

NASA CONNECTICUT SPACE GRANT CONSORTIUM

REQUEST FOR PROPOSALS

Student Programs

Graduate Research Fellowship Undergraduate Research Grant Student Project Grant Undergraduate & Community College Scholarship Community College Transfer Scholarship Travel Grant Summer Internship

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.

	4-Year Intuition Consortiu	
Central Connecticut State University	Connecticut College	Eastern Connecticut State University
Dr. Luz Amaya	TBD	Dr. Elizabeth A. Cowles
School of Engineering		Dept. of Biology
860.832.1818		860.465.4385
l.amaya@mail.ccsu.edu		<u>cowlese@easternct.edu</u>
Fairfield University	Quinnipiac University	Sacred Heart University
Dr. Harvey Hoffman	Dr. Lynn Byers	Dr. Tolga Kaya
School of Engineering	Dept. of Mechanical Engineer	ng Dept. of Computer Science & Engineering
203.254.4000 x3080	203.582.5028	203.396.6589
hhoffman@fairfield.edu	Lynn.Byers@quinnipiac.edu	Kayat@sacredheart.edu
Southern Connecticut State University	Trinity College	University of Bridgeport
Dr. Dana Casetti	Dr. Clayton Byers	Dr. Jani Pallis
Dept. of Physics	Dept. of Engineering	Dept. of Mechanical Engineering
203.392.7191	860.297.5239	203.576.4579
<u>casettid1@southernct.edu</u>	<u>clayton.byers@trincoll.edu</u>	jpallis@bridgeport.edu
University of Connecticut	University of Hartford	University of New Haven
Dr. Jason Lee	Dr. Brian Wells	Dr. Chong Qiu
School of Engineering	College of Arts and Sciences	Dept. of Chemistry
860.486.2239	860.768.4318	203.479.4888
Jason.Lee@uconn.edu	brwells@hartford.edu	CQiu@newhaven.edu
University of St. Joseph	Wesleyan University	Yale University
TBD	Dr. Seth Redfield	Dr. Andrew Szymkowiak
	Astronomy Dept.	Dept. of Physics
	860.685.3669	203.432.9854
	sredfield@wesleyan.edu	andrew.szymkowiak@yale.edu
	CT State Community College Cor	
CT State Community College - Asnuntuck	CT State Community College	Capital CT State Community College -
Professor Amely Cross	Dr. Cleo Rolle	Gateway
Dept. of Chemistry/Physics	Dept. of Science & Mathemati	
860.253.3056	860.906.5177	Dept. of Mathematics
across@acc.commnet.edu	crolle@ccc.commnet.edu	203.285.2452
	<u> </u>	sspencer@gatewayct.edu
CT State Community College -	CT State Community College	
Housatonic	Manchester	Dr. Lin Lin
TBD	Dr. Fatma Salman	Dept. of Engineering, Computer Science &
	Dept. of Physics	Technology
	860.512.2743	860.343.5763
	fsalman@mcc.commnet.edu	llin@mxcc.edu
CT State Community College -	CT State Community College	
Naugatuck Valley	Northwestern	Dr. Mobin Rastgar Agah
Dr. Peter Angelastro	Professor Douglas Hoffman	Dept. of Mathematics
Dept. of Biology	Dept. of Mathematics	203.857.3366
203.596.8690	860.738.6332	mrastgaragah@norwalk.edu
pangelastro@nv.edu	dhoffman@nwcc.commnet.ee	
	CT State Community College	
CT State Community College - Quinebaug Valley	, ,	Dr. Karen Wosczyna-Birch
Professor Jakob Spjut	Rivers Professor James Doran	Dept. of Chemistry
Dept. of Engineering	Interim Program Coordinator	
860.932.4156	Engineering Technology	kwosczyna-birch@commnet.edu
jspjut@qvcc.commnet.edu	(860) 449-4498	wosczyna-birch@commiet.euu
<u>isplace queeconnine actual</u>	jdoran@trcc.commnet.edu	
	Leadership Team	1
Dr. Hisham Alnajjar, Interim Director	Dr. Yingcui Li, Associate Direc	tor Dr. Brian Wells, Assistant Director
alnajjar@hartford.edu	yinli@hartford.edu	brwells@hartford.edu
860.768.4681	860.768.4533	860.768.4318
Janet Spatcher, Program		I Michaud, Program Coordinator
ctspgrant@hartford.edu	e 1	info@hartford.edu
860.768.4813		768.4890

NASA CT SPACE GRANT CONSORTIUM

203 Dana Hall, University of Hartford (Lead Institution), 200 Bloomfield Avenue, West Hartford, CT 06117 860.768.4813 <u>ctspgrant@hartford.edu</u> <u>www.ctspacegrant.org @CTSpaceGrant</u>

ABOUT NASA CTSGC	4
PROPOSAL DEVELOPMENT CONSIDERATIONS	. 5
Preparation of Proposals	5
Period of Performance	5
Review of Proposals Application Submission	5 6
Award Notification	6
Tax Consequences of Awards	6
Evaluation of Funded Projects and Reporting Requirements	6
Equipment and Supplies	6
Prior Award Recipients	6
Funds Distribution	6
PROGRAM INFORMATION	. 9
Graduate Fellowship	9
About this award	9
Post award responsibilities	9
Apply for this award Evaluation rubric	10 11
	11
	.11
About this award	11
Post award responsibilities Apply for this award	12 13
Evaluation Rubric	13
Student Project Grant	.14
-	14
Post award responsibilities	15
Apply for this award	15
Evaluation rubric	16
Scholarships: Undergraduate, Community College, Community College Transfer	17
About this award	17
Post award responsibilities	17
Apply for this award Evaluation Rubric	18 19
	15
Travel Grant	.19
About this award	19
Post award responsibilities	20
Apply for this award Evaluation Rubric	20 21
	.22
	22 23
Apply for this award	23 23
	25
	25 25
	25
Important Resources	25

About NASA CTSGC

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 CTSGC'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

Proposed research/work/interests should be related to one of NASA's <u>Mission Directorates</u>. They are Aeronautics Research, Exploration Systems Division, Mission Support, Science, Space Technology, and Spaceflight Operations.

For the use of NASA facilities, University Affairs Offices at NASA Centers may be contacted. Contact information and NASA facility mission statements may be found at each of the NASA facilities' websites. A directory of <u>NASA Centers and Facilities</u> is online.

Eligibility Requirements

 NASA Office of Management and Budget (OMB) mandates that students must be citizens of the United States of America to receive direct funding from any NASA Space Grant award. Direct funding for non-citizens must be comprised of institutionally matched funds or other non-federal funds. For further clarification, please see NASA Grants and Cooperative Agreements Subpart A of 14 CFR Part 1260.

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 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) at one of the Consortium Member Institutions with a strong academic record. An exception would be a student finishing their last semester, needing less than normal credit hours to fulfill their degree requirements.

Preparation of Proposals

If you are considering applying for a 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. Space Grant Affiliate Members and Campus Director information can be found on the <u>NASA CTSGC website</u>.

Period of Performance

All grant activity must be completed within one year of the date of award. A 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. **All awards must be completed by June 9, 2025.**

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 program.

Application Submission

Submit the application and additional forms via the links at ctspacegrant.org.

Award Notification

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

<u>Website and Social Media</u>: Awards will be announced on the NASA CTSGC website, via Twitter and Instagram. (<u>www.ctspacegrant.org</u>, @CTSpaceGrant).

<u>Website and Social Media</u>: Awards will be announced on the NASA CTSGC website, via Twitter and Instagram. (<u>www.ctspacegrant.org</u>, @CTSpaceGrant).

Tax Consequences of Awards

Award recipients should familiarize themselves with tax laws to determine the tax status of their grants. **NASA CTSGC does not give tax advice.**

Evaluation of Funded Projects and Reporting Requirements

The following are required at completion of the project: Project report, Longitudinal tracking, participation in Grants Expo Poster Session, creating a NASA STEM Gateway account, and for Graduate Research Fellowships and Undergraduate Research grants, outreach is required. Please see each award type for more information.

<u>Public Information</u>: This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the <u>NASA CTSGC website</u> 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. 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.

Prior Award Recipients

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

Funds Distribution

• For all awards, except for scholarships (handled by affiliate financial aid offices), the affiliate grants/financial offices will be required to send an invoice at least quarterly. If there is no activity, a zero invoice will be required.

Revised 09/10/2024

- <u>Graduate Research Fellowship</u>: 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: NASA CTSGC cannot award final payment until all postaward requirements are met and approved. Details will be conveyed within the award agreement.
- <u>Undergraduate Research Grant</u>: 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 the research. The remaining balance will be paid upon submittal and approval of all required post-award documentation.
- <u>Student Project Grant</u>: 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 subaward 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: NASA CTSGC cannot award final payment until all post-award requirements are met and approved.
- <u>Undergraduate Scholarship</u>: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.
- <u>Community College Scholarship</u>: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.
- <u>Community College Transfer Scholarship</u>: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.
- <u>Travel Grant</u>: 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 NASA CTSGC funds. *International travel is not allowed with Space Grant funding.* Note: NASA CTSGC cannot award final payment until all post-award requirements are met and approved.
- <u>Industrial, Education, and Technical Internship</u>: Funds will be distributed in three equal payments directly to the partner, as follows: first payment at the beginning of the internship, a second upon receipt of a mid-point report from the supervisor of satisfactory performance, with the final balance paid upon submission and approval of all required post-award documentation. Student interns will be paid in accordance with the sponsoring organizations' practices.
- <u>NASA Internship</u>: Funds will be paid to the student's institution in two payment types, one for stipend and one on a reimbursement basis for travel costs. NASA CTSGC will pay detailed invoices from the affiliate upon completion of a "sub-award' to the master agreement. NASA CTSGC, as well as most affiliate institutions, will require detailed, itemized receipts for reimbursable travel costs. Contact your Campus Director for details. No travel advances will be allowed from NASA CTSGC funds. Note: NASA CTSGC cannot award final payment until all post-award requirements are met and approved.

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 <u>online</u> and this information is included in the final report form. Communications and questions regarding New Technology Reporting should be directed to the-CTSGC office.

203 Dana Hall, University of Hartford (Lead Institution), 200 Bloomfield Avenue, West Hartford, CT 06117 860.768.4813 <u>ctspgrant@hartford.edu www.ctspacegrant.org @CTSpaceGrant</u>

Program Information

Graduate Fellowship

About this award

- Award Graduate Fellowships are available to promote and support graduate student research in areas that align with NASA Mission Directorates. Refer to the NASA CTSGC website for the number and amounts of awards available each academic year. A student is eligible for one NASA CTSGC fellowship per academic 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 strong academic record. First-semester graduate students should provide an undergraduate transcript. Applicants are required to provide proof of U.S. Citizenship to their respective Campus Director for accurate and timely completion of the Grant Verification approval. New applicants will be given priority over recent awardees with this grant.
- 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. Funds may also be used to support travel <u>directly related</u> to the performance of the research/study. Funds may **not** be used for equipment/computers, entertainment, entry fees, or indirect costs. All federal requirements pass through NASA CT Space Grant Consortium's lead institution, University of Hartford, to all awarded grants.
- 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 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: NASA CTSGC cannot award final payment until all post-award requirements are met and approved. Details will be conveyed within the award agreement.

Post award responsibilities

Reporting – A project report will be required upon completion of the fellowship 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 to be an investment in the future of the researcher, their department and the institution, and therefore requires the tracking of these outcomes for CTSGC reporting to NASA.

- 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 student 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.
- **Outreach** Fellowship award recipients are required to share their knowledge of and enthusiasm for STEM careers by performing outreach within a community college, middle/high school community of their choice, or other community program. For additional information on outreach opportunities, please refer to the <u>NASA CTSGC website</u>.
- **Poster Session** Students will be required to furnish a research poster (<u>template available online</u>) 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.
- 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.

Apply for this award

Submit the application and additional forms via the <u>Apply</u> page.

- 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 5-page maximum
 - i. Purpose and objectives
 - ii. Relationship to NASA's Mission Directorates
 - iii. Methodology
 - iv. Feasibility and timeline (plan) of the project
 - v. Budget narrative
 - vi. Expected outcomes and Assessment Plan
 - vii. Career potential

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

c. **Budget** – Please be sure to include a <u>Budget Worksheet</u> for each institution involved in collaboration grant proposals.

- d. **Two Recommendations** (internal or external) Applicants will be asked to provide email addresses of recommenders in their application. *One recommendation must come from the research project supervisor.* The recommenders will be emailed a unique link to provide their recommendation, or they can log into the application site using the provided email address. Their recommendation will be included in the completed application when reviewed by the selection committee. Recommendations are due no later than one week (7 days) after the date applications close for that cycle.
- e. **Resume/Curriculum Vitae** One-page (maximum) resume/CV is required. (Submissions over page maximum will be rejected.) For team or collaborative proposals, please submit a one-page resume/CV for each team member.
- f. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem. Transcript must show current course enrollments. Please do not upload encrypted files.

Criteria	Evaluation	Max Score
Abstract	States a specific testable research question or objective.	10
Relation to NASA's Mission Directorates	Clearly stated and directly related to the mission of NASA/aerospace/STEM through Mission Directorate alignment.	15
Methodology	Provides a clear explanation of the proposed experimental or theoretical methods, hypothesis, prototype, or product.	15
Feasibility & timeline (planning)	The facilities and advisor/expertise are available, and the timeline is appropriate for conducting the proposed research.	15
Budget narrative and worksheet	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
Expected outcome & assessment plan	The deliverables are clear, innovative, with a clear assessment plan.	15
Future career potential	Relationship to prior work and future career plans is well documented.	5
Recommendations	Recommendations received/supports applicant.	5
Recent award	Student has never received a NASA CTSGC award.	5
		100

Evaluation rubric

Undergraduate Research Grant

About this award

Award – Undergraduate Research Grants are available to support and promote undergraduate research with faculty advisors at their institution. Refer to the NASA CTSGC website for the number and amounts of awards each academic year. A student is eligible for one award per academic 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 strong academic record. First-semester students are not eligible to apply as a transcript showing at least one completed semester is required with your application. Applicants are required to provide proof of U.S. Citizenship to their respective Campus Director for accurate and timely completion of the Grant Verification approval. New applicants will be given priority over recent awardees with all grants.
- 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 Mission Directorates. Students desiring to complete their research in collaboration with local STEM companies should contact the companies in advance and include a letter of support from the partner along with their application.
- **Budget** A budget worksheet is required for Undergraduate Research Grant. Funds will be paid directly to the student as a stipend.
- Fund Distribution 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 the research. The remaining balance will be paid upon submittal and approval of all required post-award documentation.

Post award responsibilities

- **Reporting** A project report will be required upon completion of the research grant. 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 to be an investment in the future of the researcher, their department and the institution, and therefore requires the tracking of these outcomes for CTSGC reporting to NASA.
- 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 student 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 <u>NASA STEM Gateway website</u> 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 <u>clicking here</u>. 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.
- **Outreach** Award recipients are required to share their knowledge of and enthusiasm for STEM careers by performing outreach within a community college (not their own), middle/high school community of their choice, or other community program. For additional information on outreach opportunities, please refer to the <u>NASA CTSGC website</u>.
- **Poster Session** Students will be required to furnish a research poster (<u>template available online</u>) 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.

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.

Apply for this award

Submit the application and additional forms via the <u>Apply</u> page.

- 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 <u>NASA's Mission Directorates</u>.
 - b. Narrative 5-page maximum
 - i. Purpose and objectives
 - ii. Relationship to NASA's Mission Directorates
 - iii. Methodology
 - iv. Feasibility and timeline (plan) of the project
 - v. Expected outcomes
 - vi. Career potential

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

- c. **Two Recommendations** (internal or external) Applicants will be asked to provide email addresses of recommenders in their application. *One recommendation must come from the research project supervisor.* The recommenders will be emailed a unique link to provide their recommendation, or they can log into the application site using the provided email address. Their recommendation will be included in the completed application when reviewed by the selection committee. Recommendations are due no later than one week (7 days) after the date applications close for that cycle.
- d. **Resume/Curriculum Vitae** One-page (maximum) resume/CV is required. (Submissions over page maximum will be rejected.) For team or collaborative proposals, please submit a one-page resume/CV for each team member.
- e. Student Transcript Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem. Transcript must show current course enrollments. Please do not upload encrypted files.

Evaluation Rubric

Criteria	Evaluation	Max Score
Abstract	States a specific testable research question or objective.	10
Relation to NASA's	Clearly stated and directly related to the mission of	15
Mission Directorates	NASA/aerospace/STEM through Mission Directorate alignment.	

²⁰³ Dana Hall, University of Hartford (Lead Institution), 200 Bloomfield Avenue, West Hartford, CT 06117 860.768.4813 <u>ctspgrant@hartford.edu www.ctspacegrant.org @CTSpaceGrant</u>

Methodology	Provides a clear explanation of the proposed experimental or theoretical methods, hypothesis, prototype, or product.	15
Feasibility & timeline (planning)	The facilities and advisor/expertise are available, and the timeline is appropriate for conducting the proposed research.	15
Budget narrative and worksheet	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
Expected outcome & assessment plan	The deliverables are clear, innovative, with a clear assessment plan.	15
Future career potential	Relationship to prior work and future career plans are well documented.	5
Recommendations	Recommendations received/supports applicant.	5
Recent award	Student has never received a NASA CTSGC award.	5
		100

Student Project Grant

About this award

- 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. NASA CTSGC recognizes 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 and amounts of awards available each academic year.
- **Eligible Projects** Any group or individual project that is consistent with the mission of NASA as exemplified by its Mission Directorates, is eligible.
- **Eligible Applicants** Individual students and informal/formal groups of students may apply. The project leader/Primary Investigator (P.I.) 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. First-semester students are not eligible to apply as a transcript showing at least one completed semester is required with your application. Individual Applicants/Project Leader (for group projects) must have a strong academic record. There must be a faculty member who agrees to serve as the project advisor. Applicant P.I. is required to provide proof of U.S. Citizenship to their respective Campus Director for accurate and timely completion of the Grant Verification approval.
- 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.

Fund Distribution – 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 (CTSGC as well as most institutions will also need detailed, itemized original receipts). Note: NASA CTSGC cannot award final payment until all post-award requirements are met and approved.

Post award responsibilities

- **Reporting** A project report will be required promptly upon completion of the project grant. 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 to be an investment in the future of the researcher, their department and the institution, and therefore requires the tracking of these outcomes for CTSGC reporting to NASA.
- **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 student 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 <u>NASA STEM Gateway website</u> *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 <u>clicking here</u>. 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** Students will be required to furnish a research poster (<u>template available online</u>) 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.
- 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.

Apply for this award

Submit the application and additional forms via the <u>Apply</u> page.

- 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** 5-page maximum
 - i. Purpose and objectives
 - ii. Relationship to NASA's Mission Directorates
 - iii. Methodology

- iv. Feasibility and timeline (plan) of the project
- v. Budget narrative
- vi. Expected outcomes
- vii. Career potential

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

- c. **Budget** Please be sure to include a <u>Budget Worksheet</u> for each institution involved in collaborative grant projects.
- d. **Two Recommendations** (internal or external) Applicants will be asked to provide email address(es) of recommender(s) in their application. One recommendation must be from the research project supervisor/advisor. The recommender(s) will be emailed a unique link to provide their recommendation, or they can log into the application site using the provided email address. Their recommendation will be included in the completed application when reviewed by the selection committee. Recommendations are due no later than one week (7 days) after the date applications close for that cycle.
- e. **Resume/Curriculum Vitae** One-page (maximum) resume/CV is required. (Submissions over page maximum will be rejected.) For team or collaborative proposals, please submit a one-page resume/CV for each team member.
- f. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem. Transcript must show current course enrollments. Please do not upload encrypted files.

Criteria	Evaluation	Max Score
Abstract	States a specific testable research question or objective	10
Relation to NASA's	Clearly stated and directly related to the mission of NASA/	15
Mission Directorates	aerospace/STEM through alignment with the Mission Directorates.	15
Methodology	Provides a clear explanation of the proposed experimental or	15
	theoretical methods/ hypothesis/prototype/ product.	15
Feasibility & timeline	Facilities are available, and the timeline is appropriate for	15
(planning)	conducting the proposed research.	15
Budget narrative and	There is a clear, detailed, budget plan, including a justification of	
worksheet	expenditures for the proposed plan and a complete budgetary	15
	schedule for the length of the program.	
Expected outcome	Deliverables are clear and innovative.	15
Recommendations	Recommendations received/supports applicant project. One	
	recommendation must be from the research project	10
	supervisor/advisor.	
Recent award	New applicants will be given priority (full points) over recent	5
	awardees	5
	·	100

Evaluation rubric

Scholarship: Undergraduate Scholarship, Community College Scholarship, Community College Transfer Scholarship

About this award

Awards – Refer to the NASA CTSGC website for the number and amounts of awards available each academic year. New applicants will be given priority (full points) over recent awardees

Eligibility –

- <u>Undergraduate Scholarship</u>: Student applicants must be full-time students at the time of application at one of the 4-year Consortium Member Institutions with a strong academic record. Firstsemester students are not eligible to apply as a transcript showing at least one completed semester is required with your application.
- <u>Community College Scholarship</u>: Student applicants must be full-time students at the time of application at one of the 2-year Community College Consortium Member Institutions with a strong academic record. First-semester students are not eligible to apply as a transcript showing at least one completed semester is required with your application.
- <u>Community College Transfer Scholarship</u>: Students must demonstrate that they began their postsecondary education at a community college where they enrolled for a minimum of two terms and are currently enrolled full-time at a 4-year Consortium Member postsecondary education institution. First-semester students are not eligible to apply, as a transcript showing at least one completed semester at the 4-year affiliate is required with your application. Students may only be awarded the Community College Transfer Scholarship once in their academic careers.
- <u>All applicants</u>: Applicants are required to provide proof of U.S. Citizenship to their respective Campus Director for accurate and timely completion of the Grant Verification approval. All students must be full-time at the time of application.–New applicants will be given priority over recent awardees with all grants.
- **Fund Distribution** Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.

Post award responsibilities

- **Reporting** Completion of a brief report is required prior to scholarship payment. The required reporting link will be sent via email following award of scholarship and is also available by logging into the application portal.
- 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 student 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 have created a STEM Gateway profile in order to comply with the terms of the awarded grant.

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.

Apply for this award

Submit the application and additional forms via the <u>Apply</u> page.

- Applicant Contact/Demographic Information
 * This information is utilized for NASA reporting only.
- Proposal Information
 - a. Narrative 3-page maximum. Please include the following sections:
 - i. Describe your academic and career goals.
 - ii. Describe information on any research experiences or other relevant experiences you have had and how you believe they have influenced your career in STEM.
 - iii. Describe your community service, extra-curricular activities, work experience awards and/or honors.
 - iv. Briefly explain the benefits that you expect to derive from a NASA CTSGC Scholarship.

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

- b. **One Recommendations** *(internal or external)* Applicants will be asked to provide email address(es) of recommender(s) in their application. The recommender(s) will be emailed a unique link to provide their recommendation, or they can log into the application site using the provided email address. Their recommendation will be included in the completed application when reviewed by the selection committee. Recommendations are due no later than one week (7 days) after the date applications close for that cycle.
- c. **Resume/Curriculum Vitae** One-page maximum.
- d. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem. Transcript must show current course enrollments. Please do not upload encrypted files.

²⁰³ Dana Hall, University of Hartford (Lead Institution), 200 Bloomfield Avenue, West Hartford, CT 06117 860.768.4813 <u>ctspgrant@hartford.edu www.ctspacegrant.org @CTSpaceGrant</u>

Evaluation Rubric

Criteria	Max Score
Academic and career goals relate to NASA CTSGC mission	20
Student demonstrates and/or describes interest in science and technology subject matter and careers	20
Student academic performance	15
Recommendation received/supports applicant.	10
Student demonstrates and describes community service, extracurricular, work and/or academic honors, experiences, and awards that support his or her application to the award	15
Student describes benefits from receiving the scholarship and/or articulates reasons for deserving the scholarship	15
Recent award or student has never received a NASA CTSGC award	
	100

Travel Grant

About this award

- 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 CTSGC awards travel grants. Refer to the NASA CTSGC website for the number of awards available each academic 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. First-semester students are not eligible to apply as a transcript showing at least one completed semester is required with your application. Applicants are required to provide proof of U.S. Citizenship to their respective Campus Director for accurate and timely completion of the Grant Verification approval. Student applicants should have a strong academic record.
- Budget Funds will be paid to the student or groups' institution upon submission of a detailed invoice, including back-up (how the funds were spent), at the conclusion of the trip. Alcohol and personal care items are not allowed. No travel advances are allowed.
- Fund Distribution 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 NASA CTSGC funds. International travel is not allowed to be funded with Space Grant dollars. Note: NASA CTSGC cannot award final payment until all post-award requirements are met and approved.

Post award responsibilities

- **Reporting** A project report will be required promptly 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 to be an investment in the future of the researcher, their department and the institution, and therefore requires the tracking of these outcomes for CTSGC reporting to NASA.
- **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 student 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 <u>NASA STEM Gateway website</u> *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 <u>clicking here</u>. 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** Students will be required to furnish a research poster (<u>template available online</u>) 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.
- 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.

Apply for this award

Submit the application and additional forms via the <u>Apply</u> page.

- > 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 2-page maximum. Please include the following sections
 - i. 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 webpage of the program is acceptable). Please remember that Space Grant can only support domestic travel.
 - ii. Relevance to NASA's Mission Directorates
 - iii. Goals and Objectives
 - iv. Timetable

c. **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 coast 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.)

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

- d. **Budget Justification** Please be sure to include a Budget Worksheet for each institution involved in collaboration grant proposals.
- e. **One Recommendation** Applicants will be asked to provide to email address(es) of recommender(s) in their application. One recommendation must be from a faculty member familiar with the travel purpose. The recommender(s) will be emailed a unique link to provide their recommendation, or they can log into the application site using the provided email address. Their recommendation will be included in the completed application when reviewed by the selection committee. Recommendations are due no later than one week (7 days) after the date applications close for that cycle.
- f. **Resume/Curriculum Vitae** One-page (maximum) resume/CV is required. (Submissions over page maximum will be rejected.) For team proposals, please submit a one-page resume/CV for each team member.
- g. Student Transcript Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem. Transcript must show current course enrollments. Please do not upload encrypted files

Criteria	Evaluation	Max
		Score
Abstract	Abstract is clear, concise and gives reader an excellent sense of the	5
	scope of travel.	
Purpose of travel	Clear and detailed description of and rationale for travel, including	20
and invitation	invitation to participate and/or other supporting material.	
Relevance to NASA's	Purpose of travel is very relevant to one or more of NASA's Mission	15
Mission Directorates	Directorates. Priority is given to travel related to CTSGC research or	
	NASA projects.	
Goals and objectives	Goals and objectives of travel are clearly stated with compelling	25
	reasons offered to pursue travel.	
Recommendation	Recommendation received/supports applicant and travel.	10
Timetable	Includes a clear and detailed timeline of travel, which is aligned	5
	with goals and objectives.	
Budget narrative and	There is a clear, detailed, budget plan, including a justification of	15
worksheet	expenditures for the proposed travel and a complete budgetary	
	schedule for the length of the travel.	
Recent award	Maximum points will be given to students who have never received	5
	a NASA CTSGC award.	
		100

Evaluation Rubric

Summer and Academic Year Internships

About this award

NASA CTSGC collaborates with Connecticut-based industries and organizations, in an effort to aid in securing full-time summer internship opportunities for student applicants. Internships may be in STEM-related industries, and informal education organizations. NASA CTSGC will solicit meaningful internship opportunities/projects from these professional partners. Eligible students may apply directly to specific projects of interest through the online application system. Applicants will be reviewed on a rolling application deadline basis.

The NASA CTSGC Internship program follows the model and structure of the highly competitive NASA Center Internships – specifically, project sponsors will identify projects ahead of time, and advertise for summer interns for those specified projects. By having projects identified ahead of time, more students, especially community college students, will be likely to apply for the opportunity. Internships will be dispensed dependent upon the funding available, the applicant pool and industry's ability to accommodate the internships. Refer to the NASA CTSGC website for the internship opportunities available

Award – <u>Industrial and Education Internship</u> – Undergraduate (4-year institution)/Graduate students enrolled at affiliated institutions are eligible to apply. Undergraduate/Graduate student applicants must be full-time students at one of the Consortium Member Institutions with a strong academic record. NASA CTSGC funds are only available to US Citizens.

<u>Technical Internship</u> (all students eligible) – Priority given to community college students enrolled in an Associate's degree or Certificate program at an affiliated institution are eligible to apply. If space is available, internships may be offered to 4-year institution or graduate students. Undergraduate student applicants must be full-time students at one of the Consortium Member Institutions with a strong academic record. NASA CTSGC funds are only available to US Citizens.

Internships will be dispensed dependent upon the funding available, the applicant pool and industry's ability to accommodate the internships. *Refer to the NASA CTSGC website for the internship opportunities available.*

- **Eligibility** Full-time students at Consortium Member Institutions are eligible. All applicants must be US Citizens. First-semester students are not eligible to apply as a transcript showing at least one completed semester is required with your application. Applicants are required to provide proof of U.S. Citizenship to their respective Campus Director for accurate and timely completion of the Grant Verification approval. Student applicants should have a strong academic record.
- **Distribution** Funds will be distributed in three equal payments directly to the industry partner, as follows: first payment at the beginning of the internship, a second upon receipt of a mid-point report from the supervisor of satisfactory performance, with the final balance paid upon submission and approval of all required post-award documentation. Student interns will be paid in accordance with the sponsoring organizations' practices.

²⁰³ Dana Hall, University of Hartford (Lead Institution), 200 Bloomfield Avenue, West Hartford, CT 06117 860.768.4813 <u>ctspgrant@hartford.edu www.ctspacegrant.org @CTSpaceGrant</u>

Post award responsibilities

- **Reporting** A project report will be required promptly upon completion of the internship. The required reporting link will be sent via email before the completion of the internship period of performance and is also available by logging into the application portal. NASA CTSGC considers a successful project to be an investment in the future of the researcher, their department and the institution, and therefore requires the tracking of these outcomes for CTSGC reporting to NASA.
- 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 student 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 have created a STEM Gateway profile in order to comply with the terms of the awarded grant.
- **Poster Session** Students will be required to furnish a research poster (<u>template available online</u>) 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.
- **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.

Apply for this award

Submit the application via the online application system at ctspacegrant.org. The following information will be needed when you apply.

- Applicant Contact/Demographic Information
 - * This information is utilized for NASA reporting only.
- > Proposal Information
 - a. Narrative 3-page maximum
 - i. Why are you interested in an internship?
 - ii. Why should you be selected for this opportunity?
 - iii. Describe how your interest/experience will be enhanced by this internship.
 - iv. How will this internship enhance or contribute to your long-term academic and career goals?
 - v. Please list all technical courses you have taken that may be helpful to hiring managers in considering your qualifications.
 - vi. Please explain your interest in your top 3 project choices. How does each project fit with your current interests and/or proposed career goals?

- vii. What has been the extent of your contact with CT industry, particularly the company you are interested in working with? (Please indicate the name of any individuals with whom you have been working/speaking.)
- b. One Recommendation (internal or external) Applicants will be asked to provide to email address(es) of recommender(s) in their application. The recommender(s) will be emailed a unique link to provide their recommendation to be included in the application using that link, or by logging into the application site using the provided email address. Recommendations are due one week (7 days) after receipt of the email to ensure timely submission of the internship application.
- c. **Resume/Curriculum Vitae** One-page (maximum) resume/CV is required. (Submissions over page maximum will be rejected.)
- d. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem. Transcript must show current course enrollments. Please do not upload encrypted files.

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 ٠ 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
 - \geq Aeronautics Research (ARMD)
 - Exploration Systems Development (ESDMD)
 - Mission Support (MSD)
 - Science (SMD)
 - Space Operations (SOMD)
 - \geq 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.