be given to applicants who 1) are non-tenured and/or early career, 2) who use these funds as seed money, and 3) who collaborate with other CT Consortium members.

**Eligible Budget Items** – The budget may include items such as technician and support staff salaries, summer salaries, student stipends, fringe benefits, supplies, and materials. Funds may not be used for travel, equipment/computers, entertainment, entry fees, or indirect costs. **Faculty/staff salary and stipend (including fringe/benefits) may not exceed 50% of the award amount.** No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions. To avoid duplication with other Consortium Grant programs, travel may not be charged to a STEM Education Research Grant or STEM Education Programming Grant. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$10,000 research grant, your budget needs to show \$20,000 with a \$10,000 match and \$10,000 supplied by the Consortium This is an example only, please refer to our website for [current award amount](#).*

**Equipment and Supplies** – NASA CTSGC funds may not be used for equipment purchases. The definition for equipment is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. General-purpose equipment needs to be approved by the NASA Grant Officer. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies. NASA CTSGC funds may not be used to purchase computers or tablets.

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee’s institution and the University of Hartford, and then will be paid to grant awardee’s institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

### **Post award responsibilities**

**Reporting** – A project report will be requested upon completion of the work. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported research is required. Please use the [Direct Participant form](#) for each student.



**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

### Apply for this award

Submit the application and additional forms on the [CTS GC website](#).

➤ **Applicant Contact/Demographic Information**

*\* This information is utilized for NASA reporting only.*

➤ **Proposal Information**

- a. **Proposal Abstract** (100-word maximum) – includes information relating the proposed project to NASA’s Mission Directorates.
- b. **Narrative** – 6 pages maximum
  - i. Project goals and objectives
  - ii. Relevance to NASA’s Mission Directorates
  - iii. Methods and procedures
  - iv. Timeline
  - v. Budget narrative
  - vi. Evidence of student involvement
  - vii. Expected outcomes and Assessment Plan

*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*

- c. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. *Reminder: Faculty must show a 1:1 cost match ratio.*
- d. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For collaborative proposals please submit a one-page CV for each team member.



## IMPORTANT REMINDERS

---

All federal requirements pass through from the NASA CTSGC's lead institution, University of Hartford, to all awarded faculty grants. When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).

*\*Note to University of Hartford faculty applicants: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*

### Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the scope of the project.	5
<b>Goals and objectives</b>	The goals and objectives are clearly stated. There are compelling reasons offered to pursue the project.	10
<b>Relevance to NASA's Mission Directorates</b>	The proposed project is very relevant to one or more of NASA's Mission Directorates.	10
<b>Methods and procedures</b>	The proposal includes a clear and detailed plan to carry out research in STEM education including but not limited to K-12 curriculum development, K-12 higher education STEM education outcomes, or STEM education outreach programs. There is a clear link between methodology and goals of the project.	10
<b>Timeline and feasibility</b>	The proposed timeline is clear, detailed, and closely aligned with the goals and objectives. The proposed timeline is feasible. Institutional support is strong. When applicable, equipment/resources are readily available.	10
<b>Expected outcomes &amp; assessment plan</b>	There is great potential for innovation, publications, or future funding. The proposal includes well-defined plan for disseminating findings. A clear, and well-defined assessment plan is included.	15
<b>Collaboration &amp; interdisciplinary approach</b>	There is strong evidence of collaboration either across disciplines, across colleges/universities or with external partners.	15
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
<b>Early Career</b>	The applicant is pre-tenure/early career.	5
<b>Recent award</b>	Using scale as Never 5, five years and above 4, three-four years 3, two years 2, one-year 1	5
		100

## STEM Education Programming Grant

### About this award

**Award Details – STEM Education Programming:** Successful applicants will show a plan to undertake and complete programming related to the STEM Education field. Funding may be used to support one-time or repeated initiatives that collaborate with other educational, industrial or institutional partners (i.e., high schools, science centers, museums, colleges, businesses) to educate, increase diversity and increase exposure of students to an aspect of STEM education (e.g., careers, fields of study, research, history, emerging technologies). Examples include (but are not limited to) funding to bring a speaker to a high school, develop a program at a museum, hold a science and technology fair, or host a symposium. Programming may take place in higher education, K-12 formal education, or informal education settings. Applicants must show a plan for implementation, documentation of support of other partners, and methodology for assessment of programmatic outcomes.

**Award Information** – Refer to the [NASA CTSGC website](#) for the award amount and number of awards available each program year.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time staff and associates are also eligible to apply. Collaboration with K-12 or other informal education partners is appropriate; however, the PI must be an eligible faculty/staff member of an academic institution.

Preference will be given to applicants who 1) are non-tenured and/or early career, 2) who use these funds as seed money, 3) who collaborate with other Consortium members (within CT), and 4) whose work involves/supports students.

**Eligible Budget Items** – The budget may include items such as technician and support staff salaries, summer salaries, student stipends, fringe benefits, supplies, and materials. Funds may not be used for travel, equipment/computers, entertainment, entry fees, or indirect costs. **Faculty/staff salary and stipend (including fringe/benefits) may not exceed 50% of the award amount.** No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions. To avoid duplication with other Consortium Grant programs, travel may not be charged to a STEM Education Research Grant or STEM Education Programming Grant. Alcohol is not allowed. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$10,000 research grant, your budget needs to show \$20,000 with a \$10,000 match and \$10,000 supplied by the Consortium. This is an example only, please refer to our website for [current award amount](#).*

**Equipment and Supplies** – NASA CTSGC funds may not be used for equipment purchases. The definition for equipment is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. General-purpose equipment needs to be approved by the NASA Grant Officer. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies. NASA CTSGC funds may not be used to purchase computers or tablets.

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee's institution and the University of Hartford, and then will be paid to grant awardee's institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

## Post award responsibilities

**Reporting** – A project report will be requested upon completion of the work. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported project is required. Please use the [Direct Participant form](#) for each student.

**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

## Apply for this award

Submit the application and additional forms via the links [on the CTSGC website](#).

- **Applicant Contact/Demographic Information**  
*\* This information is utilized for NASA reporting only.*
- **Proposal Information**
  - a. **Proposal Abstract** (100 words maximum) – includes information relating the proposed project to NASA’s Mission Directorates.
  - b. **Narrative** – a 6 page maximum
    - i. Project goals and objectives
    - ii. Relevance to NASA’s Mission Directorates
    - iii. Methods and procedures
    - iv. Timeline
    - v. Budget narrative

- vi. Evidence of student involvement
- vii. Expected outcomes and Assessment Plan

*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*

- c. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. *Reminder: Faculty must show a 1:1 cost match ratio.*
- d. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For collaborative proposals please submit a one-page CV for each team member.

## IMPORTANT REMINDERS

---

*All federal requirements pass through from the NASA CTSGC's lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).***

*\*Note to **University of Hartford faculty applicants**: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*

## Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the scope of the project.	5
<b>Relevance to NASA's Mission Directorates</b>	The proposed project is very relevant to one or more of NASA's Mission Directorates.	10
<b>Goals and objectives</b>	The goals and objectives are clearly stated. There are compelling reasons offered to pursue the project.	10
<b>Methods and procedures</b>	The proposal shows a clear, feasible and well-defined plan for implementation, documentation of support of other partners, and methodology for assessment of programmatic outcomes. There is a clear and well-supported link between programming, educational plans, and the designated goal of increasing exposure of students to a specific aspect of STEM education.	15
<b>Timeline and feasibility</b>	The proposed timeline is clear, detailed, and closely aligned with the goals and objectives. The proposed timeline is feasible. Institutional support is strong. When applicable, equipment/resources are readily available.	10
<b>Expected outcomes &amp; assessment plan</b>	There is great potential for innovation, publications, or future funding. The proposal includes well-defined plan for disseminating findings. A clear, and well-defined assessment plan is included.	15
<b>Collaboration &amp; interdisciplinary approach</b>	There is strong evidence of collaboration either across disciplines, across colleges/universities or with external partners.	10
<b>Student involvement</b>	Students play a significant role in the project and are included in the budget.	5
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	10
<b>Early Career</b>	The applicant is pre-tenure/early career.	5
<b>Recent award</b>	Using scale as Never 5, five years and above 4, three-four years 3, two years 2, one-year 1	5
		100

## Travel Grants

### About this award

**Award Details** – To encourage travel to NASA facilities to use their unique resources, and present Space Grant and NASA funded research at conferences, the NASA CTSGC awards travel grants. During the Space Grant program year, the Consortium expects to award multiple travel grants, based upon available funding.

**Award Information** – Refer to [NASA CTSGC website](#) for the amount and number of awards available each program year. Since this is an institutional award, a subcontract for each institution will be executed.

**Eligible Travel** – Domestic travel supported by travel grants may include, but is not limited to, trips to NASA facilities to use specialized research equipment, trips to NASA Centers to discuss collaborations with NASA scientists and engineers, attendance at pre-proposal conferences sponsored by NASA, presentation of Space Grant funded research at conferences, giving plenary or invited papers at conferences presenting NASA- or Space Grant-related research, visits by NASA scientists/engineers to campuses for research collaboration. This award is not to attend a conference for networking or non-presenting purposes. Invitations/letters/acceptance/etc. should be included in application when possible. NASA CTSGC only supports domestic travel.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time research staff and associates are also eligible to apply.

**Budget** – The Consortium reserves the right to adjust funding requests based upon the number and quality of applications. Funds will be paid to the grant awardees' institution at the conclusion of the trip on a reimbursement basis after submission of receipts to the awardee's affiliate office. Alcohol and personal care items are not allowed. No travel advances are allowed. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$1,000 travel grant, your budget needs to show \$2,000 with a \$1,000 match and \$1,000 supplied by the Consortium. This is an example only, please refer to our website for [current award amount](#).*

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee's institution and the University of Hartford, and then will be paid to the grant awardee's institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

### Post award responsibilities

**Reporting** – A project report will be requested upon completion of the travel. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported project/travel is required. Please use the [Direct Participant form](#) for each student. for each student.

**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

### Apply for this award

Submit the application and additional forms on the [CTSGC website](#)

➤ **Applicant Contact/Demographic Information**

*\* This information is utilized for NASA reporting only.*

➤ **Proposal Information**

- a. **Proposal Abstract** (100-word maximum) – includes information relating the proposed project to NASA’s Mission Directorates.
- b. **Narrative** – a 2 page maximum. Outline description and rationale for the travel, and how you will fund the travel if you do not receive full Space Grant funding.  
  
*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*
- c. **Invitation/Other Supporting Materials** – Upload supporting documents such as conference paper acceptance notice, invitation to speak, etc.
- d. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. *Reminder: Faculty must show a 1:1 cost match ratio.*
- e. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For collaborative proposals please submit a one-page CV for each team member.

### IMPORTANT REMINDERS

---

*All federal requirements pass through from the NASA CTSGC’s lead institution, University of Hartford, to all awarded faculty grants. When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).*

*\*Note to University of Hartford faculty applicants: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*



## Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the purpose of the travel.	5
<b>Purpose of the travel</b>	There is a clear and detailed description of and rationale for travel, including an invitation to participate and/or other supporting material.	15
<b>Relevance to NASA's Mission Directorates</b>	The proposed travel is very relevant to one or more of NASA's Mission Directorates.	15
<b>Goals and objectives</b>	The goals and objectives of the travel are clearly stated. There are compelling reasons offered to pursue the travel.	10
<b>Timeline</b>	The proposed timeline is clear and detailed timeline of travel, including a feasible schedule for achieving teaching, research, or future funding outcomes related to travel.	10
<b>Expected outcomes</b>	There is great potential for travel to positively impact research, teaching, or future funding. The proposal includes a well-defined plan for achieving outcomes and the PI has a demonstrated record of output.	20
<b>Budget narrative and worksheet</b>	There is a clear, detailed budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
<b>Recent award</b>	Using scale as Never 10, five years and above 8, three-four years 6, two years 4, one-year 2	10
		100

## Group Travel Grants (Faculty-led)

### About this award

**Award Details** – To encourage small groups led by faculty to travel to NASA facilities to use their unique resources, and present Space Grant and NASA funded research at conferences, the NASA CTSGC awards travel grants.

**Award Information** –This grant is awarded on a rolling basis based on available funds. Since this is an institutional award, a subcontract for each institution will be executed.

**Eligible Travel** – Domestic travel supported by group travel grants may include, but is not limited to, trips to NASA facilities to use specialized research equipment, trips to NASA Centers to discuss collaborations with NASA scientists and engineers, attendance at pre-proposal conferences sponsored by NASA, presentation of Space Grant funded research at conferences, giving plenary or invited papers at conferences presenting NASA- or Space Grant-related research, visits by NASA scientists/engineers to campuses for research collaboration. This award is not to attend a conference for networking or non-presenting purposes. Invitations/letters/acceptance/etc. should be included in application when possible. NASA CTSGC only supports domestic travel.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time research staff and associates are also eligible to apply. Student travelers must be US Citizens and full-time students at Consortium Member Institutions.



**Budget** – The Consortium reserves the right to adjust funding requests based upon the number and quality of applications. Funds will be paid to the grant awardees’ institution at the conclusion of the trip on a reimbursement basis after submission of receipts to the awardee’s affiliate office. Alcohol and personal care items are not allowed. No travel advances are allowed. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$1,000 travel grant, your budget needs to show \$2,000 with a \$1,000 match and \$1,000 supplied by the Consortium. This is an example only.*

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee’s institution and the University of Hartford, and then will be paid to the grant awardee’s institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

### **Post award responsibilities**

**Reporting** – A project report will be requested upon completion of the travel. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported project/travel is required. Please use the [Direct Participant form](#) for each student. for each student.

**NASA STEM Gateway** – NASA requires tracking of all awardees and participants (i.e. travelers) for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a poster ([template available online](#)) for an annual expo following the completion of their travel. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

## Apply for this award

Submit the application and additional forms on the [CTSGC website](#)

➤ **Applicant Contact/Demographic Information**

*\* This information is utilized for NASA reporting only.*

➤ **Proposal Information**

- f. **Proposal Abstract** (100-word maximum) – includes information relating the proposed project to NASA’s Mission Directorates.
- g. **Narrative** – a 2 page maximum. Outline description and rationale for the travel, and how you will fund the travel if you do not receive full Space Grant funding.

*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*

- a. **Travelers:** Your narrative must include the name(s) and role(s) of each traveler. Your narrative should describe the input of each traveler to the project and how that relates to travel. The narrative should also designate whether or not the traveler is essential or optional (budget-permitting) for travel.
- h. **Invitation/Other Supporting Materials** – Upload supporting documents such as conference paper acceptance notice, invitation to speak, etc.
- i. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. *Reminder: Faculty must show a 1:1 cost match ratio.*
- j. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For group proposals please submit a one-page CV for each team member (must be combined as one upload).

## IMPORTANT REMINDERS

---

*All federal requirements pass through from the NASA CTSGC’s lead institution, University of Hartford, to all awarded faculty grants. When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).*

*\*Note to University of Hartford faculty applicants: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*

## Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the purpose of the travel.	5
<b>Purpose of the travel</b>	There is a clear and detailed description of and rationale for travel, including an invitation to participate and/or other supporting material.	15
<b>Relevance to NASA's Mission Directorates</b>	The proposed travel is very relevant to one or more of NASA's Mission Directorates.	15
<b>Goals and objectives</b>	The goals and objectives of the travel are clearly stated. There are compelling reasons offered to pursue the travel.	10
<b>Timeline</b>	The proposed timeline is clear and detailed timeline of travel, including a feasible schedule for achieving teaching, research, or future funding outcomes related to travel.	10
<b>Expected outcomes</b>	There is great potential for travel to positively impact research, teaching, or future funding. The proposal includes a well-defined plan for achieving outcomes and the PI has a demonstrated record of output.	20
<b>Budget narrative and worksheet</b>	There is a clear, detailed budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
<b>Recent award</b>	Using scale as Never 10, five years and above 8, three-four years 6, two years 4, one-year 2	10
		100

## Undergraduate Student – Faculty Research Grant

### About this award

To encourage undergraduate student engagement in the research process, NASA CTSGC has created a Student-Faculty Research Grant. This grant will enable undergraduate students to gain meaningful research experience in NASA CTSGC Affiliate research laboratories in areas consistent with the mission of NASA as exemplified by its Mission Directorates. They are Aeronautics Research, Human Exploration and Operations, Science, and Space Technology.

The award will support two undergraduate students (one from a 4-year institution and the other from a community college) with a stipend and provide a small stipend for the faculty advisor. If the research is happening over the summer, the project should span a minimum of 8-weeks in length, where students work full-time on the project. If the project is to be completed during the academic year, students and PI must present a plan to obtain approximately 320 hours of commitment to the project.

**Award Information** – Refer to the [NASA CTSGC website](#) for the amount and number of awards available each program year. Since this is an institutional award, a subcontract for each *lead institution* will be executed.

**Eligible Activities** – Research in any area related to the mission of NASA as illustrated by its Mission Directorates.

**Eligible Applicants** – Faculty: Full-time faculty or research staff at Consortium Member Institutions are eligible to apply. Student: Undergraduate student applicants must be U.S. citizens and full-time students at the time of application at one of the Consortium Member Institutions with a strong academic record.

**Eligible Budget Items** – The budget is limited to include only student (\$6,000 per student for these two students) and faculty/staff stipend (\$2,000, including fringe and benefits). No indirect costs may be charged to the grant, however indirect charges may be included within the matching contributions. *When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).*

**Please Note**: Faculty must show a minimum \$8,000 cost match within the budget. Cost match may include direct costs for additional students or staff, or in-kind match such as lab space, equipment rental, equipment & supplies, and mentoring time (above and beyond the equivalent of \$2,000 stipend.)

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee’s institution and the University of Hartford, and then will be paid to the grant awardee’s institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

### **Post award responsibilities**

**Reporting** – A project report will be requested upon completion of the work. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported research is required. Please use the [Direct Participant form](#) for each student.

**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

**New Technology Reporting** – All NASA contractors, grantees and NASA partners, have an obligation to report new technologies to NASA as required by their agreement. NASA CTSG requires all applicants to comply with this New Technology Report. The detailed guidelines are available [online](#) and this information is included in the final report form. Communications and questions regarding New Technology Reporting should be directed to the-CTSGC office.

### Apply for this award

A joint student/faculty application must be submitted by the faculty member [on the CTSGC website](#).

**Attention Faculty PI:** *If you need assistance in recruiting a community college student to work on your team, (1) please complete the Student-Faculty Summer Research Project proposal form, located on the NASA CTSG website and (2) forward this document to the NASA CTSG Office and campus directors for local community colleges (contact information available on NASA CTSGC website).*

- **Applicant Contact/Demographic Information**
  - \* This information is utilized for NASA reporting only.
- **Proposal Information**
  - a. **Proposal Abstract** (100 words maximum) – includes information relating the proposed project to NASA’s Mission Directorates.
  - b. **Narrative** – 6 pages maximum. The narrative should include the following:
    - i. Project goals and objectives
    - ii. Relationship to NASA’s Mission Directorates
    - iii. Methodology
    - iv. Timeline
    - v. Role of student researchers
    - vi. Expected outcomes
  - c. **Budget Worksheet:** Download the [Budget Worksheet](#) from NASA CTSGC website. *Reminder: Faculty must show a minimum \$8,000 cost match.*
  - d. **Curriculum Vitae:** One-page (maximum) CV is required. (Submissions over page maximum will be rejected.)
- **Student Proposal Information** Each student must individually submit the following:
  - a. **Narrative** – 1 page maximum. Please include the following sections
    - i. Purpose and objectives
    - ii. Career potential
  - b. **Student Transcript** - Official is preferred; however, unofficial is acceptable.
  - c. **Resume/Curriculum Vitae** - 1 page maximum. For team proposals please submit a resume/C.V. for each team member.

---

### IMPORTANT REMINDERS

All federal requirements pass through from the NASA CTSGC's lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).**

*\*Note to **University of Hartford faculty applicants**: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*

## Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the scope of the project.	5
<b>Goals and objectives</b>	The goals and objectives are clearly stated. There are compelling reasons offered to pursue the project.	10
<b>Relevance to NASA's Mission Directorates</b>	The proposed project is very relevant to one or more of NASA's Mission Directorates.	10
<b>Methods and procedures</b>	The proposal includes a detailed, well-written explanation of the proposed methods and procedures to achieve the project's goals and objectives. There is a strong link between the methodology and goals of the project.	15
<b>Timeline and feasibility</b>	The proposed timeline is clear, detailed, and closely aligned with the goals and objectives. The proposed timeline is feasible. Institutional support is strong. When applicable, equipment/resources are readily available.	10
<b>Expected outcomes &amp; assessment plan</b>	There is great potential for innovation, publications, or future funding. The proposal includes well-defined plan for disseminating findings. A clear, and well-defined assessment plan is included.	10
<b>Collaboration</b>	There is strong evidence of collaboration either across disciplines, across colleges/universities or with external partners.	10
<b>Student involvement</b>	Students play a significant role in the project and are included in the budget.	10
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	10
<b>Early Career</b>	The applicant is pre-tenure/early career, including post-doctoral fellow	5
<b>Recent award</b>	Using scale as Never 5, five years and above 4, three-four years 3, two years 2, one-year 1	5
		100

## Curriculum Development

### About this award

The Science and Engineering Community have advocated that curriculum reform must occur on a variety of levels if the United States is to remain internationally competitive. Areas requiring enhancement to address the needs of the Science, Technology, Engineering and Mathematics (STEM) community include: the topics of the curriculum, the development of a problem-solving learning style, the methods of delivery of instruction, and active student participation in a research environment.

The NASA National Space Grant College and Fellowship Program has actively encouraged educators to make those curriculum enhancements, which will more effectively prepare students to become successful students and professionals in STEM disciplines.

### Award Details – Curriculum Development or Curriculum Revision/Enhancement Grant:

Successful applicants will show a plan to develop or revise/enhance an undergraduate or graduate level college course (amount of award will vary based on the proposal for up to \$4,000 for developing a new course, and up to \$2,000 for revising or enhancing a current course). While proposals of creative and innovative merit are actively sought, applicants should be aware that a body of previously developed models exists, and may only need adaptation to a local setting. There are serious obstacles to curricular reform. Please be sure to address the following in your proposal:

- **Develop new course:** must present final approval by the institution.
- **Revise/Enhance current course:** must present justifications and approval of college/department for course revision/enhancement.
- Faculty support, and
- Availability of equipment or facilities.

**Award Information** – Refer to the [NASA CTSGC website](#) for the award amount and number of awards available each program year.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time research staff and associates are also eligible to apply, as long as there is a faculty collaborator or Co-PI on the project.

**Eligible Budget Items** – The budget may include items such as technician and support staff salaries, summer salaries, student stipends, fringe benefits, supplies, and materials. No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions but are limited. To avoid duplication with other Consortium Grant programs, travel may not be charged to a Curriculum Development.

***Faculty/staff salary and stipend (including fringe/benefits) may not exceed 50% of the award amount.***

No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions. To avoid duplication with other Consortium Grant programs, travel may not be charged to a STEM Education Research Grant or STEM Education Programming Grant. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$10,000 research grant, your budget needs to show \$20,000 with a \$10,000 match and \$10,000 supplied by the Consortium This is an example only, please refer to our website for [current award amount](#).*



**Equipment and Supplies** – NASA CTSGC funds may not be used for equipment purchases. The definition for equipment is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. General-purpose equipment needs to be approved by the NASA Grant Officer. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies. NASA CTSGC funds may not be used to purchase computers or tablets.

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee’s institution and the University of Hartford, and then will be paid to grant awardee’s institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

### **Post award responsibilities**

**Reporting** – A project report will be requested upon completion of the work. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported project is required. Please use the [Direct Participant form](#) for each student.

**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.



**New Technology Reporting** – All NASA contractors, grantees and NASA partners, have an obligation to report new technologies to NASA as required by their agreement. NASA CTSG requires all applicants to comply with this New Technology Report. The detailed guidelines are available [online](#) and this information is included in the final report form. Communications and questions regarding New Technology Reporting should be directed to the-CTSGC office.

### Apply for this award

Submit the application and additional forms [on the CTSGC website](#).

➤ **Applicant Contact/Demographic Information**

*\* This information is utilized for NASA reporting only.*

➤ **Proposal Information**

- a. **Proposal Abstract** (100 words maximum) – includes information relating the proposed project to NASA’s [Mission Directorates](#).
- b. **Narrative** – 4 pages maximum
  - i. Project goals and objectives
  - ii. Relevance to NASA’s Mission Directorates
  - iii. Methods and procedures
  - iv. Budget narrative
  - v. Evidence of student involvement (Appendix maybe added in a separate section, see e below)
  - vi. Expected outcomes and Assessment Plan

*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*
- c. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. Reminder: Faculty must show a 1:1 cost match ratio.
- d. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For collaborative proposals please submit a one-page CV for each team member.
- e. Other supporting evidence can be combined and submitted as a single pdf.

## Evaluation rubric

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the scope of the project.	5
<b>Goals and objectives</b>	The goals and objectives are clearly stated. There are compelling reasons offered to pursue the project.	20
<b>Relevance to NASA's Mission Directorates</b>	The proposed project is very relevant to one or more of NASA's Mission Directorates.	10
<b>Methods and procedures</b>	The proposal includes a detailed, well-written explanation of the proposed methods and procedures to achieve the project's goals and objectives. There is a strong link between the methodology and goals of the project.	20
<b>Expected timeline, outcomes &amp; assessment plan</b>	There is great potential for innovation, publications, or future funding. The proposal includes well-defined plan for disseminating findings. A clear, and well-defined assessment plan is included. The proposed timeline is feasible.	15
<b>Collaboration</b>	There is strong evidence of collaboration either across disciplines, across colleges/universities or with external partners.	5
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
<b>Early Career</b>	The applicant is pre-tenure/early career.	5
<b>Recent award</b>	Using scale as Never 5, five years and above 4, three-four years 3, two years 2, one-year 1	5
		100

## IMPORTANT NOTES

*All federal requirements pass through from the NASA CTSGC's lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the Office of Management and Budget Uniform Guidance link: <https://www.nssc.nasa.gov/grants>***

*\*Note to **University of Hartford faculty applicants**: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research*

## High-Altitude Ballooning / CubeSat (HAB/C) Seed Grant

### About this award

**Award Details** – The goal of a High-Altitude Ballooning/CubeSat (HAB/C) Seed Grant is to support faculty development of high-altitude ballooning and/or CubeSat development on a CTSG Affiliate campus. This funding will help create infrastructure and a base of knowledge for continued activity at the campus after the end of this grant period. Funding may be used to purchase materials and supplies, perform research, and support student stipends. With the upcoming US eclipses in 2023 and 2024, and planned participation in CT, CTSG aims to introduce ballooning to all levels of students.

**Information** – Refer to [NASA CTSGC website](#) for the amount and number of awards available each program year. Since this is an institutional award, a subcontract for each institution will be executed.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions are eligible to apply. Full-time research staff and associates are also eligible to apply.

**Eligible Budget Items** – Funds may be used for supplies and materials, student stipends, and local travel reimbursement. Funds may not be used for faculty stipend and/or fringe, equipment/computers, entertainment, or indirect costs. Funds will be paid to the grant awardees' institution on a reimbursement basis after submission of receipts to the awardee's affiliate office. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$2,000 grant, your budget needs to show \$4,000 with a \$2,000 match and \$2,000 supplied by the Consortium. This is an example only, please refer to our website for [current award amount](#).*

**Equipment and Supplies** – NASA CTSGC funds may not be used for equipment purchases. The definition for equipment is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. General-purpose equipment needs to be approved by the NASA Grant Officer. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies. ***NASA CTSGC funds may not be used to purchase computers or tablets.***

**Fund Distribution** – Funds will be available upon successful completion of a sub-award to the master agreement between the grant awardee's institution and the University of Hartford, and then will be paid to the grant awardee's institution to be distributed according to its policies related to faculty grants. Final payment will be made upon submission and approval of all post-award reporting. Details will be conveyed within the award agreement.

### Post award responsibilities

**Reporting** – A project report will be requested upon completion of the work. The required reporting link will be sent via email before the completion of the grant period of performance and is also available by logging into the application portal.. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution. Therefore, the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving NASA CTSGC funding.

**Student Participant Tracking** – Tracking of all graduate and undergraduate student participants involved in the supported project is required. Please use the [Direct Participant form](#) for each student.

Revised: 09/10/2024

35

**NASA STEM Gateway** – NASA requires tracking of all awardees for Space Grant awards. To aid in tracking applicants, a **NASA STEM Gateway** profile must be created for each higher education faculty who has either been directly funded or has significantly participated in CTSGC-funded project. If you are awarded (primary investigator) a CTSGC grant, or participated in a research grant or project (direct participant) funded by CTSGC, *your NASA STEM Gateway profile is required*. All profiles are created directly through the [NASA STEM Gateway website](#) **and are in addition** to any CTSGC reporting required at the completion of a grant. Directions on how to create your profile can be found by [clicking here](#). It is the responsibility of the awardee to ensure that they and any direct participants have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

**Poster Session** – Faculty will be required to furnish a research poster ([template available online](#)) for an annual expo following the completion of their research. The poster will be submitted with the grant report, and the awardee will bring a physical copy to the expo for display. Details about the annual expo will be communicated closer to the date.

**Public Information** – This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the [NASA CTSGC website](#) and will be kept there for an extended period of time.

**New Technology Reporting** – All NASA contractors, grantees and NASA partners, have an obligation to report new technologies to NASA as required by their agreement. NASA CTSG requires all applicants to comply with this New Technology Report. The detailed guidelines are available [online](#) and this information is included in the final report form. Communications and questions regarding New Technology Reporting should be directed to the-CTSGC office.

### Apply for this award

Submit the application and additional forms on the CTSGC [website](#)

➤ **Applicant Contact/Demographic Information**

*\* This information is utilized for NASA reporting only.*

➤ **Proposal Information**

- a. **Proposal Abstract** (100 words maximum) – includes information relating the proposed project to NASA’s [Mission Directorates](#).
- b. **Narrative** – 4 pages maximum
  - i. Project goals and objectives
  - ii. Relevance to NASA’s Mission Directorates
  - iii. Methods and procedures
  - iv. Budget narrative
  - v. Evidence of student involvement (Appendix maybe added in a separate section, see e below)
  - vi. Expected outcomes and Assessment Plan

*\* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.*

- c. **Budget Worksheet** – Please be sure to include a [Budget Worksheet](#) for each institution involved in collaboration grant proposals. *Reminder: Faculty must show a 1:1 cost match ratio.*
- d. **Curriculum Vitae** – One-page (maximum) CV is required. (Submissions over page maximum will be rejected.) For collaborative proposals please submit a one-page CV for each team member.
- e. **Other supporting evidence** can be combined and submitted as a single pdf.

**IMPORTANT REMINDERS:**

*All federal requirements pass through from the NASA CTSGC’s lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).***

*\*Note to **University of Hartford faculty applicants**: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in NASA CTSGC research.*

**Evaluation rubric**

Criteria	Evaluation	Max Score
<b>Abstract</b>	The abstract is clear, concise and gives the reader an excellent sense of the scope of the project.	5
<b>Goals and objectives</b>	The goals and objectives are clearly stated. There are compelling reasons offered to pursue the project.	10
<b>Relevance to NASA’s Mission Directorates</b>	The proposed project is very relevant to one or more of NASA’s Mission Directorates.	10
<b>Methods and procedures</b>	The proposal includes a detailed, well-written explanation of the proposed methods and procedures to achieve the project’s goals and objectives. There is a strong link between the methodology and goals of the project.	20
<b>Expected outcomes &amp; assessment plan</b>	There is great potential for innovation, publications, or future funding. The proposal includes well-defined plan for disseminating findings. A clear, and well-defined assessment plan is included. The proposed timeline is feasible.	15
<b>Collaboration</b>	There is strong evidence of collaboration either across disciplines, across colleges/universities or with external partners.	5
<b>Student involvement</b>	Students play a significant role in the project and are included in the budget.	10
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
<b>Early Career</b>	The applicant is pre-tenure/early career.	5
<b>Recent award</b>	Using scale as Never 5, five years and above 4, three-four years 3, two years 2, one-year 1	5
		100

# National Space Grant Program Goal and Objectives



## Goal

Contribute to the nation's science enterprise by funding education, research, and public service projects through a national network of university-based Space Grant consortia.

## Objectives

- Establish and maintain a national network of universities with interests and capabilities in aeronautics, space and related fields.
- Encourage cooperative programs among universities, aerospace industry, and Federal, state and local governments.
- Encourage interdisciplinary training, research and public service programs related to aerospace.
- Recruit and train U.S. citizens, especially women, underrepresented minorities, and persons with disabilities, for careers in aerospace science and technology.
- Promote a strong science, mathematics, and technology education base from elementary through secondary levels.

## Important Resources

- [NASA Office of STEM Engagement \(OSTEM\)](#)
- [NASA Center Internships](#)
- [Information on NASA's Mission Directorates](#)
  - [Aeronautics Research \(ARMD\)](#)
  - [Exploration Systems Development \(ESDMD\)](#)
  - [Science \(SMD\)](#)
  - [Space Operations \(SOMD\)](#)
  - [Space Technology \(STMD\)](#)
- [NASA Space Grant Program Office \(Links to Office of STEM Engagement\)](#)
- [NASA: Explore Moon to Mars](#)
- [NASA Leadership, Center Offices, Programs and More](#)
- [NASA New Technology Report](#)

FEDERAL UNIFORM GUIDANCE: All federal requirements pass through from the CT Space Grant Consortium's lead institution, University of Hartford, to all awarded faculty grants. **When preparing budget proposals, it may be helpful to reference the [Office of Management and Budget Uniform Guidance](#).**