LaSPACE

Senior Design Project Support (Senior Design) Program

Notice of Funding Opportunity (NOFO) & Proposal Guidelines

Offered by the Louisiana Space Grant Consortium

Under the authority of the
NASA Space Grant College and Fellowship Program

LaSPACE Program Director: Colleen H. Fava

Louisiana Space Grant Consortium (LaSPACE)
364 Nicholson Hall, Department of Physics and Astronomy
Louisiana State University, Baton Rouge, LA 70803
225.578.8697 | http://laspace.lsu.edu/ | laspace@lsu.edu

Revised, March 2025
All previous versions of this program's guidelines are null and void.

Senior Design Program Summary Page

About the Senior Design Program

The Senior Design Project Support Program is meant to offer supplemental funding in support of high-level student-led research and design projects conducted under the auspices of a formal Senior Design or Capstone Course. Projects must show clear relevance to NASA's mission and ongoing research at one or more of the NASA centers and be clearly aligned with research under the umbrella of one or more of the four mission directorates. This funding source is meant to supplement the cost of materials and supplies and/or travel for competitions related to such formally established senior design projects/courses. Senior Design subawards will be issued as 9.5 month awards with a standard Period of Performance being used for all of our programs offered for 2025-2026, 08/15/2025-05/31/2026.

Program Summary

- Proposals must be signed off on by the Project PI and the Authorized Organizational Representative for Sponsored Programs at your institution.
- While a single PI may submit proposals to support multiple projects, our objective is to serve a broad set of disciplines and campuses, so we may not be able to fund more than one project per PI. Please rank order multiple proposals so we can consider your funding request in order of your preference.
- Award funds can be requested up to $4,000; no strict cost-match is required, **but some institutional investment is required** and will impact our evaluation.
- Please include the Student Participant List if your student participants have already been identified. If the team members are not all selected at the time of proposing, please be sure to send a complete Student Participant List as soon as the students have all been identified. All identified students must submit an online LaSPACE Student Participation Form, an online LaSPACE/NASA Media release form, and set up a profile in NASA Gateway (instructions are included at the end of this document).
- The final invoice and a final project report must be submitted to the LaSPACE office within 30 days of the project end date. Photographs and copies of all papers, presentations, and posters generated should be shared with LaSPACE as they occur and collected/referenced in the Final Report. Final Report guidelines can be downloaded from the LaSPACE website's document center. A link to our online reporting tool is also available.

NOTE: This competition is being conducted in advance of LaSPACE receiving our formal contract for the next multiyear Space Grant award, which begins June 10, 2025. Any changes in restrictions / requirements included in our parent award from NASA will be passed down to all subawardees. Modifications to your proposal will be requested, if needed!

Proposal Submissions

- **Submit all properly executed proposals via email as fully searchable pdf documents to laspace@lsu.edu by 11:59 pm on Friday, May 9, 2025.**
- Important Dates:
  - Proposal Release Date: Friday, March 14, 2025
  - **Proposal Due Date: Friday, May 9, 2025**
  - Anticipated Award Announcements: Late June/Early July
  - Award Period of Performance: 08/15/2025 - 05/31/2026

LaSPACE General Guidelines

Introduction to the Space Grant Program

The Louisiana Space Grant Consortium (LaSPACE) is a Designated Consortium in the NASA National Space Grant and Fellowship Program network, which was designed to network colleges, universities, and state education boards with partners in business, industry, and the non-profit sector to promote, develop, and strengthen aerospace science, research, technology, education, and awareness. LaSPACE promotes scientific research, workforce development, and public outreach to develop and strengthen long-term research capabilities within Louisiana that will make significant contributions to the research and technology goals at NASA while supporting the goals of the state.

Basis of Authority

The Louisiana Space Grant Consortium (LaSPACE) currently comprises Louisiana public and private colleges and universities in addition to other government and science organizations. The consortium is funded jointly by the National Aeronautics and Space Administration (NASA) and by the Louisiana Board of Regents Support Fund (BORSF), as well as significant cost share and support from the lead institution Louisiana State University. The consortium is administered by the LaSPACE Management team at LSU with input from the LaSPACE Council (comprised of affiliate representatives), under the aegis of NASA and the Board of Regents. The basis of authority for this and other programs of LaSPACE rests in part on the above funding. It is important, therefore, to note that the implementation of LaSPACE-supported projects must conform to applicable Federal and State regulations, in general, and to the NASA stipulations, in particular. Reductions in federal funding will directly impact funding levels for our programs.

NASA Agency Information

NASA 2022 Strategic Plan

NASA's 2022 strategic plan aligns the Agency's future activities along three strategic themes of Discover, Explore, and Develop, as well as a fourth theme focused on the activities that will enable the Agency's mission.

- DISCOVER: Expand human knowledge through new scientific discoveries
- EXPLORE: Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization
- INNOVATE: Catalyze economic growth and drive innovation to address national challenges
- ADVANCE: Enhance capabilities and operations to catalyze current and future mission success

The complete plan can be downloaded here.

NASA Vision

Exploring the secrets of the universe for the benefit of all.

NASA Mission

NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery.

NASA Office of STEM Engagement

NASA's journeys have propelled technological breakthroughs, pushed the frontiers of scientific research, and expanded our understanding of the universe. These accomplishments, and those to come, share a common genesis: education in science, technology, engineering, and math. NASA's Office of STEM Engagement (OSTEM) delivers tools for young Americans and educators to learn and succeed. OSTEM seeks to:

- Create unique opportunities for students and the public to contribute to NASA's work in exploration and discovery.
- Build a future STEM workforce by engaging students in authentic learning experiences with NASA people, content, and facilities.
- Strengthen public understanding by enabling powerful connections to NASA's mission and work.

To achieve these goals, NASA's Office of STEM Engagement strives to increase K-12 involvement in NASA projects, enhance higher education, support all communities, strengthen online education, and boost NASA's contribution to informal education. The intended outcome is a generation prepared to code, calculate, design, and discover its way to a new era of American innovation.

The National Space Grant College and Fellowship Program, from which LaSPACE is derived, is a component of the NASA Office of STEM Engagement's larger portfolio, managed at NASA Headquarters in Washington D.C., in alignment with the NASA Mission Directorates, and engagement with all NASA centers and facilities.

NASA Mission Directorates (MD)

Research, technology, and development priorities of your proposed project must align with one or more of NASA's Mission Directorates:

Aeronautics: Results achieved by NASA's aeronautical innovators through the years directly benefit today's air transportation system, the aviation industry, and the passengers and businesses who rely on those advances in flight every day. As a result, every U.S. commercial aircraft and U.S. air traffic control tower uses NASA-developed technology to improve efficiency and maintain safety.

Exploration Systems: The Exploration Systems Development Mission Directorate manages human exploration system development for lunar orbital, lunar surface, and Mars exploration. Artemis missions will open a new era of scientific discovery and economic opportunity on the Moon while validating operations and systems and preparing for human missions to Mars. Programs in the directorate include the Space Launch System rocket, Orion spacecraft, supporting ground systems, human landing systems, spacesuits, and Gateway.

Science: The Science Mission Directorate is an organization where discoveries in one scientific discipline have a direct route to other areas of study. This flow is something extremely valuable and is rare in the scientific world. From exoplanet research to better understanding Earth's climate to understanding the influence of the sun on our planet and the solar system, the directorate's work is interdisciplinary and collaborative.

Space Operations: The Space Operations Mission Directorate maintains a continuous human presence in space for the benefit of people on Earth. The programs within the directorate are the heart of NASA's space

exploration efforts, enabling Artemis, commercial space, science, and other agency missions through communication, launch services, research capabilities, and crew support.

Space Technology: Technology drives exploration and the space economy. NASA's Space Technology Mission Directorate aims to transform future missions while ensuring American leadership in aerospace. The directorate develops, demonstrates, and transfers new space technologies that benefit NASA, commercial, and other government missions.

All NASA Space Grant subprograms must relate to and support one or more of these directorates. Likewise, all programs supported by LaSPACE must support the NASA organization, align with the NASA Strategic Plan, and support the goals of the Office of STEM Engagement. Any alignment with NASA Center programs should also be detailed.

NASA MD Contacts for University Researchers

Aeronautics Research Mission Directorate (ARMD)
POC: Dave Berger, OSTEM Embed for ARMD, dave.e.berger@nasa.gov, 202.358.2473
Exploration Systems Development Mission Directorate (ESDMD)
POC: Veronica Seyl, OSTEM Embed for ESDMD, veronica.l.seyl@nasa.gov, 281.483.5110
Science Mission Directorate (SMD)
POC: Susan Poland, OSTEM Embed for SMD, susan.m.poland@nasa.gov, 202.358.1082
Space Operations Mission Directorate (SOMD)
POC: Veronica Seyl, OSTEM Embed for SOMD, veronica.l.seyl@nasa.gov, 281.483.5110
Space Technology Mission Directorate (STMD)
POC: Stephanie Yeldell, OSTEM Embed for STMD, stephanie.l.yeldell@nasa.gov, 202.358.1162

NASA Center Liaisons

Armstrong Flight Research Center Veronica Wilson veronica.l.wilson@nasa.gov	Johnson Space Center Jakarda Varnado jakarda.w.varnado@nasa.gov
Ames Research Center Veronica Wilson veronica.l.wilson@nasa.gov	Kennedy Space Center Patricia Gillis patricia.j.gillis@nasa.gov
Goddard Space Flight Center James Harrington james.l.harrington@nasa.gov	Langley Research Center Bonnie Murray bonnie.murray@nasa.gov
Glenn Research Center Gerald Voltz gerald.w.voltz@nasa.gov	Marshall Space Flight Center Vemitra Alexander vemitra.m.white@nasa.gov
Jet Propulsion Lab Petra Kneissl petra.a.kneissl-milanian@jpl.nasa.gov	Stennis Space Center Louis Thompson louis.m.thompson@nasa.gov

The Louisiana Space Grant Consortium, part of the National Space Grant College and Fellowship Program and in partnership with the Louisiana Board of Regents, supports programs at affiliated academic institutions and other Louisiana organizations that address the NASA mission, federal CoSTEM goals, and state education and economic priorities. LaSPACE programs for Research, Higher Education, Workforce Development, K-12 Teacher Development, and Public Outreach, strengthen the Science, Technology, Engineering, and Math (STEM) education needed for a robust technical workforce, and develops the research and economic infrastructure to boost Louisiana's contribution to NASA research priorities.

LaSPACE Program Office & Affiliate Representatives

General administration is the responsibility of the LaSPACE Team headquartered at LSU. Questions about applications to any LaSPACE programs should be directed to the program management team via the general laspace@lsu.edu email address. Unless otherwise directed, all proposals, invoices, reports, and queries should also be submitted via email to the program email address (laspace@lsu.edu).

LaSPACE Program Office, laspace@lsu.edu, 225-578-8697
LSU Department of Physics & Astronomy |364 Nicholson Hall, Baton Rouge, LA 70803

Additionally, all member institutions have appointed an affiliate representative who sits on the LaSPACE Advisory Council and is available to discuss opportunities and processes related to LaSPACE programs. Contact information for all affiliates is provided below. For institutions with a vacancy, contact the LaSPACE program office at LSU. Please refer to the LaSPACE FAQs before contacting LaSPACE management and/or affiliate reps.

LaSPACE Affiliate Representatives

Affiliated Insitution	Rep Name	Email	Phone
Baton Rouge Community College (BRCC)	vacant	vacant	vacant
BREC / Highland Road Park Observatory (HRPO)	Christopher Kersey	o@brec.org	225-768-9948
Cain Center for STEM Literacy (Cain Center)	Frank Neubrander	fneubr1@lsu.edu	225-578-4082
Delgado Community College (DCC)	Raymond Duplessis	rduple@dcc.edu	504-671-6419
Dillard University (Dillard)	Abdalla Darwish	adarwish@dillard.edu	504-816-4840
East Baton Rouge Parish Library (EBRPL)	Mary Stein	mstein@ebrpl.com	225-231-3710
Grambling State University (GSU)	vacant	vacant	vacant
LaSTEM at LA BOR (LaSTEM)	Clint Coleman	Clint.coleman@laregents.edu	504-352-4891
Louisiana Arts and Science Museum (LASM)	vacant	vacant	vacant
Louisiana Board of Regents (BOR)	Jessica Patton	jessica.domingue@la.gov	225-342-4253
Louisiana Business and Technology Center (LBTC)	Roy Keller	rkeller@lsu.edu	225-578-3985
Louisiana Civil Air Patrol (La CAP)	Jud Ergle	fergle@cap.gov	504-756-9255
Louisiana Community and Technical College System (LCTCS)	vacant	vacant	vacant

Louisiana Economic Development (LED) FastStart	Justin Dedden	Justin.Dedden@la.gov	225-342-5607
La Board of Elementary & Secondary Education (BESE)	Ann Wilson	ann.wilson@la.gov	225-342-0140
Louisiana Public Broadcasting (LPB)	vacant	vacant	vacant
Louisiana State University and A&M College (LSU)	John Flake	johnflake@lsu.edu	225-578-5833
Louisiana State University at Alexandria	vacant	vacant	vacant
Louisiana State University Agricultural Center (LSU-Ag)	Wade Baumgartner	wbaumgartner@agcenter.lsu.edu	225-578-7742
Louisiana State University Health Sciences (LSUHSC)	Xiaohong Lu	xiaohong.lu@lsuhs.edu	318-675-4276
Louisiana State University of Shreveport (LSUS)	Urska Cvek	urska.cvek@lsus.edu	318-675-5128
Louisiana Tech University (LaTech)	Mary Caldorera-Moore	mcmoore@latech.edu	318-257-2207
Loyola University (Loyola)	Anat Burger	aburger@loyno.edu	504-865-2247
McNeese State University (McNeese)	Ning Zhang	nzhang@mcneese.edu	337-475-5873
National Center for Biomedical Research & Training (LSU-NCBRT)	Jason Krause	jkrause@ncbrt.lsu.edu	225-578-0285
Nicholls State University (Nicholls)	Matt Marlow	matthew.marlow@nicholls.edu	985-448-4576
Northshore Technical Community College (NTTC)	Chuck Crabtree	charlescrabtree@northshorecollege.edu	985-545-1231
Northwestern State University of Louisiana (NSULA)	Anna Dugas	dugasa@nsula.edu	318-357-5519
Nunez Community College (NCC)	vacant	vacant	vacant
River Parishes Community College (RPCC)	Esperanza Zenon	ezenon@rpcc.edu	225-743-8713
SciPort Discovery Center	Heather Kleiner	hkleiner@sciport.org	318-424-3466
Southeastern Louisiana University (SELU)	Gerard Blanchard	gerard.blanchard@selu.edu	985-549-2159
Southern University and A & M College (SUBR)	Michael Stubblefield	michael_stubblefield@subr.edu	225-771-5231
Southern University of New Orleans (SUNO)	Illya Tietzel	itietzel@suno.edu	504-286-5111
The 1881 Institute	Bahiy Watson	bahiy@the1881school.org	504-475-8070
Tulane University (Tulane)	Mark J. Fink	fink@tulane.edu	504-862-3568
University of Louisiana at Lafayette (ULL)	Afef Fekih	afef.fekih@louisiana.edu	337-482-5333
University of Louisiana at Monroe (ULM)	Ken Leppert	leppert@ulm.edu	318-342-1918
University of New Orleans (UNO)	Matthew Tarr	mtarr@uno.edu	504-280-6836
Xavier University of Louisiana (Xavier)	Ashwith K. Chilvery	achilver@xula.edu	504-520-5149

LaSPACE Requirements and Restrictions

In this section, requirements and restrictions applied to all LaSPACE programs are summarized. Additional requirements and restrictions pertaining to individual programs offered by LaSPACE are detailed later in these guidelines.

Public Nature of Applications to LaSPACE

Once an application is received in the LaSPACE office, it becomes public record. Although the staff will not disseminate applications to individuals other than to reviewers, applicants should be aware that, if a formal request for information is made by the public, a copy of the application, by law, may be provided.

Disclosure of Information

All LaSPACE programs must conform to applicable Federal, State and NASA regulations and stipulations. This includes annual reporting of award participant information to both the Louisiana Board of Regents and NASA. Part of this information will include both directory information such as name, address, telephone number, date of birth, and demographic information such as gender, ethnicity, and race for all award participants including faculty, staff, and students. Further, LaSPACE outreach includes public dissemination of its supported programs through newsletters, flyers, the LaSPACE website (https://laspace.lsu.edu/), as well as papers and/or presentations at Space Grant or related Education & Public Outreach conferences. The contents of award reports, including participant names, titles, institution, project summaries, results or conclusions, and images, might be included in such public outreach articles. It is not intended that these public articles will disclose directory or demographic information except as aggregated statistical data.

Animal Use

Any project proposing the use of an animal model for validation must include a local IACUC approval letter, fully signed, which specifies a validity period longer than the proposed project period. Failure to obtain the Institutional Animal Care and Use Committee's approval in advance, is grounds for returning the proposal unreviewed. Attach the IACUC material as an additional appendix.

Human Subjects

Projects that involve human subjects are not acceptable for this program.

Eligibility

PI must be authorized by an affiliated institution to serve as Principal Investigator on behalf of said institution. Students directly funded under programs designated as NASA NIFs programs must be U.S. citizens. Current NASA NIFs programs offered by LaSPACE: GPS, GIRAF, GSRA, HIS, Internships, LURA, LaSSO, & SEMSI. Additional, or altered, restrictions may apply to specific programs. The citizenship requirement is issued by NASA OSTEM and LaSPACE has no authority to supersede it.

Concurrent, Overlapping, and Consecutive Awards

PIs may hold more than one LaSPACE Award concurrently with some restrictions. No student may be funded simultaneously via multiple awards in the scholarship/fellowship programs (GSRA, GIRAF, LaSSO, LURA, HIS, & SEMSI programs). Consecutive, non-overlapping awards in these program areas may be issued to exceptional students in the midst of extended research. Proposals for additional year(s) of

funding may be submitted if 1) the previous period of performance has recently passed or is 60 days or less from completion, 2) must explicitly reference the completion of proposed tasks from the current/previous award within the new proposal, **3) must include a Final report, or preliminary Final Report if still in progress, in an appendix**, and 4) must clearly state the objectives and goals for the new proposal differentiating said goals from the prior work.

Budgeting

Capital Equipment purchases and Foreign Travel are not allowable costs**.** The submitting PI is responsible for the writing of the budget. **Any requests to rebudget funds must be submitted in writing to laspace@lsu.edu for consideration.** A completed LaSPACE Budget Revision Request Form (available for download from the LaSPACE Document Center) must be included and minimum requirements for direct student funding commitments must be met.

Disbursement of Funds

LaSPACE Award fund distribution will be managed by the applicant's college or university, either via a cost-reimbursable subcontract if the applicant is at an affiliate other than LSU, or by transfer of funds from LaSPACE to the applicant's department for projects at LSU. The institution/department will assume responsibility for administering, distributing, and documenting costs charged to this program, including any cost-share commitments.

Period of Performance

Unless otherwise stated, LaSPACE programs have a default period of performance of no greater than 9.5 months. Shorter periods of performance may be proposed, or even required by the LaSPACE office, to meet any requirements or restrictions related to the parent grant. *A proposed period of performance is provided for each program cycle on the summary page; proposers may request a different period with* ***advance permission*** *from the LaSPACE Management team*.

No-Cost Extensions

LaSPACE will no longer consider full-year No-Cost Extensions (NCEs). We may consider NCE requests for up to 6 months. We are getting more pressure from NASA to complete as much spending as possible within each program year. It is harder to justify NCEs for our subawarded projects. We need you to propose an NCE for ***only exactly how much additional time you need***. If we deem that there are avoidable reasons for you needing an NCE, it may be rejected. Do your best to spend according to your proposed timeline. Reach out earlier rather than later if you hit early snags.

NCE's for ongoing projects must be submitted to the LaSPACE program office no later than 60 days before the initial project end-date. All NCE requests must be submitted to laspace@lsu.edu and must include a progress report which addresses all accomplishments made to-date on the project (including all publications, proposals, presentations, patents, etc), where the project is in relation to the originally proposed end date, reasons why the project has been delayed, and a proposed plan for completing the project. This progress report must also identify all participants on the project (students, post-docs, faculty, and staff). A link to the online platform for progress report submission, as well as a document with detailed guidance for writing the report, are posted in the LaSPACE Document Center on our website.

Invoicing & Reporting Requirements

Invoices must be submitted monthly by the 15th of the month, beginning no later than the second full calendar month of the award period using the billing form available in our document center. Example: For awards with a period of performance of 08/15/2025—05/31/2026 the first invoice must be submitted in October by 10/15/2025 with additional invoices submitted on or before the 15th of each subsequent month. The final invoice must be submitted within 30 days of the last day of the period of performance. For the example period of performance, the final invoice would be due by 06/30/2026. **The LaSPACE team is now providing pre-populated invoice templates for each individual subaward to help our affiliate's sponsored programs staff submit compliant invoices.**
A final report must be submitted by the PI/Project Lead no later than 30 days after the project end date. Photographs and copies of all papers, presentations, and posters generated should be shared with LaSPACE as they occur and collected/referenced in the final report. Final Report guidelines can be downloaded from the LaSPACE website's document center. Please review the reporting guidelines at the start of your project to identify in advance the kinds of information you must share at the end of your award. **For example, you must track participation hours & total funding per student and collect reflective statements from your students. Develop a plan to collect this info early!**
Failure to submit timely invoices and reports may result in new restrictions and requirements, including a potential suspension of eligibility to apply for LaSPACE funding.

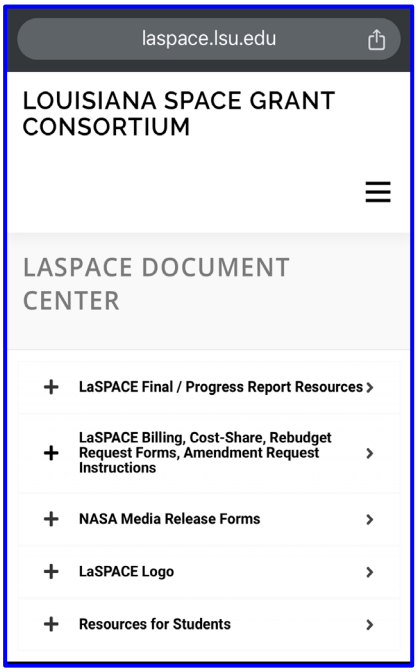

Figure 1: Screen Shot of the LaSPACE website's Document Center showing available content linked there; including Reporting Resources, Billing/Budgeting forms, Media Releases, the LaSPACE Logo, and Resources for Students.

LaSPACE Annual Meeting Participation

Funded participants are expected to make every effort to attend the LaSPACE Annual Meeting held during the fall semester on a Friday and Saturday at a different affiliate institution each year. For the 2025 meeting we will meet at Louisiana State University in Baton Rouge, LA on November 7th & 8th. Information will be sent out to our affiliate representatives and funded awardees and posted to our website here.
Recently/currently funded students are expected to present a poster at the student poster session on Saturday.

Senior Design Project Support

Application Guidelines

About the Senior Design Program

The Senior Design Project Support Program is meant to offer supplemental funding in support of high-level student-led research and design projects conducted under the auspices of a formal Senior Design or Capstone Course and typically involve participation from 2-5 students. Projects must show clear relevance to NASA's mission and ongoing research at one or more of the NASA centers/under the umbrella of one or more of the four mission directorates. This funding source is meant to supplement the cost of materials and supplies and/or travel for competitions related to such formally established senior design projects/courses.

Background and Objectives

The State of Louisiana's prime goal is to develop a well-trained, technical workforce capable of moving the state forward in R & D, attracting high tech industries, and promoting economic development. This is precisely what NASA desires and what LaSPACE is working to achieve. The core focus of the LaSPACE program continues to be student involvement in genuine scientific research and engineering projects.

PI Eligibility

Proposals to the Senior Design RFP may be submitted only by qualified faculty members at a LaSPACE affiliate academic institution. This person becomes the project's Principal Investigator (PI) and is responsible for administering the funds, monitoring the student teams as they develop their projects, and managing the team's reporting requirements to LaSPACE. PI's may submit more than one proposal to the Senior Design funding competition; however, they must rank order proposals and additional projects will only be considered if funding remains. Our mission is to support projects around the state and in multiple disciplines. Rank order provisioning helps us avoid concentrated funding in one space.

Award Funds

Senior Design awards are capped at $4,000. The proposal may include costs for materials, supplies, and support for constructing/testing student products, and may include travel costs if a competition is associated with the final deliverable. A strict cost-share formula is not set for this program, but some institutional investment is required. The Senior Design Project Support Program is meant to supplement the cost of developing and building a final product as part of a formal Senior Design or Capstone Course at the PI's institution. Wages of any kind are not an allowable cost on a project of this type.

Disbursement of Funds

Senior Design award fund distribution will be managed by the PI's college or university, either via cost-reimbursable subcontract if they are at an affiliate other than LSU, or by transfer of funds from LaSPACE to the PI's department for projects at LSU. The institution/department will assume responsibility for administering, distributing, and documenting costs charged to this program according to standard procedures and consistent with all federal and state rules and guidelines. The subawarded institution must invoice LaSPACE monthly.

Incompletion of Project

If projects are not completed and/or deliverables not met, LaSPACE reserves the right to restrict individual PIs and campuses from participation in future programs.

Animal Use

Any project proposing the use of an 'animal model' for validation must include a local IACUC approval letter, fully signed, which specifies a validity period longer than the proposed project period. Failure to obtain the Institutional Animal Care and Use Committee's approval in advance is grounds for returning the proposal unreviewed. Attach the IACUC material as an additional appendix.

Human Subjects

Projects that involve human subjects are not acceptable for this program.

Proposal Revision Requests

This competition is being conducted in advance of LaSPACE receiving our formal contract for the next multiyear Space Grant award, which begins June 10, 2025. Any changes in restrictions / requirements included in our parent award from NASA will be passed down to all subawardees. Modifications to your proposal will be requested, if needed!

Senior Design Proposal Requirements & Format

Senior Design proposals should be submitted as fully searchable pdf documents via email to laspace@lsu.edu. Proposals must include the following completed sections in the order presented:

- LaSPACE Senior Design Program Proposal Cover Page
- Proposed Project Summary Form
- Prior LaSPACE Awards Form (most recent 5 years)

A. Proposal Narrative (not to exceed 5 pages)
    1. Introduction: State the problem to be addressed & explicitly cite the Senior Design Course Number(s) and general requirements for this course on your campus.
    2. Background research summary
    3. Implementation Methodology with Timetable (The methodology to be employed in the project should be succinctly described. A concise timetable, preferably in a tabular form, should be provided. Key steps or milestones toward the successful completion of the project should be shown in this table. Background information should be provided as needed).
    4. Explicit alignment with research goals or priorities for any of NASA's Mission Directorates or Centers.
    5. Student Recruitment & Retention: How will you find students to join your team and what practices will you employ to retain them.
    6. Student Participant List / Form Confirmations: List identified student team members (name, classification, major, project role) in the Student Participant List. If students are to be selected after award, submit this list as soon as students are recruited. Include the expected number of students to be recruited and the recruitment plan/schedule for your campus's Senior Design courses.
    7. Anticipated outcomes for student learning and development, including professional development activities such as poster presentations, written reports, competitions, etc.
    8. Evaluation procedure/mechanism

B. Budget
    1. LaSPACE Budget Form
    2. Budget Justification: narrative explanation of all costs. Note: It is hoped that for a student team award of this type, your institution will be willing to forego some or all of the indirect charges. Waived indirect should be used as institutional matching funds.

C. Principal Investigator Short CV (1-2 pages)

NOTE to Proposers:

- Do NOT include anything that is not explicitly listed above. If you believe additional content/sections are needed, contact our office at laspace@lsu.edu to request permission.
- Do NOT include the guidelines in your proposal submission.

Senior Design Evaluation Criteria

Each proposal will be evaluated using the following evaluation form.

Senior Design Evaluation Form

Institution	
PI Name	
Proposal Title	
Funding Recommendation	

Proposal Formatting and Required Contents
All sections are present and in the right order

Relevance to & Alignment with NASA
Clearly aligned to a NASA Mission Directorate and priorities

Overall Quality of Proposal
Clarity & quality of the proposed work and key personnel

Evidence of Likely Completion of the Project
Management and task plan is detailed and specific; evidence of past success

Student Recruitment and Retention Plan
How will you recruit and retain students on this project

Budget Appropriateness
Appropriate to the work and to the goals of this program. Sufficient narrative details on costs.

Additional Comments
Additional Comments

Attachments
Required Proposal Forms

Required Forms for Proposal

All proposals submitted to LaSPACE must use the forms included following this page. Proposals not using these forms may be rejected without review.

- LaSPACE Senior Design Program Proposal Cover Sheet
- Proposed Project Summary
- Prior LaSPACE Awards
- LaSPACE Proposed Budget Form
- Student Participant List & Form Submission Confirmations
- NASA Media Release Form (submitted online by PI and all identified student participants)

LaSPACE Senior Design Program Proposal Cover Sheet

1. Title of Proposed Project:_____

_____

2. Principal Investigator: _____
(Name) (Highest Degree Earned) (Citizenship)

_____
(Department)

3. Institution of Higher Education:_____

4. Address:_____
(Street Address/P.O. Box Number)

_____
(City, State) (Zip Code)

5. Telephone:_____ FAX:_____

E-mail:_____

6. Date of Submission: _____

7. Total Funds Requested: $_____ Institutional Match: $_____

****

Certification of Compliance with Applicable Executive Orders and U.S. Code: By signing and submitting this proposal, the signatories certify that the statements made in this proposal are true and complete to the best of their knowledge; they agree to comply with LaSPACE award terms and conditions if an award is made as a result of this proposal; and the institution and proposed project are in compliance with all applicable Federal and State laws and regulations including, but not limited to, Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities; Non-Discrimination; Certification against Lobbying imposed by section 1352, title 31, U.S. Code; Compliance with China Funding Restriction as detailed in Public Laws 112-10 Section 1340(a) and 112-55, Section 539; ACORN Compliance in accordance with 534 of the Consolidated and Further Continuing Appropriations Act of 2012 (Pub. L.112-55); and does not have a federal tax liability or federal felony conviction (sections 544 and 543 of Public Law 112-55).

8. Signature of Principal Investigator:_____

9. Name of Authorized Organizational Rep:_____

10. Signature of Authorized Organizational Rep:_____

11. Date Signed: _____

Proposed Project Summary

NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS AND SCHOOL OR DIVISION)
ADDRESS (INCLUDE DEPARTMENT, BUILDING & ROOM #, CITY, STATE, ZIP)
PRINCIPAL INVESTIGATOR NAME, TITLE, & EMAIL
PROJECT TITLE
NASA MISSION DIRECTORATE ALIGNMENT (Check all that apply to your project. Narrative proof for selected alignment(s) must be included in your proposal narrative.) ☐SMD ☐STMD ☐ARMD ☐ESDMD ☐SOMD
ABSTRACT (DO NOT EXCEED 250 WORDS)

Prior LaSPACE Awards

(Limit this list to the last 5 years)

For each prior LaSPACE award, as a PI or a Co-I please provide the following:

1. Project Title:

2. Dates:

3. Was a final technical report submitted? _____YES _____NO*

   If no, explain:

4. Did a proposal to a funding agency result? _____NO _____YES

   If yes, Agency:

   Title:

   Date:

   Status: _____Funded _____Declined _____Pending

(Add additional pages as necessary.)

LaSPACE Proposed Budget Form

Include this form in your proposal. Be sure to only ascribe funds to categories explicitly open to the program area to which you are applying. Use the proposed justification template on the following page to explain your proposed costs.

Proposal Title: _____

Principal Investigator: _____

Institution: _____

		LaSPACE Funds Requested	Proposed Cost Share*
A. Direct Labor			
	1. Faculty/Staff Researchers	$ n/a	$
	2. Graduate Student(s)	$ n/a	$
	3. Undergraduate Student(s)	$ n/a	$
	4. Fringe Benefits	$ n/a	$
	5. Total A	**$ n/a**	**$**
B. Supportive Expenses			
	1. Travel	$	$
	2. Supplies & Materials	$	$
	3. Other Direct Costs (Identify)	$ n/a	$
	4. Total B	**$**	**$**
C. Facilities & Administration			
	1. F&A (Indirect Costs)	**$ n/a**	**$**
D. Total Budget			
	Total Budget (A5+B4+C1)	**$**	**$**

**Must be certified on all financial billings/reports.*

LaSPACE Proposed Budget Justification

LaSPACE Requested Funds

A. Direct Labor

1. Describe any faculty/staff support costs with explicit calculations.
2. Describe any graduate student support costs with explicit calculations.
3. Describe any undergraduate student support costs with explicit calculations.
4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees and printing services.

C. Facilities & Administration

1. Provide a letter or link to the official F&A rate for your campus. Describe all applicable costs for which you will apply your F&A rate OR a modified F&A rate. Be explicit and show calculations.

Institution Proposed Cost Share

A. Direct Labor

1. Describe any faculty/staff support costs with explicit calculations.
2. Describe any graduate student support costs with explicit calculations.
3. Describe any undergraduate student support costs with explicit calculations.
4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees and printing services.

C. Facilities & Administration

1. Provide a letter or link to the official F&A rate for your campus. Describe all applicable costs for which you will apply your F&A rate. Show calculations. Describe any unrecovered F&A costs you are claiming for cost share and show calculations.

LaSPACE Student Participant List & Form Submission Confirmations

The Student Participant List must be completed, and online participant forms filled out in advance of submitting a proposal.

Copy and complete the participant list and confirmation checkboxes below into your proposal.

Name	Classification	Major	Project Role
e.g. Jane Smith	*Undergraduate, Junior*	*Electrical Engineering*	*Electrical Design Lead; Technical Writing Co-Lead*

☐ Check this box to confirm that all students listed above have completed a LaSPACE student participant form. Include this page in your proposal.

☐ Check this box to confirm that all students listed above have completed a NASA STEM Gateway profile. Include this page in your proposal.

☐ Check this box to confirm that all students listed above have completed a Media Release Form. Include this page in your proposal.

For Projects which have not yet recruited student participants only:

☐ Check this box to confirm that all students recruited after you've been awarded will complete the required online forms and you will submit this table immediately upon recruitment. Include this page in your proposal.

LaSPACE Student Participant Form Instructions

Link to LaSPACE Student Participant Form

Please provide the following guidance to students completing the online participant form.

- The LaSPACE Student Participant Information Form must be completed in advance of submitting this application. If any section is left blank in the online form, you will be disqualified from consideration.
- Upon completion of the form, a message will appear on the screen to confirm the form was successfully submitted. Additionally, a confirmation email will be sent to the school email provided in the form. Once the email is received, it is safe to close your browser. Save the confirmation email and forward to your Principal Investigator / Project Lead. Do NOT include NOR share screenshots or copies of your demographic information. This is to protect your Personally Identifiable Information.
- The **Project PI / Lead** should be the PI who is submitting this proposal. Please provide the students with your office phone number and email address to input.
- The **LaSPACE Program** should be the program for which students are currently applying for/participating in. If working under multiple LaSPACE projects, students will submit a participant form for each separate project. For this proposal students will select GSRA.
- The **Project Start Date** is the first day of the project's Period of Performance (PoP). This is not your personal start date on the project. Confirm PoP start date in the program guidelines or ask your Project PI / Lead. Project Start date should be 8/15/2025 for students under this current proposal submission.
- The **Participating Semester(s)** is where students select their semesters of participation on the project.

NASA STEM Gateway Profile Instructions

All students funded under any National Space Grant Program must register in the NASA STEM Gateway system here: https://stemgateway.nasa.gov/s/.

Guidance on setting up a NASA STEM Gateway profile is posted to the LaSPACE Document Center on our website in the student resources section.

LaSPACE NASA Media Release Form Instructions

The LaSPACE NASA Media Release Form provides permission to LaSPACE and NASA to share your photographs in our reports, newsletters, and online channels. It must be completed in advance of submitting this application. If any section is left blank in the online form, you will be disqualified from consideration. After submitting the form, check the relevant confirmation checkbox on the Proposed Project Summary Form.

LaSPACE NASA Media Release Form

- The online form should be completed and submitted by the PI and any other named, known participants (i.e. undergraduate student researcher for a LURA / graduate student for a GSRA, etc) at the time of proposal submission. Facilitators/participants recruited later and/or featured in photos associated with the funded activities should complete their own forms before, or at the time, of Final Report submission.
- For projects that involve recruiting student participants during the active award period (i.e. Senior Design, LaACES, etc), we suggest requiring completion of this form and the student participant form on the first day of official participation by the student.
- Upon completion of the form, a message will appear on the screen to confirm the form was successfully submitted. Additionally, a confirmation email will be sent to the school email provided in the form. Save this email and have students/external participants forward to the Principal Investigator / Project Lead.
- For large-scale public events, we suggest bringing a device for folks to complete on-site releases.
- For registration-based activities, we suggest including a link to our online form in your registration materials.