



## NASA CONNECTICUT SPACE GRANT CONSORTIUM

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# REQUEST FOR PROPOSALS

## Fall 2016 Student Programs

*Graduate Research Fellowship*  
*Undergraduate Research Fellowship*  
*Student Project Grant*  
*Undergraduate & Community College Scholarships*  
*Community College Transfer Scholarship (NEW)*  
*Travel Grant*  
*Community College Quadcopter Challenge*

**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.

Contact Points: 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 Consortium Office.

### Universities

#### **Central Connecticut State University**

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860.832.1896  
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#### **Southern Connecticut State University**

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#### **University of Connecticut**

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#### **University of New Haven**

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### Community Colleges

#### **Asnuntuck Community College**

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#### **Housatonic Community College**

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#### **Naugatuck Valley Community College**

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#### **Quinebaug Valley Community College**

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#### **Eastern Connecticut State University**

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#### **Trinity College**

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Department of Engineering  
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#### **UConn Health Center**

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#### **Wesleyan University**

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#### **Capital Community College**

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#### **Manchester Community College**

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#### **Northwestern CT Community College**

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#### **Three Rivers Community College**

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#### **Fairfield University**

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#### **University of Bridgeport**

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#### **University of Hartford**

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#### **Yale University**

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Department of Astronomy  
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#### **Gateway Community College**

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203.285.2452  
[sspencer@gatewayct.edu](mailto:sspencer@gatewayct.edu)

#### **Middlesex Community College**

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#### **Norwalk Community College**

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#### **Tunxis Community College**

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#### **Consortium Office:**

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# NASA Connecticut Space Grant Consortium

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# Proposal Development Considerations

Proposal research/work should be related to one of NASA's strategic enterprises. They are Space Science, Mission to Planet Earth, Human Exploration and Development of Space, Space Technology and Aeronautics.

For use of NASA facilities, University Affairs Offices at NASA Centers may be contacted. Contact information and NASA facility missions statements may be found at each of the NASA facilities web sites. For a directory of facility web sites see:

<http://www.nasa.gov/about/sites/index.html>

## Eligibility Requirements

1. Recipients of Space Grant funds must provide proof of U.S. Citizenship via the Grant Verification Form at the time of application. Proof of citizenship may be in the form of one of the following:
  - U.S. Passport (may be currently valid or expired)
  - Naturalization Certificate
  - U.S. Birth Certificate
  - Military ID Card
2. Students must be considered a full-time student at their institution (enrolled in a minimum of 12 credits). An exception would be a student finishing their last semester, needing less than normal credit hours to fulfill their degree requirements.

## Review of Proposals

The proposal review committee is composed of the 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. The rubrics shown below will be used by the reviewers to assess the proposals. Please note: all scholarship applications are reviewed and evaluated by the NASA CTSGC leadership team.

## Selection Criteria

The following rubrics are used as a guide and the results are subject to committee review.

### 1. Graduate/Undergraduate Research Fellowships, Student Project Rubric

	<b>STRONGLY EVIDENT</b>	<b>EVIDENT</b>	<b>SOMEWHAT EVIDENT</b>	<b>NOT EVIDENT</b>	Max Score
<b>Abstract</b>	States a specific testable research question or objective	States a clear, but untestable research and background question or the objective is not clear	States a vague, untestable research question and/or the objective is not clear	No research question posed	10
<b>Relation to NASA's strategic goals</b>	Clearly stated and directly related to the mission of NASA/aerospace/STEM	Clearly stated and to some degree agrees with the mission of NASA/aerospace/STEM	Clearly stated but does not agree with the mission of NASA/aerospace/STEM	Not stated and/or not clear	15
<b>Methodology</b>	Provides a clear explanation of the proposed experimental or theoretical methods/hypothesis /prototype/product	Provides an adequate explanation of the proposed experimental or theoretical methods/hypothesis/prototype/ product	Provides an unorganized explanation of proposed experimental or theoretical methods/hypothesis/prototype / product	Explanation of experimental methods missing	15
<b>Feasibility &amp; timeline (planning)</b>	Facilities are available and the timeline is appropriate for conducting the proposed research	Facilities are available but timeline is inappropriate for conducting the proposed research	Facilities are not adequately available. Schedule is vague, not within program limits, or has unrealistic timeline	Neither facilities nor timeline are appropriate for conducting the research	15
<b>Budget narrative and worksheet (not applicable for UG Fellowship projects)</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 program	There is a budget plan with a justification of expenditures for the proposed project and a partial budgetary schedule.	There is a budget plan with little justification of expenditures.	No budget plan provided.	15
<b>Expected outcome</b>	Deliverables are clear, innovative, with a clear assessment plan and obtainable in the specified time frame	Deliverables are clear, innovative, with a clear assessment plan but it is not clear how this could be accomplished in the specified time frame	Deliverables are not clear and the assessment plan does not match deliverables	Deliverables are not clear and no assessment plan provided	20
<b>Career potential</b>	Relationship to prior work and future plans is well documented	Relationship to prior work and future plans is not well documented	Relationship to prior work and future plans is poorly documented	Relationship to prior work and future plans not documented	5
<b>Recent award</b>	Never	Three or more years ago	Two years ago	Last year	5
					100

**2. Undergraduate, Community College, and Transfer Scholarship Rubric**

	Outstanding (17-20)	Above Average (13-16)	Average (9-12)	Below Average (5-8)	Does Not Qualify (0-4)
Academic and career goals relate to NASA CTSGC mission					
Student demonstrates and/or describes interest in science and technology subject matter and careers					
Student demonstrates and describes community service, extracurricular, work and/or academic honors, experiences and awards that support his or her application to the award					
Student describes benefits from receiving the scholarship and/or articulates reasons for deserving the scholarship					
Application is complete: cover sheet; narrative; letter of recommendation; resume; transcript; verification form and demographic information					

TOTAL POINTS: \_\_\_\_\_/100

### 3. Travel Grant Rubric

	<b>STRONGLY EVIDENT</b>	<b>EVIDENT</b>	<b>SOMEWHAT EVIDENT</b>	<b>NOT EVIDENT</b>	<b>Max Score</b>
<b>Abstract</b>	Abstract is clear, concise and gives reader an excellent sense of the scope of travel	Abstract is clear and concise	Abstract is somewhat clear and concise	Abstract is unclear and/or not concise	5
<b>Purpose of travel and invitation</b>	Clear and detailed description of and rationale for travel, including invitation to participate and/or other supporting material	Description of and rationale for travel, including an invitation to participate and/or other supporting material	Description of and rationale for travel. No invitation to participate and weak or no supporting material	No description of, nor rationale for travel. No invitation to participate nor supporting material	25
<b>Relevance to NASA's strategic goals</b>	Purpose of travel is very relevant to one or more of NASA's strategic goals	Purpose of travel is relevant to one or more of NASA's strategic goals	Purpose of travel is somewhat relevant to one or more of NASA's strategic goals	Purpose of travel is not relevant to NASA's strategic goals	15
<b>Goals and objectives</b>	Goals and objectives of travel are clearly stated. There are compelling reasons offered to pursue travel	Goals and objectives of travel are clearly stated. There is some evidence to support importance of travel	Goals and objectives are unclear. There is little evidence to support importance of travel	Goals and objectives are not clearly stated. There is no evidence to support importance of travel	30
<b>Timetable</b>	Includes a clear and detailed timeline of travel, which is aligned with goals and objectives	Includes a timeline of travel, which is aligned with goals and objectives	Timeline provided is either unclear or lacks sufficient detail. There is a weak alignment with goals and objectives	Timeline provided is weak/missing. There is no alignment with goals and objectives	5
<b>Budget narrative and worksheet</b>	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed travel and a complete budgetary schedule for the length of the travel	There is a budget plan with a justification of expenditures for the proposed travel and a partial budgetary schedule	There is a budget plan with little justification of expenditures. The schedule is vague, not within program limits, or has unrealistic explanations	There is no budget plan provided	15
<b>Recent award</b>	Never <u>OR</u> travel complements previous award			Last year	5
					100

#### 4. Community College Quadcopter Challenge

	<b>STRONGLY EVIDENT</b>	<b>EVIDENT</b>	<b>SOMEWHAT EVIDENT</b>	<b>NOT EVIDENT</b>	Max Score
<b>(Student) Purpose &amp; objectives</b>	Objectives of project are clearly stated, and well written.	Objectives of project are stated.	Objectives of project are vague.	Objectives of project are missing.	10
<b>(Student) Career potential</b>	Relationship to prior work (if any) and future plans is well documented	Relationship to prior work (if any) and future plans is not well documented	Relationship to prior work (if any) and future plans is poorly documented	Relationship to prior (if any) work and future plans is not documented	20
<b>(Faculty) Goals &amp; objectives</b>	Goals and objectives are clearly stated. There are compelling reasons offered to pursue project. <i>If this is the 2<sup>nd</sup> year of the challenge at your institution, state how the team will improve upon previous knowledge.</i>	Goals and objectives are clearly stated. There is some evidence to support the importance of project.	Goals and objectives are unclear. There is little evidence to support the importance of project.	Goals and objectives are not clearly stated.	20
<b>(Faculty) Methodology</b>	Provides a clear explanations of plan to execute project with a team that meets the guidelines as stated in RFP	Provides an adequate explanation of plan to execute project with a team that meets the guidelines as stated in RFP	Provides an adequate explanations of the plan to execute the project with a team that does not meet the guidelines as stated in RFP	Provides little or no explanations of plan to execute project with a team that does not meets the guidelines as stated in RFP	20
<b>(Faculty) Expected outcome</b>	The expected educational outcomes for the student are very well documented. Proposal includes a plan for documenting work including a reflective section about lessons learned.	The expected educational outcomes for the student are documented. The proposal includes a plan for documenting work including a reflective section about lessons learned.	The expected educational outcomes for the student are documented. The proposal does not include a plan for documenting work including a reflective section about lessons learned...	The expected educational outcomes for students are not documented. The proposal does not include a plan for documenting work including a reflective section about lessons learned.	30
					100



## **Application Submission**

The NASA CTSGC only accepts materials submitted via an official university/college email address, following the specified format requirements. Individual application coversheets (organized by grant award type) can be found on the Consortium website under Forms. (Application checklists can be found on the pages that follow.)

## **Award Notification**

Award/Decline Letters: Each awarded application/applicant will receive email notification as to their grant acceptance with an attached award/decline letter. *Award decisions are made approximately 4-5 weeks following application deadline.*

## **Tax Consequences of Awards**

Award recipients should familiarize themselves with the tax laws to determine the tax status of their grants. NASA CTSGC does not give tax advice. Recipients may find it helpful to consult the Internal Revenue Service (IRS) Publication #520, “Scholarships and Fellowships”, which is available at IRS offices. Any questions regarding the tax status of awards should be addressed to the IRS. Income Code 15 is available at: <http://www.irs.gov/publications/p15/index.html>.

## **Evaluation of Funded Projects and Reporting Requirements**

Report: NASA CTSGC requires a project report from each funded student upon completion of the research/project/travel-related work. The required reporting format is available for download on the NASA CTSGC website. The Consortium considers a successful project an investment in the future of the researcher, their department and the institution, and therefore tracks these outcomes for reporting to NASA.

Longitudinal Tracking: NASA CTSGC and NASA require tracking of all significant student awardees to their “next career step”. Please be aware that you will be contacted by your Campus Director to follow up on your career path and/or progress.

Poster Session: Students are required to furnish a research poster for an annual forum which follows the completion of the award-related work/research. Details will be communicated closer to the date. A template for the poster is available on the NASA CTSGC website.

Outreach: Student award recipients are expected to share their knowledge of and enthusiasm for STEM careers by performing outreach within the college or middle/high school community of their choice. Example: giving a presentation to a local middle school class about STEM studies or careers. Please give a brief summary, 3-4 sentences, of your outreach including photographs, to the Consortium Office. This documentation must be included in your final report. Potential outreach opportunities and previous student experiences are available on the NASA CTSGC website.

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.

## **Funds Distribution**

Graduate Research Fellowship: Funds will be available upon successful completion of a sub-award 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 graduate student research grants. Graduate applicants should meet with their respective institution's grants' office prior to application submission. Note that the Consortium cannot award final payment until all post-award requirements are met. Details will be conveyed within the award agreement.

Undergraduate Research Fellowship: Funds will be distributed in two payments to the student's institution; the institution will pay the student upon completion of a sub-award between the institution and the University of Hartford. The first payment will be \$3,000 at the beginning of research. The remaining balance will be paid upon submittal of all required post-award documentation.

Student Project Grant: Funds will be paid to the student's institution upon receipt of a detailed invoice on a reimbursement basis; the institution will pay the student upon completion of a sub-award agreement between the institution and the University of Hartford. Submission of a completed budget form (most institutions will also need detailed, itemized original receipts). Note that the Consortium cannot award final payment until all post-award requirements are met.

Undergraduate Scholarship: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion and submission of reporting.

Community College Scholarship: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion and submission of reporting.

Community College Transfer Scholarship: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion and submission of reporting.

Travel Grant: Funds will be paid to the student's institution on a reimbursement basis. NASA CTSGC will pay detailed invoices from the affiliate upon completion of a sub-award to the master agreement. Most affiliate institutions will require detailed, itemized receipts. Contact your Campus Director for details. No travel advances will be allowed from Consortium funds. ***International travel is not allowed to be funded with Space Grant dollars.*** Note that the Consortium cannot award final payment until all post-award requirements are met.

Community College Quadcopter Challenge: Funds will be distributed to the team's institution; the institution will pay the faculty advisor and student, as they participate, upon completion of a sub-award between the institution and the University of Hartford.

# Award Details

## Graduate Research Fellowship

**Award** – Graduate Student Research Fellowships are currently available, up to \$10,000 each. Refer to the NASA CTSGC website for the number of awards available each program year. A student is eligible for one NASA CTSGC fellowship per program year. (Note: Space Grant Fellowship recipients cannot receive other federal fellowships or traineeships while receiving a Space Grant fellowship. Please be sure to specify the proposed period of performance within your application to ensure no overlap of federal fellowships/traineeships.)

**Eligibility** – Graduate student applicants must be full-time graduate students at one of the Consortium Member Institutions with a minimum GPA of 3.0 or higher. First semester graduate students should provide undergraduate transcript. Applicants must provide proof of U.S. Citizenship through the Grant Verification Form.

**Award Opportunities** – Funding opportunities are available to Graduate Students preparing for careers useful to NASA.

**Eligible Budget Items** – The budget may include items such as tuition, student stipend, technician and support staff salaries, summer salaries, fringe benefits, supplies, and materials. No indirect costs may be charged to the NASA Grant. To avoid duplication with other Consortium Grant programs, travel may not be charged to this fellowship research grant. All federal requirements pass through from the NASA CT Space Grant Consortium’s lead institution, University of Hartford, to all awarded 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>

**Proposal Format and Checklist** - Submit application following NASA CTSGC email submission guidelines. Required components of the Graduate Research Fellowship Application can be found in the Application Checklist.

**Reporting** - A project report will be requested upon completion of the fellowship work. A reporting format is available on the NASA CTSGC website.

**Outreach:** Fellowship award recipients are required to share their knowledge of and enthusiasm for STEM careers by performing outreach within the college, community college, or middle/high school community of their choice. Example: giving a presentation to a local middle/high school class or to college first year students about STEM studies or careers. Please give a brief summary, 3-4 sentences, of your outreach including photographs, to the Consortium Office. For additional information on outreach opportunities, please refer to the NASA CTSGC website.

**Poster Session** - Students will be required to furnish a research poster for an annual forum following the completion of their research.

## **Undergraduate Research Fellowship**

**Award** – Undergraduate Student Research Fellowships are currently set at \$5,000 for the program year. Refer to the NASA CTSGC website for the number of awards available each program year. A student is eligible for one fellowship per program year.

**Eligibility** – Undergraduate student applicants must be full-time students at the time of application and during the entire project period at one of the Consortium Member Institutions with a minimum GPA of 3.0 or higher. Applicants are required to provide proof of U.S. Citizenship through the Grant Verification Form.

**Award Opportunities** –Students may be preparing for senior design projects, honors research, or searching for an educational experience, which is consistent with the mission of NASA as exemplified by its four strategic enterprises: Earth Science, Space Science, Human Exploration and Development of Space, and Office of Aero-Space Technology and/or which will assist them in establishing relationships within NASA, and/or with local industrial contacts. Students desiring to complete their fellowship in collaboration with local STEM companies should contact the companies in advance and include a letter of support from the firm along with their application.

**Proposal Format and Checklist** - Submit application following NASA CTSGC email submission guidelines. Required components of the Undergraduate Fellowship Application can be found in the Application Checklist.

**Reporting** - A project report is required upon completion of the fellowship work. A reporting format is available on the NASA CTSGC website.

**Outreach:** Undergraduate Fellowship award recipients are expected to share their knowledge of and enthusiasm for STEM careers by performing outreach within the college or middle/high school community of their choice. Example: giving a presentation to a local middle/high school class or to college first year students about STEM studies or careers. Please give a brief summary, 3-4 sentences, of your outreach including photographs, to the Consortium Office. For additional information on outreach opportunities, please refer to the NASA CTSGC website.

**Poster Session** - Students will be required to furnish a research poster for an annual forum following the completion of their research.

## **Student Project Grant**

**Award** – The purpose of these grants is to allow students to purchase items needed for senior capstone, undergraduate research, or extracurricular club design projects including materials, electronic components, chemicals, etc. The Consortium recognizes that these small grants will allow students to choose projects that are beyond the normal funds allocated by departments, colleges and universities. Refer to the NASA CTSGC website for the number of awards available each program year.

**Eligible Projects** – Any group or individual project that is consistent with the mission of NASA as exemplified by its four strategic enterprises: Earth Science, Space Science, Human Exploration and Development of Space, and Office of Aero-Space Technology, is eligible.

**Eligible Applicants** – Individual students and informal/formal groups of students may apply. The project leader must be a U.S. Citizen and all project team members must be full-time students at a Consortium Member Institution at the beginning of the project. Individual Applicants/Project Leader (for group projects) must have minimum 3.0 GPA. There must be a faculty member who agrees to serve as the project advisor. Applicant P.I. must provide proof of U.S. Citizenship through the Grant Verification Form.

**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. *\*Students may also apply for Travel Grants to visit NASA Centers, participate in professional meetings, etc.*

**Proposal Format and Checklist** - Submit application following NASA CTSGC email submission guidelines. Required components of the Student Project Application can be found in the Application Checklist.

**Reporting** - A student project report is required upon completion of the research project. A reporting format is available on the NASA CTSGC website.

**Poster Session** - Students are required to furnish a research poster for an annual forum.

## **Undergraduate & Community College Scholarship**

**Awards** – Refer to the NASA CTSGC website for the number of awards available each program year. A student is eligible for one fellowship per program year.

Undergraduate Scholarships are currently set at \$5,000 for the program year. A student is eligible for one fellowship or scholarship per program year.

Community College Scholarships are currently set at \$1,500 per program year.

**Eligibility** – Undergraduate student applicants must be full-time students at the time of application at one of the Consortium Member Institutions with a minimum GPA of 3.0 or higher. Applicants are required to provide proof of U.S. Citizenship through the Grant Verification Form.

**Proposal Format and Checklist** - Submit application following NASA CTSGC email submission guidelines. Required components of the Undergraduate and Community College Scholarship Applications can be found in the Application Checklist.

**Reporting** - A short report is required prior to scholarship payment. A reporting format is available on the NASA CTSGC website.

## **Community College Transfer Scholarship**

In an effort to improve the postsecondary education transfer rates of students from community colleges to 4-year institutions, we plan to offer scholarships to students who have successfully transferred to a 4-year institution from a 2-year community college.

**Award** – Community College Transfer Scholarships are currently set at \$5,000 for the program year. A student is eligible for one scholarship upon enrollment in baccalaureate program.

**Eligibility** – Undergraduate student applicants must be full-time students at the time of application at one of the Consortium Member Institutions with a minimum GPA of 3.0 or higher from their previous and/or current institution. Students must demonstrate that they began their postsecondary education at a community college and enrolled for a minimum of two terms. Applicants are required to provide proof of U.S. Citizenship through the Grant Verification Form.

**Proposal Format and Checklist** - Submit application following NASA CTSGC email submission guidelines. Required components of the Undergraduate and Community College Scholarship Applications can be found in the Application Checklist.

**Reporting** - A short report is required prior to scholarship payment. A reporting format is available on the NASA CTSGC website.

## Travel Grants

**Award** – To encourage travel to NASA facilities to use their unique resources and/or present Space Grant and NASA funded research at Conferences, the NASA Connecticut Space Grant Consortium awards travel grants. Refer to the NASA CTSGC website for the number of awards available each program year.

**Eligible Travel** – 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, participation in NASA or Space Grant programs/workshops/competitions, or invited papers at conferences, visits by NASA scientists/engineers to campuses for research collaboration. *NASA CTSGC only supports domestic travel.*

**Eligible Applicants** – Full time students at Consortium Member Institutions are eligible. All applicants must be US Citizens. Applicants must provide proof of U.S. Citizenship through the Grant Verification Form. Student applicants should have a minimum 3.0 GPA.

**Budget** – Travel may be funded up to a maximum of \$1,000. Funds will be paid to the student or groups' institution upon submission of a completed budget form at the conclusion of the trip. **No travel advances are allowed.** Please consult with your Campus Director to obtain the appropriate travel forms for your institution.

**Proposal Format and Checklist** - Submit application following NASA CTSGC email submission guidelines. Required components of the Travel Grant Application can be found in the Application Checklist.

**Reporting** - A short report is required upon return from the trip. A reporting format is available on the NASA CTSGC website.

**Poster Session** - Students are required to furnish a research poster for an annual forum.



## Community College Quadcopter Challenge

The goal of the challenge is to support a community college based program in order to improve STEM recruitment and retention, primarily of underserved populations. This program is designed to:

- (1) Increase the number of community college students who graduate with STEM degrees and/or transfer to STEM programs at 4-year institutions,
- (2) Increase the ability of community college faculty members to deliver aerospace-related content in areas of interest to NASA, and
- (3) Enhance the diversity (race/ethnicity and gender) of students pursuing STEM fields at Connecticut community colleges.

These objectives will be accomplished by the use of small model helicopters (quadcopters) in competitions between student design groups from the Connecticut community colleges. Faculty advisors from our Academic Affiliate community colleges will lead these design groups.

Teams of five students will be selected to participate, each advised by a community college faculty member.

**Award** – *The NASA CTSGC will make available a special RFP for this challenge with all the requirements. The document can be found on the NASA CTSGC website.*

**Eligible Applicants** – Faculty: Full-time faculty or research staff at Consortium Member Community Colleges who are U.S. Citizens are eligible to apply. Student: Community college student applicants must be full-time students at the advisor’s institution. Up to five students per team.

**Proposal Format and Checklist** – A joint student/faculty application must be submitted by the faculty advisor, following NASA CTSGC email submission guidelines. Required components of the application will be available through *a special RFP with all the details stipulated on the NASA CTSGC website.*

**Reporting** - A project report is due upon completion of the work. The required report format is part of the special RFP for this challenge, and is available on the NASA CTSGC website.

**Demonstration Day** – Faculty and students will be required to participate to demonstrate their work at a location set by the Consortium Director late in the Spring Semester.

**Poster Session** – The winning team will be required to furnish a joint research/project poster for an annual forum following the completion of the competition. Details will be communicated closer to the date.

# Application Checklists

## Application Checklist: Graduate Research Fellowship

Submit the application via email ([csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu)). The email must include two attachments,

- the ‘Contact and Demographic Info’ form, and
- a single PDF containing the appropriate cover sheet, abstract, proposal narrative, budget, letters of support, resume/CV, grant verification form, transcript, and may not exceed 25 MB in size. *Note that Narrative sections page limits will be strictly enforced. Proposals that exceed the page limit will be reviewed only up to the page limit (remaining pages of the narrative will not be reviewed). Also, if letter writers wish to submit confidential letters of recommendation, they may email those separately to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*

- Applicant Contact/Demographic Information** - Typed into the ‘Contact/Demographic Information’ form, and saved as a .doc, .docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the NASA CTSGC website. (Note: this information is used separately for blind reporting to NASA.) (For team proposals, please attach a separate sheet for each team member as addendums to the proposal narrative pdf file.)

### **PLEASE ATTACH THE FOLLOWING APPLICATION COMPONENTS AS A SINGLE PDF FILE:**

- Application Cover Sheet** (blank forms can be found under the Forms section of the NASA CTSGC website).
- Proposal Abstract:** 100 word maximum – include information relating the proposed project to NASA’s strategic enterprises.
- Narrative** – Five double-spaced page maximum. Please include the following sections:
1. Purpose and objectives
  2. Relationship to NASA’s strategic goals
  3. Methodology
  4. Feasibility and timeline (plan) of the project
  5. Budget narrative
  6. Expected outcomes
  7. Career potential

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

- Budget** – Applicants must use the budget form available on the NASA CTSGC website. This form must be signed by the student’s faculty advisor, and by a representative of the student’s Institutional Grants Office.
- Two Letters of Recommendation** (internal or external) – One letter must be from the research project supervisor. All recommendation letters need to be signed and on institutional letterhead. *Faculty who wish to submit confidential letters of recommendation may email those to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*
- Resume/Curriculum Vitae** - One page maximum. For team proposals please submit a resume/CV for each team member.
- Grant Verification Form:** Completed and signed by the Campus Director
- Student Transcript** - Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

**Reminder:**

- **All forms are available on the NASA CTSGC website.**
- **All proposals and attachments must be submitted together in a single email.**
- **The email size may not exceed 25 MB.**

## Application Checklist: Undergraduate Research Fellowship

Submit the application via email ([csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu)). The email must include two attachments,

- the Contact/Demographic Info form and
- a single PDF containing the appropriate cover sheet, abstract, proposal narrative, letters of support, resume/CV, grant verification, transcript, and may not exceed 25 MB in size. *Note that Narrative sections page limits will be strictly enforced. Proposals that exceed the page limit will be reviewed only up to the page limit (remaining pages of the narrative will not be reviewed). Also, if letter writers wish to submit confidential letters of recommendation, they may email those separately to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*

- Applicant Contact/Demographic Information** - Typed into the 'Contact/Demographic Information' form, and saved as a .doc, .docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the NASA CTSGC website. (Note: this information is used separately for blind reporting to NASA.) (For team proposals, please attach a separate sheet for each team member as addendums to the proposal narrative pdf file.)

### **PLEASE ATTACH THE FOLLOWING APPLICATION COMPONENTS AS A SINGLE PDF FILE:**

- Application Cover Sheet** (blank forms can be found under the Forms section of the NASA CTSGC website).
- Proposal Abstract:** 100 word maximum – include information relating the proposed project to NASA's strategic enterprises.
- Narrative** – Five double-spaced page maximum. Please include the following sections:
  1. Purpose and objectives
  2. Relationship to NASA's strategic goals
  3. Methodology
  4. Feasibility and timeline (plan) of the project
  5. Expected outcomes
  6. Career potential

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

- Two Letters of Recommendation** (internal or external) – One letter must be from the research project supervisor. The second from a responsible researcher who is familiar with the quality of the student's work. All recommendation letters need to be signed and to be on institutional letterhead. *Faculty who wish to submit confidential letters of recommendation may email those to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*

- Resume/Curriculum Vitae** - One page maximum. For team proposals please submit a resume/C.V. for each team member.
- Grant Verification Form:** Completed and signed by the Campus Director
- Student Transcript** - Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

**Reminder:**

- **All forms are available on the NASA CTSGC website.**
- **All proposals and attachments must be submitted together in a single email.**
- **The email size may not exceed 25 MB.**

## Application Checklist: Student Projects

Submit the application via email ([csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu)). The email must include two attachments,

- the Contact/Demographic Info form and
- A single PDF containing the appropriate cover sheet, abstract, proposal narrative, budget, letters of support, resume/CV, transcript, grant verification form and may not exceed 25 MB in size. *Note that Narrative sections page limits will be strictly enforced. Proposals that exceed the page limit will be reviewed only up to the page limit (remaining pages of the narrative will not be reviewed). Also, if letter writers wish to submit confidential letters of recommendation, they may email those separately to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*

- Applicant Contact/Demographic Information** - Typed into the 'Contact/Demographic Information' form, and saved as a .doc, .docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the NASA CTSGC website. (Note: this information is used separately for blind reporting to NASA.) (For team proposals, please attach a separate sheet for each team member as addendums to the proposal narrative pdf file.)

### **PLEASE ATTACH THE FOLLOWING APPLICATION COMPONENTS AS A SINGLE PDF FILE:**

- Application Cover Sheet** (blank forms can be found under the Forms section of the NASA CTSGC website).
- Proposal Abstract** – 100 word maximum to include information relating the proposed project to NASA's strategic enterprises.
- Narrative** – Five double-spaced page maximum. Please include the following sections:
  1. Purpose and objectives
  2. Relationship to NASA's strategic goals
  3. Methodology
  4. Feasibility and timeline (plan) of the project
  5. Budget narrative
  6. Expected outcomes
  7. Career potential

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

- Budget** - Applicants must use the budget form available on the NASA CTSGC website. This form must be signed by the student's faculty advisor, and by a representative of the student's Institutional Grants Office.

- One Letter of Recommendation** – Must be from the project’s faculty advisor. Applicants may submit additional letters of support. All recommendation letters need to be signed and on institutional letterhead. *Faculty who wish to submit confidential letters of recommendation may email those to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*
- Resume/Curriculum Vitae** - One page maximum. *(For a team or group, please include a resume for each member.)*
- Grant Verification Form:** For project leader; completed and signed by the Campus Director
- Student Transcript** - Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

**Reminder:**

- **All forms are available on the NASA CTSGC website.**
- **All proposals and attachments must be submitted together in a single email.**
- **The email size may not exceed 25 MB.**

## Application Checklist: Undergraduate, Community College & Transfer Scholarship

Submit the application via email ([csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu)). The email must include two attachments,

- The Contact/Demographic Info form and
- A single PDF containing the appropriate cover sheet, narrative, letter of recommendation, resume, Grant Verification Form, and transcript, and may not exceed 25 MB in size.  
*Note that Narrative sections page limits will be strictly enforced.*

- Applicant Contact/Demographic Information** - Typed into the 'Contact/Demographic Information' form, and saved as a .doc, .docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the NASA CTSGC website. (Note: this information is used separately for blind reporting to NASA.)

### **PLEASE ATTACH THE FOLLOWING APPLICATION COMPONENTS AS A SINGLE PDF FILE:**

- Application Cover Sheet** (blank forms can be found under the Forms on the NASA CTSGC website).
- Narrative** – Three double-spaced page maximum. Please address the following when writing your narrative:
1. Describe your academic and career goals.
  2. Describe information on any research experiences or other relevant experiences you have had and how you believe they have influenced your career in STEM.
  3. Describe your community service, extra-curricular activities, work experience awards and/or honors.
  4. Briefly explain the benefits that you expect to derive from a NASA CTSGC Scholarship.

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

- One Letter of Recommendation** – Faculty who wish to submit confidential letters of recommendation may email those to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).
- Resume** - One page maximum.
- Student Transcript** - Unofficial transcript is acceptable. Students should include a transcript from all previous institutions, or these credits should appear in their current transcript.
- Grant Verification Form:** Completed and signed by the Campus Director.

#### **Reminder:**

- **All forms are available on the NASA CTSGC website.**
- **All proposals and attachments must be submitted together in a single email.**
- **The email size may not exceed 25 MB.**



## Application Checklist: Travel Grant

Submit the application via email ([csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu)). The email must include two attachments,

- the Contact/Demographic Info form and
- A single PDF containing the appropriate cover sheet, abstract, trip information, letters of support, resume/CV, transcript, grant verification form and may not exceed 25 MB in size. *Note that page limits will be strictly enforced. Proposals that exceed the page limit will be reviewed only up to the page limit (remaining pages of the narrative will not be reviewed). Also, if letter writers wish to submit confidential letters of recommendation, they may email those separately to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*

- Applicant Contact/Demographic Information** - Typed into the 'Contact/Demographic Information' form, and saved as a .doc, .docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the NASA CTSGC website. (Note: this information is used separately for blind reporting to NASA.) (For team proposals, please attach a separate sheet for each team member as addendums to the proposal narrative pdf file.)

### **PLEASE ATTACH THE FOLLOWING APPLICATION COMPONENTS AS A SINGLE PDF FILE:**

- Application Cover Sheet** (blank forms can be found under the Forms section of the NASA CTSGC website).
- Proposal Abstract:** 100 word maximum.
- Narrative** – Two double-spaced page maximum. Please include the following sections:
  1. Purpose of Travel and Invitation: provide a copy of any supporting materials related to the travel, i.e., letter or conference paper acceptance notice (copy of email or WEB page of program is acceptable). Please remember that Space Grant can only support domestic travel.
  2. Relevance to NASA's strategic goals
  3. Goals and Objectives
  4. Timetable
  5. Budget Narrative: Please provide a description of how you will fund the travel if you do not receive full Space Grant funding for the total cost of the trip. *(Ex. If the total trip will cost \$1,500, describe how you will fund the remaining \$500 after the Space Grant award of \$1,000.)*

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

- Budget Justification** – please provide a prospective budget of estimated costs for the trip. Please use the required budget worksheet, which is available on the NASA CTSGC website.
- One Letter of Recommendation** – Must be from a faculty member familiar with the travel purpose. Applicants may submit additional letters of support. All recommendation letters need to be signed and on institutional letterhead. *Faculty/industry contacts who wish to submit confidential letters of recommendation may email those to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).*
- Resume/Curriculum Vitae** - One page maximum. *(For a team or group, please include a resume for each member.)*
- Grant Verification Form:** Completed and signed by the Campus Director
- Student Transcript** - Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

**Reminder:**

- **All forms are available on the NASA CTSGC website.**
- **All proposals and attachments must be submitted together in a single email.**
- **The email size may not exceed 25 MB.**

## Application Checklist: Community College Quadcopter Challenge

More detailed information regarding this opportunity is available in the Special RFP for this challenge, on the NASA CTSG website.

**Important: All required components of the application, noted below, must be saved as a single file and attached to the application email. Be sure to allow time for your institution's Grant's Office to review/approval your proposal before the deadline.**

### **ATTACH THE FOLLOWING PROPOSAL COMPONENTS AS A SINGLE PDF FILE:**

- **Application Cover Sheet:** Download the form from the NASA CTSGC website and obtain the signatures of your institution's grant office and Dean before scanning along with the other application materials into a single file for uploading into the online application.
- **Follow the Guidelines of the Special RFP for this Challenge on the NASA CTSGC.**

The Faculty or Staff Advisor should submit the application via email ([csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu)). The email must include the following

- (1) a single PDF containing the **Contact and Demographic Info** form for the faculty advisor and all participating team members
  - (2) a single PDF containing the **Grant Verification Forms** for the faculty advisor and students, and
  - (3) A single PDF containing the appropriate **Team Info**, faculty narrative, and the student application information.
- Faculty Narrative (3 pages maximum)
    - Goals and objective of the project
    - Methodology – a brief description of the structure of the program at your institution.
    - Expected Outcome
  - Student application material must include the following for each student
    - Pre-Program Survey
    - Transcript showing full-time student status

Proposals must be typed in no smaller than 10 point font, double spaced with margins of at least 1" on 8 1/2" x 11" paper.

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

#### **Reminder:**

- **All forms are available on the NASA CTSGC website.**
- **All proposals and attachments must be submitted together in a single email, and should be submitted to [csgcinfo@hartford.edu](mailto:csgcinfo@hartford.edu).**